

“Multi Objective Optimization of the Tribological Responses of Cermet and Alloy based Blended Coatings using Response Surface Methodology coupled with Principal Component Analysis”

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Highlights

- The selection of powders and their blending composition by weight percentages worked out well, experimentation
- Methodology and optimization are the main highlights of this work.

Abstract

The objective of the present work is focused towards the reduction of wear in industrial applications. This can be overcome by applying layers of the protective coatings on the surface of the substrate, thereby improving surface properties. Here in the present work three powders WC-12%Co, NiCrBSi, Cr₃C₂-25wt%NiCr are taken, from which three types of blended powders are prepared taking in proper wt% by means of mechanical blending. The powders prepared were (30wt%WC-Co12+70wt%NiCrBSi), (30wt%WC-Co12+70wt%Cr₃C₂-NiCr25) and (30wt%WC-Co12+35wt%NiCrBSi+35wt%Cr₃C₂-NiCr25). These powders are sprayed using High Velocity Oxy Fuel (HVOF) process on to the substrate. The coatings were tested for mechanical and tribological properties. From the results found, the blend of (30wt%WC-Co12+70wt%NiCrBSi) showed good wear resistance and NiCrBSi as minimum Coefficient of Friction. Multiobjective optimization was done and the blend of WC-Co and NiCrBSi was found to exhibit superior results at high temperature (3500C), high load (30N) and for the distance of (15000m).

Introduction

One of the widely used materials is tungsten carbide. It plays a very important role in most of the applications such as cutting tools (turning, milling, drilling) for machining of metal components in the automotive and/or aerospace industry. WC-Co powder particle consists of the hard tungsten carbide grain dispersed in tough cobalt matrix, notable for its high hardness and toughness [1].





Ferromagnetic Bismuth-Substituted CeO₂ Nanostructures and Prevalence of Antiferromagnetic Clusters

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Abstract

Bismuth-substituted CeO₂ (Bi_{0.05}Ce_{0.95}O₂) nanostructured material have displayed room temperature ferromagnetic behavior. The substitution of Ce ions with Bi³⁺ ions decreased the saturation magnetization (M_S) value of CeO₂. UV-Vis and photoluminescence spectroscopic analyses revealed the occurrence of defect states i.e. surface oxygen vacancies in the sample, which facilitated ferromagnetic interactions in the Bi-substituted CeO₂ nanostructures. Further, the clusters in the sample could provide antiferromagnetic interaction amongst ions, which reduced the M_S value of CeO₂. The clusters in the annealed sample was substantiated from its ZFC/FC curve. X-ray photoelectron spectroscopy analysis revealed the presence of Bi³⁺, Ce³⁺, and Ce⁴⁺ ions in the sample. High-resolution transmission electron microscopy (HRTEM) images suggested the spherical and rod-shaped morphology for the particles.

Keywords Spherical morphology · Surface oxygen vacancies · Antiferromagnetic interactions · Clusters

1 Introduction

The prevalence of defect states, specifically oxygen vacancies, in various nanocrystalline oxide materials, led to open up new ways for designing various functional materials [1–3]. The missing oxygen atoms in the crystalline materials result in charge imbalance in the system, which allows redistribution of charges [4]. Consequently, the defect states are induced in the materials, which have an influence on their structural and optical properties. The defects at the surface such as surface oxygen vacancies demonstrated improved electrochemical, catalytic, electric, and magnetic properties [5–7]. Because of surface oxygen vacancies, CeO₂ nanostructures have shown many intrinsic advantages like redox property, oxygen storage

capacity (OSC), photocatalysis, and room temperature ferromagnetic behavior (RTFM) [8–10].

It is articulated that the long-range ferromagnetic ordering occurs in several materials such as ZnO, TiO₂, CeO₂, Al₂O₃, HfO₂, and SnO₂ when their size reduces to nanodimension [11]. This has been accomplished to the prevalence of surface oxygen vacancies. In contrast, they exhibit dia- or paramagnetic behavior when their particle size lies in the micrometer range. CeO₂ is an n-type semiconductor and can retain its fluorite structure even after the loss of its lattice oxygen atoms [8]. Further, it also has the capacity to absorb oxygen in an oxygen-rich conditions and release oxygen in oxygen-deficient atmosphere [8]. Hence, it is believed that the nanocrystalline CeO₂ accompanied by intrinsic oxygen vacancies facilitates RTFM behavior [10]. During the process of creation of oxygen vacancies, the F-centers are formed in the materials that enable ferromagnetic interactions amid the ions and long-range ferromagnetic ordering is established [12].

The magnetic properties of nanocrystalline M_xCe_{1-x}O₂, where M = Co, Mn, Fe, Ni, Cu, Ca, Cr, Pr, and Y) materials have been reported elsewhere [13–22]. In the beginning, it is believed that the ferromagnetic elements (i.e. Fe or Co or Ni) doping into CeO₂ cause augmentation of saturation magnetization (M_S) values in comparison with undoped CeO₂ [14–16]. For example, Co-substituted CeO₂ thin films have shown a giant magnetic moment (~8.2 μ_B/Co) with a high

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**CLUSTERING AND INDEXING OF MULTIPLE DOCUMENTS USING FEATURE EXTRACTION
THROUGH APACHE HADOOP ON BIG DATA**

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ABSTRACT

Bigdata is a challenging field in data processing since the information is retrieved from various search engines through internet. A number of large organizations, that use document clustering fails in arranging the documents sequentially in their machines. Across the globe, advanced technology has contributed to the high speed internet access. But the consequences of useful yet unorganized information in machine files seem to be confused in the retrieval process. Manual ordering of files has its own complications. In this paper, application software like Apache Lucene and Hadoop have taken a lead towards text mining for indexing and parallel implementation of document clustering. In organizations, it identifies the structure of the text data in computer files and its arrangement from files to folders, folders to subfolders, and to higher folders. A deeper analysis of document clustering was performed by considering various efficient algorithms like LSI, SVD and was compared with the newly proposed updated model of Non-Negative Matrix Factorization. The parallel implementation of hadoop developed automatic clusters for similar documents. MapReduce framework enforced its approach using K-means algorithm for all the incoming documents. The final clusters were automatically organized in folders using Apache Lucene in machines. This model was tested by considering the dataset of Newsgroup20 text documents. Thus this paper determines the implementation of large scale documents using parallel performance of MapReduce and Lucene that generate automatic arrangement of documents, which reduces the computational time and improves the quick retrieval of documents in any scenario.

Keywords: Text Mining, Hadoop MapReduce, Indexing, Lucene, Clustering, NMF, K-means


1.0 INTRODUCTION

Organizations leverage large databases for robust utilization of information retrieved from various sources. Well recognized databases for structured data can be relational, object-oriented or object-relational. Both unstructured as well as semi-structured data are reserved in huge volumes. Text mining and data mining integrate to extract the data and assemble the patterns for detection. TDM(Text and Data Mining) is an improved approach to read data.



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Precision Measurements of Internal Conversion Coefficients of Low Energy Transitions in ^{169}Tm for Efficiency Calibration of Electron Detectors

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65 Accesses | 1 Citations | [Metrics](#)

Abstract

The 32.018 d beta decay of ^{169}Yb is studied with a high resolution precisely calibrated 8K PC based Multi-Channel Analyzer coupled HPGe gamma spectrometer system and liquid nitrogen cooled Si(Li) detector coupled to a well calibrated Mini-Orange magnetic spectrometer. Precise energies and relative intensities of gamma transitions and conversion electron intensities of gamma transitions have been determined for the first time with better accuracy. The experimental internal conversion coefficients of the gamma transitions in ^{169}Tm have been determined using Normalized Peak to Gamma method and compared with the theoretical values adopted by Nuclear Data Sheets to assign multipolarities of all the transitions. The precise internal conversion electron intensities of the low energy transitions can be used as standards



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Particulate-Reinforced Tungsten Heavy Alloy/Yttria-Stabilized Zirconia Composites Sintered Through Spark Plasma Sintering

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Abstract

The current work investigates the mechanical properties of W–Ni–Fe tungsten heavy alloy (WHA) composites reinforced with 0.25, 0.5, 0.75 and 1.0 wt% of yttria-stabilized zirconia (YSZ). The composites were fabricated through spark plasma sintering (SPS) technique. Detailed microstructural characterization of the sintered samples, including contiguity, grain size and matrix volume fraction, was carried out. It was found that the W–W contiguity was decreasing with increasing amount of YSZ. Hardness and yield strength of the sintered samples were found to be decreasing with the increasing amount of YSZ. The WHA with 0.25 wt% YSZ exhibited the highest mechanical properties among all compositions chosen for this study. Fractography revealed W–W intergranular fracture indicating a brittle mode failure.

Keyword 8 mol % yttria-stabilized zirconia · Oxide dispersion strengthening · Spark plasma sintering · Tungsten heavy alloys

Abbreviations

WHA	Tungsten heavy alloy
YSZ	Yttria-stabilized zirconia
Y ₂ O ₃	Yttrium oxide
WC	Tungsten carbide
SiC	Silicon carbide
La ₂ O ₃	Lanthanum oxide
HfO ₂	Hafnium dioxide
TiO ₂	Titanium dioxide
ZrO ₂	Zirconium dioxide
ZrC	Zirconium carbide
Sc ₂ O ₃	Scandium oxide
SPS	Spark plasma sintering

BN	Boron nitride
EDS	Energy-dispersive X-ray spectroscopy
UTS	Ultimate tensile strength

1 Introduction

The W–Ni–Fe-based tungsten heavy alloys (WHAs) are widely used in nuclear, military and defence applications due to their high strength and easy deformability of Ni and Fe [1, 2]. Pure tungsten exhibits high strength and high density but very low ductility, and therefore, it behaves like a brittle material, and hence is not very suitable in heavy duty nuclear and defence applications [3, 4]. However, the tungsten alloyed with Ni and Fe provides good ductility. Traditional WHAs are the alloys with the combination of Ni–Fe or Ni–Co or Ni–Cu with tungsten [5–8]. WHAs have a wide range of applications in defence industry such as counter weights, radiation shields and kinetic energy penetrators. Among the numerous applications of WHAs, the kinetic energy penetrators are unique, and the penetration capacity is a function of density and hardness. Significant research has been carried out to increase the penetration depth of WHAs [9–16]. To improve the hardness and penetration performance, traditional WHAs were added with refractory metals like Re and Mo; it resulted through in enhancement

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Prediction and Forecasting of Persistent Kidney Problems Using Machine Learning Algorithms

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ABSTRACT

Persistent Kidney Illness is an extremely hazardous health problem that has been spreading in addition to expanding due to diversification in lifestyle such as food routines, modifications in the environment, and so on.

Aim and Objective: The field of health science generates substantial amounts of information from Electronic Wellness Records. According to the wellness data of India, 63538 cases have been registered on persistent kidney condition. The average age of male and female prone to renal problems occurs within the variety of Mid Forty and Seventy year age groups.

Conclusion: This paper's original idea is to make a comparative study on various classification techniques and their performance.

Key Words: Disease Forecasting, Kidney Diseases, Classification.

INTRODUCTION

Machine learning and data processing play a vital role in getting more flexible and understandable reports on the idea of varied techniques. Kidneys role act as blood purifiers that remove waste contents while preserving new valuable blood contents like proteins. If the purifiers were damaged, the protein content would be initially leaked, and the substances may seep into urine from the blood. Sometimes the chronic renal disorder is amid high vital sign, which not only is often caused by kidney damage but also further accelerates kidney injury and maybe a significant reason for the adverse effects of chronic renal disorder on other body parts automatically increases the risk of a heart condition and heart-strokes, collection of excess body fluids, anaemia, weakening of bones and deterioration mainly the body will not support for medications. It cannot be detected until the seriousness of the disease is advanced. If detected early, treatment can hamper or refrain kidney function and deny and reduce the opposite effects on new body parts.

A biopsy measuring tool called glomerular filtration rate works on the kidneys for removing waste blood contents called creatinine. If the value lies within the range of 60 to

90, it is an early sign of occurring kidney disease; a worth below 60 is typically considered as an abnormal phase.¹ Testing urine samples gives the results of protein contents (albumin) within the urine; repeated results of 30 mg or more can signify a drug. Huge vital signs can also point to underlying chronic renal disorder. Distinct machine learning procedures are appropriate for analyzing the data from distinct prospects and reviewing them into useful data.

Machine Learning is an application of artificial intelligence (AI) that gives systems the capacity to use analytical strategies to give computers the ability to learn with information and improve from experience without being explicitly configured.

Literature Survey

These days, AI calculations are generally utilized in the field of medication. Various works have been done where AI systems are utilized to predict illness (disease). Sossi Alaoui, et al. shows the utilization of AI in infection forecast over extensive information examination.² Sandeep Reddy and Jaya, et al.,³ AI (ML) systems are used to research how Chronic Kidney Disease (CKD) can be analyzed. In another exploration work of Aljaaf and Ahmed J. et al.,⁴ CKD's arrangement is finished

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An intelligent traffic light controller (TLC) system using iot model(Article)

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Abstract

Traffic problems in cities and developing cities are proliferating. Several methods are being followed to reduce the congestion on city roads. In the current article, an attempt has been made to identify the number of vehicles on city roads and based on the number of vehicles on city roads, the traffic lights are controlled automatically such that to reduce the congestion on city roads. Identifying vehicles on different lanes at traffic signals and trying to control the signals based on the number of vehicles. The current model was developed and implemented on the platform of Python, and the testing of the current model was done with four cases. The results observed for the four test cases are excellent and encouraging. The exact method and it's functioning and the results are displayed in the results and discussions sections in detail. © 2020 Alpha Publishers. All rights reserved.

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Clinical model machine learning for gait observation cardiovascular disease diagnosis(Article)

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Abstract

Heart replacement and nearly 80% of the significant complications or deaths of elderly patients are associated with medical treatment. The potential for predicting mortality and high morbidity in older patients considering cardiac surgery would be improved by conventional risk models if frailty is included in their gait frequency estimation. The current priorities for cardiovascular diagnosis are MRI scans, ultra scans and ECG device examination. Ultrasound imaging is used in this clinical research to classify cardiovascular problems. Specialized methodologies have been used in feature extraction and classification in this segmentation. This research is specifically suited to heart disorders for scientists and physicians. Finally, the performance measurement, i.e. Know, F1, real effectiveness, strong prices. The outputs challenge existing models and improve cardiac diagnostic accuracy. © 2020, Advanced Scientific Research. All rights reserved.

Author keywords

Cardiovascular Disease Diagnosis Gait Observation Heart diseases classification Machine learning Middle channel Optical stream Ultra-scan

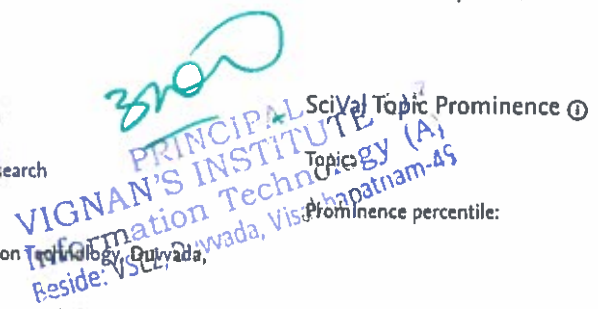
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(2022) AIP Conference Proceedings

Sampath Dakshina Murthy, A. , Karthikeyan, T. , Vinoth Kanna, R.

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Prediction and Forecasting of Persistent Kidney Problems Using Machine Learning Algorithms

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Key Words: Disease Forecasting, Kidney Diseases, Classification.

INTRODUCTION

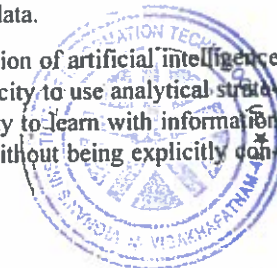
Machine learning and data processing play a vital role in getting more flexible and understandable reports on the idea of varied techniques. Kidneys role act as blood purifiers that remove waste contents while preserving new valuable blood contents like proteins. If the purifiers were damaged, the protein content would be initially leaked, and the substances may seep into urine from the blood. Sometimes the chronic renal disorder is amid high vital sign, which not only is often caused by kidney damage but also further accelerates kidney injury and maybe a significant reason for the adverse effects of chronic renal disorder on other body parts automatically increases the risk of a heart condition and heart-strokes, collection of excess body fluids, anaemia, weakening of bones and deterioration mainly the body will not support for medications. It cannot be detected until the seriousness of the disease is advanced. If detected early, treatment can hamper or refrain kidney function and deny and reduce the opposite

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Object Detection Using Machine Learning for Visually Impaired People

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ABSTRACT

In this challenging evolution, the primary task in detecting the objects requires a computer vision that deals over indoor and outdoor classes. Over the past decades, this zeal requires more attentiveness. Previous implementation techniques involve in object detection with a strategy of single labelling.

Aim and Objectives: In this regard, a multi-label approach using machine learning and vision technologies, and accurate response can be acknowledged based on its accuracy and effectiveness. In the proposed work, we solve the existing system problem by using classification/clustering techniques that are used to reduce the recognize time of multi objects in less time with best time complexities.

Model: The model used to assist the visually impaired people can independently recognize objects which are near to them. The reverence, combined with the study, confounded the inception of these machine learning algorithm for visually impaired persons in assisting the accurate navigation, including indoor and outdoor circumstances.

Conclusion: In this connection, an indoor and outdoor architecture on Retina Net is implemented for its detection techniques, and also neural network technologies support this framework. Based on the effectiveness and implementation time, ResNet and FPN act as a crucial module for its accuracy.

Key Words: Object Detection, Machine Learning, RetinaNet, Yolo, Visually Impaired People

INTRODUCTION

Computer Vision

For analyzing the Visual world to break and elucidate, which explains computer vision in computer technology. In categorizing the objects' accuracy, machines use deep learning models¹⁷ and digital images such as cameras and videos. In the early 1950s, demonstrations have already started in computer vision to identify the keen edges and align the simpler objects with falling under categories such as circles and squares by the techniques of first neural networks. Later in the 1970s, Optional character recognition came into existence of computer vision explicated typed or handwritten data on its primary trading tool. The illustrated data mainly used for the blind as a development.³ In the 1990s, the World Wide Web has evolved, producing sizeable images for examining and various computing

facial detection had developed. These evolving text frames supported the analysis of machines in detecting particular persons in pictures and videos.^{20,21,21}

The image segmentation has to be inspected individually by categorized into various partitions or frames. The object detection indicates detecting a particular object in the image. Upgraded object detection admits multiple objects in a single image. For example, in certain instances, like the football field, an offensive player, a defensive player, a ball, etc. To obtain this X, the Y Coordinate model is implemented for the bounding box and detecting everything inside the region.^{6,7} The facial recognition technology for Object detection has come up with the latest type that concedes the human face in the entire image and detects as a person in particular. Using pattern detection, a duplication of the shapes, colours, and other visual indicators in the picture. The image classifications are used to bring together into multiple divisions. The

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Identification of Parasite Presence on Thin Blood Splotch Images

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ABSTRACT

Parasite is a bacterium that lives in a separate organism that functions as a host known as plasmodium. The parasite is vulnerable to malaria, dengue, typhoid diseases, etc. The presence of the parasite in blood smears can often lead to human death for some times. So, detecting and recognizing the parasite in blood splotch images at the early stages is very important to save human life.

Aim and Objective: The primary consideration in this article is to detect the parasite which occurs in red blood cells through blood splotch images in early stages in less time using a new image processing method.

Method: The method which is followed identifies the presence of parasite on blood smear images, was done in several steps. The first step of the method is to collect the input image from a laboratory taken through an electronic microscope. Then the image is further sent by converting the input image to the grayscale image using the standard method. Once the grayscale is obtained, the output image is further converted to the monochrome image. The pixel values of the image consist of only binary values using the "Otsu Threshold form." Then this monochrome image is converted to a matrix model and processed with the binary values.

Conclusion: The presence of parasites on the images will be displayed with the binary values by either one or zero on the output matrix model. Suppose the entire image is displayed as all zeros, In that case, it can be concluded to no parasite presence, and if any one's presence on the matrix model, then it can be observed that there is a presence of parasite on the blood smear blotch images.

Key Words: Parasite, Blood splotch images, Matrix, Binary values, Grayscale, Image Processing.

INTRODUCTION

Image processing is a method of carrying out such image operations to produce an enhanced image or collect user data. It is a signal processing type where pictures are entered, and the output can be images or characteristics.¹ Today the processing of photographs is a technique that is rapidly increasing. It forms a central field of engineering and IT studies. For the processing of photographs, two methods are applied, namely analogue and digital imagery. Analogue picture processing can be used for hard copies, such as prints and photographs.^{2,3} The full details about an image and the parasite can be discussed in detail as subsections below.

Image definition

The image is an arrangement of pixels organized in columns and lines of a given width and height. The pixel value of every image is used.^{3,4,5} The following are various styles of images,

- Binary image:** Binary image is termed as a monochrome image. In this image, there are just two black and white values. Black is the value of a pixel 0, and white is a pixel 1.
- Grayscale image:** Grayscale is a spectrum from black to white monochromatic colours with 255 pixels. The combined shades of black and grey are present in this grayscale picture. Therefore, a grey picture just has white with no colour and grey variations.^{6,7,8}

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Excellent catalytic activity of ethylenediamine stabilised oxalate ligated aluminium coordination complex for synthesis of novel benzoquinolines



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ABSTRACT

Two-dimensional supramolecular structure of oxalate ligated Al(III) coordination complex, $(C_2H_{10}N_2)_2[Al_2(\mu-O_2)(oxalate)_4] \cdot 2H_2O$ (Al-Ox) was synthesised hydrothermally and determined the structural features with single-crystal X-ray diffraction studies. Unique oxo bridged dinuclear Al(III) clusters were established and each Al(III) atom bonded with two units of oxalate ligand in the dinuclear Al(III) structure, two Al(III) atoms were separated with a bond distance of 2.8702 Å. Unsaturated metal centres creation upon activation acts as Lewis acid sites and ethylenediamine with a strong basic character in the structure remarkably facilitate an efficient and economic strategy for heterogeneous organic transformations. The Lewis acid-base character catalytic efficacy of the complex is explored in tandem multi-component synthesis of benzoquinoline-2-carbonitrile moieties. The synergy between the exceptional Lewis acidic and basic properties of Al-Ox contributed to its excellent catalytic activity in the generation of five new benzoquinoline-2-carbonitriles in impressive yields (92–96%) in short reaction time (ca. 15 min) in a simple one-pot protocol, in ethanol. Recyclability with consistent activity (5 times) is the added advantage.

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1. Introduction

Most of the pharmaceutical industries and medicinal researchers are in quest for newer synthetic strategies to avoid the problems with encountered conventional processes. Atom economy, time minimisation, avoidance of hazardous solvents, and improved yields are some of the desired parameters in the organic transformations [1–3]. The strategies, which qualify such situations will be cost-effective to the industry and research institutions in search of new drugs, fine chemicals and pesticides and lessen the environmental burden [4–5]. Catalyst driven organic transformation is appropriate, and the presence of a proper catalyst in the reaction media not only accelerate the reaction process but also create new vista in the adoption of green principles [6–9].

Heterogeneous catalysts are potential candidates in overcoming the hurdles faced in organic transformations [10,11]. Easy separation and reusability are one of the vital criteria of heterogeneous catalysts, which impart greater flexibility in increased selectivity

and specificity of organic reactions [12]. In general, porous and high surface area materials are preferred substances as heterogeneous catalysts. Precious metals such as Pt and Pd are active catalysts, but their utilisation was restricted due to costs and the shortage of suitable supports [14,15]. Various materials, etc. are investigated as cheaper alternatives. Activated carbon, zeolites, metal oxides are a few supports, which alleviate the transport capability to some extent. On the other side, coordination compounds/complexes like metal-organic frameworks (MOFs) are more commendable in progressing of heterogeneous catalysis [16–18]. Unlike other materials, coordination compounds comprise metal and ligand, and their coordination modes are 1D, 2D and 3D rigid structures. In this scenario, metal and ligand are equivalent in most of the cases in showing different exceptional properties [19–22]. In MOFs, the size of the active catalytic sites is more, and their availability increases upon the design and construction of coordination architectures. Different combinations of metallic centres and ligand framework combinations come across endless options in creating a wide variety of active catalytic sites [23–25].

Generally, the challenge in heterogeneous catalysis is the precise breaking of old bonds and making of new bonds, particularly C–C bond formation and to find a suitable support for the organic transformations. Stability of catalyst is of great importance. Lack of

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A study on the catalytic behaviour of Cd(II) and Sm(III) coordination complexes towards the four-component synthesis of quinoline-3-carboxylates

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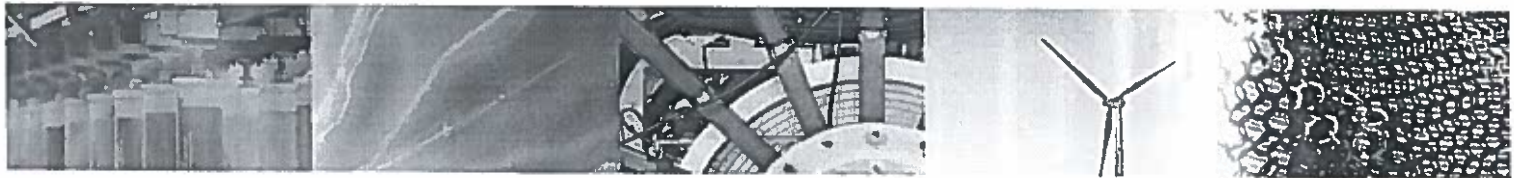
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Abstract

We report the synthesis two 3-dimensional coordination complexes namely, [Cd(2,5-Pydc)₂(H₂O)₂].H₂O (1) [Sm(2,5-Pydc)(NO₃)(H₂O)].(H₂O) (2) using 2,5-Pyridine dicarboxylic acid (2,5-Pydc) as ligand by simple hydrothermal method. Nitrogen and oxygen atoms of 2,5-Pydc provided more scope for the coordination of Cd(II) and Sm(III) ions to the ligand in both the complexes with high dimensionality. The 3D networks of complexes 1 and 2 possessed attractive structures of supramolecular assemblies with good rigidity and high thermal stability. The coordinatively unsaturated metal sites in both 1 and 2 upon activation process generate a Lewis acidic environment. The Lewis acidic nature of complexes 1 and 2 was promptly utilised in the synthesis of novel quinoline-3-carboxylate moieties from the four-component single-pot fusion. Both 1 and 2 showed impressive catalytic activity in the formation of the products in high yield (92-96%) and in a short interval of time (15-25 min.). The complexes 1 and 2 catalysed the



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Research Article

Severe plastic deformation of AA 5083 and copper bimetallic metal



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Abstract

The purpose of the present study is to investigate the effect of Cu casing and wall thickness of the drilled copper bars on uniform distribution of imposed strain in terms of structural homogeneity and distribution of microhardness in the severely deformed AA 5083 after equal channel angular extrusion (ECAE). In this study, AA 5083 cylindrical inserts of 6 mm, 8 mm and 10 mm diameter with 100 mm length are tightly inserted in the 16 mm square copper bars having the respective diameter holes. The square cross sectioned AA 5083 billets of 16 mm × 16 mm and 100 mm length are also considered as feedstock. The longitudinal surfaces of the bimetallic metals are polished and annealed at 530 °C for 1 h and then processed by ECAE up to four passes in route A (same sense after every pass without any rotation) at room temperature using a die with square cross-sectioned channels having channel intersection angle (ϕ) 120° and outer corner angle (Ψ) 30°. The initial grain size of 60 μm has been greatly refined and the ultrafine grains of the AA 5083 in the range of 400–700 nm are formed in the extruded AA 5083 inserts after the four passes. The microhardness of the extruded AA 5083 significantly increased from 69 to 134 VHN, 132, 176 and 157 respectively for the square billets with Cu casing and cylindrical inserts with the diameters of 6, 8 and 10 mm covered with Cu casing after the four passes. The variations in the microhardness measurements at different regions on the sectioned surfaces are also investigated in this study. The requirement of pressing force is very significantly reduced by using copper casing which is having ductile nature and the frictional forces between the copper and steel die are very less as compared to the AA 5083 and steel. The chances of formation of dead metal zone are avoided by filling the corner gap by copper metal during ECAE process. The uniform distribution of strain imposed on the severely deformed billets develops the homogeneous ultrafine grain structure and significantly improves the micro-hardness of the processed material.

Keywords ECAE · Al–Mg alloy · Grain refinement · Copper casing · Microhardness

1 Introduction

Equal channel angular extrusion is a most significant process among various Severe Plastic Deformation (SPD) processes for improving mechanical properties of materials by producing ultrafine grains [1]–[3]. The process of ECAE uses a die having two channels of similar cross-section connected at a specified channel angle (ϕ) and outer angle (Ψ) [4]. When the material passes through the plastic deformation portion of the die high shear strain is

induced in the materials [5, 6]. The pressing route can be altered between the successive passes by using different orientations of the billet (route-A, 90° in an alternate orientation (route-B₁, 90° in the same orientation (route-B₂) and 180° (route-C) [7]. Selection of appropriate die angles, pressing route (A, B₁, B₂, C), pressing speed, pressing temperature and number of passes control the strain developed and the microstructural changes [8, 9]. ECAE with casing is a novel technique in which the billet is inserted in the metallic or non-metallic casing or capsule

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THE PERFORMANCE ANALYSIS OF A PARALLEL COMMUNICATION NETWORK WITH PHASE TYPE TRANSMISSION HAVING NON-HOMOGENEOUS BINOMIAL BULK ARRIVALS UNDER EQUILIBRIUM CONDITIONS

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Abstract:

In the current article, a three-node tandem and parallel communication network model having binomial bulk arrivals had developed and analyzed its performance under equilibrium conditions. The flow of packets from one node to the other nodes with respect to time is more important consideration in any network. But sometimes the network may not have the considerable amount of time to manage, consider and analyze the performance of each nodes in the network. An attempt had been made in the current article to study the performance of the current network model with various performance metrics of the network under equilibrium conditions. The messages arrived at the network are transformed into packets for forward transmission. After completing the transmission in the first node the packet may join buffer 2 or 3 which are in parallel and connected to node 1 with certain probabilities. The inter transmission time of packets in each node follows the Poisson process. The performance and behavior of the network is evaluated through deriving the explicit expression for various performance metrics of the network model like utilization of buffers at nodes, the throughput of each node, delay at each node, the total number of packet at each node etc. From the results, it is observed that the performance of the current network model is having a good impact on the network even if the transmission to the network is under equilibrium mode. This is considering the network model without dependent on time.

Keywords:

Tandem Network, Equilibrium Conditions, Performance of the Model, Dynamic Bandwidth Allocation, Bulk Arrivals, Binomial Distribution, Non-Homogeneous Compound Poisson Process, Performance Evaluation



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Modern Traffic Enforcement and Elimination of Carbon Emissions in Intelligent Corridors from NAD Junction to Car Shed Junction at Visakhapatnam Using PTV Visum Software

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Abstract

Traffic management plays an important role in the day to day affairs of smart cities including Visakhapatnam. Parametric models and non-parametric models are available for such cases. Kalman filter also plays a significant role. For solving the problem of intersection parts of Vishakhapatnam specialized software has been closed to implement the traffic rules according to state of the standards. Improvement of traffic flow, reduction in jam and running time are the main objection of research. VISUM software has been selected due to its versatility and the implementation has been done it car shed unction. The results have been quite encouraging in improving and controlling parts of entry and exit. The estimated travel time for NAD to car-shed junction will be reduced from 72 min to 55 min for bus and 55 min to 40 min by car.





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Advanced Empirical Studies on Group Governance of the Novel Corona Virus, MERS, SARS and EBOLA: A Systematic Study

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ABSTRACT

Coronavirus condition (COVID-19) is a contagious illness brought on by a freshly discovered Coronavirus. Most individuals contaminated with the COVID-19 infection will certainly experience moderate to modest respiratory system health problems and recoup without needing unique therapy. Older people and those with underlying clinical problems like cardiovascular disease, diabetic issues, persistent respiratory conditions, and cancer are more likely to create a significant health problem.

Aim and Objective: This paper gives the best way to prevent and reduce transmission is to be well educated about the COVID-19 infection, its causes, and its spread. Protect your own and others from infection by cleaning your hands or using an alcohol-based rub frequently and not touching your face. The COVID-19 infection spreads out primarily in beads of saliva or discharge from the nose when an infected person coughs or sneezes, so it is vital that you additionally follow the breathing rules (for instance, by coughing right into a flexed elbow joint). Right now, there are no detailed vaccinations or therapies for COVID-19. Nevertheless, there are several ongoing professional trials assessing capacity treatments.

Method: The study aimed to develop a statistical model to predict how the cases are growing exponentially in various parts of the world. Even after starting from a low base, there is no proper statistical analysis of cases we can get from an ambiguous thing that numbers of cases are exponentially increasing. We have analyzed the mortality rate, the number of deaths per country, and the number of recovery cases.

Conclusion: By comparing the statistical analysis of confirmed cases vs. deaths within a short period, nCov-19 affected the most compared with Zoonotic viruses. The coronavirus disease remains to spread out throughout the world, adding to a trajectory that is challenging to predict. The health, altruistic, and socio-economic policies have taken on by the world will certainly figure out the rate and stamina of the healing. There has to be a global human-centred reaction that is based on solidarity.

Key Words: nCoV-19, SARS, MERS, EBOLA, Mortality, Zoonotic, Exponential Growth.

INTRODUCTION

Coronaviruses are a large, diverse team of viruses and need a useful microscopic lens to see them. There are several types of coronaviruses, and also they infect a broad range of creatures and birds. Moreover, some even create moderate respiratory system illnesses in people each year. The infection that causes COVID-19, we call SARS Coronavirus 2. This virus originated in bats, indicating that bats lug this infection and are infected with this virus at all times. However, this virus developed a unique technique. It developed

the ability to leap between varieties and also infect people. All of these coronaviruses likely originated in bats currently infect individuals and can be passed from one person to another. So the initial of the disease was called acute severe breathing disorder, or SARS Coronavirus, the initial SARS Coronavirus. More just recently, at the end of 2019, SARS Coronavirus 2 emerged in Wuhan, China. Viruses need to live in other cells, and as they duplicate in those cells and go on to infect various other cells in the body. The natural history of SARS Coronavirus-2. Indicators of the disease are objectively used to define an

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Optimal response of half car vehicle model with sky-hook damper using LQR with look ahead preview control

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Abstract

This paper addresses the problem of determining the optimal parameters of a sky-hook damper type suspension in the control of the stationary random response of half car vehicle models traversing a rough road with constant velocity. The feedback control scheme is realized by approximating the sky-hook damper strategy, and the optimal parameters of the sky-hook damper are obtained by equating the sky-hook damper suspension force with that of a fully active suspension force using linear quadratic regulator with preview control (LQR with preview control). Results show that the overall performance of the sky-hook damper approximately 99% matches with performance of LQR with preview control (look ahead preview control) over a specified vehicle velocity range.

Keywords Half Car · Sky-hook damper · Preview control · Optimization · Semi-active suspension

1 Introduction

The active suspension system improves the performance of vehicle by counteracting the road excitations through an actuator. Some of the drawbacks of the active suspension systems are the time lag, less robustness and more cost restrict the use of active suspension. To overcome some of these drawbacks of active suspension, semi-active suspensions are introduced.

In this context, the idea of sky-hook type semi-active suspensions has been introduced for vehicle suspensions by Crosby and Karnopp [1]. Karnopp et al. [2] have tried to realize the sky-hook concept in a moving vehicle as a variable rate damper. Liu et al. [3] used five controls to study the semi-active damper performance using on-off sky-hook, adaptive damping, continuous sky-hook and continuous control. Sammier et al. [4] proposed a continuous feedback control strategy to approximately realize the sky-hook damper

control. Valasek et al. [5] introduced extended ground-hook control strategy concept for off-road vehicle suspensions. Li and Nagai [6] used sky-hook control to increase the ride comfort of railway vehicle models.

Vladimir and Marian [7] used genetic algorithm optimization method to optimize half car vehicle model parameters like damping coefficients and stiffness coefficients. Rao and Narayanan [8] used new methodology to optimize the sky-hook damper parameters of half car vehicle model by equating the active suspension control to that of linear quadratic regulator (LQR) with that of the sky-hook damper suspension force. Lee and Cheng [9] optimized the parameters of 14 DOF nonlinear railway vehicle suspension using minimum design and quantum-behaved particle swarm optimization techniques.

An optimal control law has been derived for a half car model using discrete linear quadratic optimal control theory including the time delay between front and rear wheel inputs to improve the performance of the system (Louam et al. [10]). Control laws have been derived for semi-active and active suspension systems of a half car vehicle model with both look ahead and wheel base types of preview controls (Hac and Youn [11]). Stochastic optimal control laws have been derived for the design of active suspension of a half car vehicle model with look ahead and wheel base preview controls (Narayanan and Senthil [12]). Multi-objective control method has been proposed for four dof half car vehicle model based on wheel base preview method.

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RESEARCH ARTICLE

S I A WILEY

Substrate temperature influenced ZrO₂ films for MOS devicesParuchuri Kondaiah¹ | S.V. Jagadish Chandra^{2,3} | Elvira Fortunato⁴ | Choi Chel Jong⁵ | G. Mohan Rao¹ | D.V. Rama Koti Reddy⁶ | S. Uthanna⁷¹Department of Instrumentation and Applied Physics, Indian Institute of Science, Bangalore, India²Department of Electronics and Communication Engineering, Vignans Institute of Information Technology (A), Visakhapatnam, Andhra Pradesh, India³CENIMAT/I3N, Materials Science Department, Faculty of Science and Technology, New University of Lisbon, Caparica, Portugal⁴Departamento de Ciência dos Materiais, CENIMAT/I3N, Faculdade de Ciências e Tecnologia (FCT), Universidade Nova de Lisboa, Caparica, Portugal⁵School of Semiconductor and Chemical Engineering, Semiconductor Physics Research Center, Chonbuk National University, Jeonju, South Korea⁶Department of Instrument Technology, Andhra University, Visakhapatnam, Andhra Pradesh, India⁷Department of Physics, Sri Venkateswara University, Tirupati, India

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The effect of substrate temperature on the direct current magnetron-sputtered zirconium oxide (ZrO₂) dielectric films was investigated. Stoichiometric ZrO₂ thin films was obtained at an oxygen partial pressure of 4.0×10^{-2} Pa. X-ray diffraction studies revealed that the crystallite size in the layer was increased from 4.8 to 16.1 nm with increase of substrate temperature from 303 to 673 K. Metal-oxide-semiconductor devices were fabricated on ZrO₂/Si stacks with Al gate electrode. The dielectric properties of ZrO₂ layer and interface quality of ZrO₂/Si were significantly influenced by the substrate temperature. The dielectric constant increased from 15 to 25, and the leakage current density decreased from 1.5×10^{-7} to 0.64×10^{-9} A cm⁻² with the increase of substrate temperature from 303 to 673 K.

KEYWORDS

conduction mechanism, dielectric constant, high-k, interface emissivity, leakage current, sputtering

1 | INTRODUCTION

The remarkable increase in the leakage currents due to the incessant scaling down in the feature size of metal-oxide-semiconductor field-effect transistors demands for the replacement of conventional low-k dielectric (SiO₂) with high-k dielectrics. Zirconium dioxide (ZrO₂) has

given its own attention among various dielectric materials due to its high dielectric constant, reasonable permittivity loss, and acceptable thermal and mechanical stability. In addition to the dielectric properties of ZrO₂, it finds potential applications in photocatalytic coatings,⁴ corrosion resistive coatings,⁵ solar cells,⁶ and biomedical applications.⁷ Kozodaev et al. found that ZrO₂ is a ferroelectric

Synthesis and anticancer activity of novel pyrazolo[4',3':5,6]pyrano[2,3-d]pyrimidin-5(2H)-one derivatives

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Abstract:

A novel sequence of pyrazole connected pyrano[2,3-d]-pyrimidin-5(2H)-one derivatives (6a-j) were designed, prepared and screened for their cytotoxicity against four human cancer cell lines like MCF-7 (breast), HeLa (cervical), CaCo2 (colorectal) and HepG2 (liver) by MTT assay. Most of the tested molecules were exhibited good to excellent cytotoxicity against all tested cell lines when compared to the standard drug Doxorubicin. Amongst all the synthesized target compounds, the molecules (7e & 7d) exhibited the excellent anticancer activity against all the human MCF-7, HeLa, CaCo2 and HepG2 tumor cell lines, with the inhibitory concentration (IC₅₀) values of 14, 14, 13, & 16 µg mL⁻¹ and 16, 14, 15 & 17 µg mL⁻¹, respectively. While, molecules (7f & 7i) revealed good inhibitory activity against all screened cell lines with IC₅₀ values of 22, 25, 25 & 24 µg mL⁻¹ and 21, 20, 21, & 20 µg mL⁻¹. All the novel target molecules were determined and characterized by various spectroscopic (¹H-NMR, ¹³C-NMR and HRMS) analysis.

Keywords: Pyrazoles; Pyrano[2,3-d]pyrimidin-5(2H)-ones; Synthesis; Anticancer activity

Specifications Table:

Subject area	Organic Chemistry
Compounds	4-(2-substitutedphenyl)-3-methyl-4,6-dihydro-2H-pyrazolo[4',3':5,6]pyrano[2,3-d]pyrimidin-5(2H)-one
Data category	Anticancer, Synthesis, structural characterization, and analytical data.
Data acquisition format	¹ H NMR, ¹³ C NMR, HRMS and FT-IR spectra



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Hybridization of firefly and Improved Multi-Objective Particle Swarm Optimization algorithm for energy efficient load balancing in Cloud Computing environments

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ABSTRACT

Load balancing, in Cloud Computing (CC) environment, is defined as the method of splitting workloads and computing properties. It enables the enterprises to manage workload demands or application demands by distributing the resources among computers, networks or servers. In this research article, a new load balancing algorithm is proposed as a hybrid of firefly and Improved Multi-Objective Particle Swarm Optimization (IMPESO) technique, abbreviated as FIMPESO. This technique deploys Firefly (FF) algorithm to minimize the search space where as the IMPESO technique is implemented to identify the enhanced response. The IMPESO algorithm works by selecting the global best (*gbest*) particle with a small distance of point to a line. With the application of minimum distance from a point to a line, the *gbest* particle candidates could be elected. The proposed FIMPESO algorithm achieved effective average load for making and enhanced the essential measures like proper resource usage and response time of the tasks. The simulation outcome showed that the proposed FIMPESO model exhibited an effective performance when compared with other methods. From the simulation outcome, it is understood that the FIMPESO algorithm yielded an effective result with the least average response time of 13.58ms, maximum CPU utilization of 98%, memory utilization of 93%, reliability of 67% and throughput of 72% along with a make span of 148, which was superior to all the other compared methods.

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1. Introduction

Cloud Computing (CC) is a rapidly developing concept in the domain of distributed computing which could be applied in diverse fields such as data storage, data analysis and IoT applications [10]. CC is an advanced technology that can change the way how traditional businesses work. It offers various facilities to registered clients in the form of online services which like to avoid user investment in computing architecture. Some of the services by CC are Infrastructure-as-a-Service (IaaS), Software-as-a-Service (SaaS) and Platform-as-a-Service (PaaS) [17]. For every service, a user should request the Cloud Service Provider (CSP) via internet. The CSP has to manage the resources in order to satisfy the requests received from clients. SP leverages the scheduling

technique to schedule the input requests as well as control the processing resource in an effective manner. Task scheduling and resource management provide high-economic rate and resource application until the specified limits. The main barriers in the utilization of CC operations are allocating and scheduling the resources. In order to overcome these complexities, many researchers showed their interest in task scheduling process in CC. The main work of task scheduling is to organize the input request in a definite way so that every resource is utilized in an efficient manner. Each service is provided to numerous clients and several tasks might be executed at the same time. If the system does not apply scheduling method, then it results in longer waiting time for the process to be performed. Unfortunately, few requests get terminated due to long waiting time that exceeded the maximum limit. While scheduling is carried out, the concern scheduler is required to monitor some of the limitations such as behavior of the task, size of the request, execution time of the task, available resource and the load induced on the resources.

Task scheduling is the main problem involved in CC. The merit involved in CC is its efficient usage of all the resources which

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Full Length Article

Optimization of number of base station antennas in downlink massive MIMO and analysis of imperfect channel state information by perfection factor

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ABSTRACT

In the present days, there is a rapid growth of data rates in wireless communication but suffers from channel state errors due to imperfections in channel state information (CSI) which leads to a decrease in energy and spectral efficiency. In this paper, the perfection factor has been proposed to optimize the number of base station antennas in massive MIMO and also for the reduction of channel estimation errors in CSI. This perfection factor calculates the achievable sum-rate which in turn determines the ratio of the number of base station antennas with respect to the number of users and further critical reliability. As critical reliability decreases the transmitted power reduces and the number of base station antennas is decreased. Simulation is carried out Massive MIMO System and the degree of perfection, energy efficiency, spectral efficiency are been evaluated. The effectiveness of the proposed method is tested with a different number of base station antennas and the number of users and also on with the increase imperfect CSI. The results obtained are presented and analyzed.

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1. Introduction

Now days, Massive MIMO is the preferred technology offering good spectral and energy efficiency provided that perfect CSI is available. Imperfections in CSI can degrade the overall performance. The chief demerits of massive MIMO are pilot contamination, hardware impairments and channel estimation errors [1]. The main objectives of design are minimization of transmit power and increases in efficiency and improvement of data rates for efficient transmission with higher throughput. Basically pilot contamination causes interference from adjacent cells which degrades the performance of beam forming [2]. The function of pilot symbols is to provide the base stations with an estimate of the forward CSI generating a linear precoder. Pilot contamination due to reuse of same frequencies causes errors in estimating the channel such that CSI becomes imperfect [3,4]. It is required for the MIMO system to be more efficient with less number of antennas with high throughput for more number of users under perfect CSI. In case of perfect CSI, the power requirements are less and number of base station

antennas are less but in practice there is imperfection due to various factors.

Chu et al. [5] proposed eigen-inference (EI) precoding scheme to improve the error performance of the massive MU-MIMO systems under imperfect CSI by using a sum of two rectangular random matrices to mitigate the deterioration caused by imperfect CSI but has not considered perfection factor. Zeng et al. [6] derived linear minimum error probability (MEP) detector with the length of pilots to overcome the imperfect CSI in URLLC using least square channel estimation improves channel reliability with in limited latency but not considered perfect CSI. Du et al. [7] proposed a robust VP precoder design, which takes the imperfectness of CSI and power scaling factor jointly into account under the criterion of minimum mean-square error (MMSE). The closed-form expressions of the proposed precoder are derived and are more sensitive to the accuracy of power scaling factors by considering perfection factor the accuracy may improve. Shahram Zarei et al. [8] proposed a robust minimum maximum mean square error Tomlinson-Harashima precoding (Min-Max-MSE THP) scheme and a low-complexity robust Min-Max-MSE hierarchical linear/THP (HL-THP) scheme for downlink massive multiuser multiple-input-multiple-output (MU-MIMO) systems with imperfect channel state information (CSI) at the transmitter improved performance in terms of the Max-MSE, maximum bit error rate, and minimum rate

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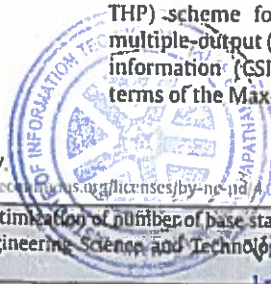
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Privacy Preserving Blockchain Technique to Achieve Secure and Reliable Sharing of IoT Data

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Abstract: In present digital era, an exponential increase in Internet of Things (IoT) devices poses several design issues for business concerning security and privacy. Earlier studies indicate that the blockchain technology is found to be a significant solution to resolve the challenges of data security exist in IoT. In this view, this paper presents a new privacy-preserving Secure Ant Colony optimization with Multi Kernel Support Vector Machine (ACOMKSVM) with Elliptical Curve cryptosystem (ECC) for secure and reliable IoT data sharing. This program uses blockchain to ensure protection and integrity of some data while it has the technology to create secure ACOMKSVM training algorithms in partial views of IoT data, collected from various data providers. Then, ECC is used to create effective and accurate privacy that protects ACOMKSVM secure learning process. In this study, the authors deployed blockchain technique to create a secure and reliable data exchange platform across multiple data providers, where IoT data is encrypted and recorded in a distributed ledger. The security analysis showed that the specific data ensures confidentiality of critical data from each data provider and protects the parameters of the ACOMKSVM model for data analysts. To examine the performance of the proposed method, it is tested against two benchmark dataset such as Breast Cancer Wisconsin Data Set (BCWD) and Heart Disease Data Set (HDD) from UCI AI repository. The simulation outcome indicated that the ACOMKSVM model has outperformed all the compared methods under several aspects.

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A Robust And Accurate Video Watermarking System Based On SVD Hybridation For Performance Assessment

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Abstract: In modern days, multimedia technology plays an important role. Various Wireless channels are available for encouraging the communication systems; in that internet has an important and trending channel for sharing of multimedia information. This facility has dual objectives like positives and controversies related to multimedia digital industry. The positive evaluation tends to improve the revenue and quality of the organization. Coming to controversy, Excessive allotment of large multimedia information through internet causes the loss. An audio, image and videos etc. are has been taken as multimedia information. The controversies which are mentioned above solve by different ways and implements a solution called as water marking. In this work various implementations are compared and suggest the perfect technique for video watermarking. Using this increases the efficiency by 97.86% and throughput by 96.78% this is good achievement compared to existed methods.

Keywords: video watermarking, cuckoo search, frame averaging, frame cropping

I. INTRODUCTION

Watermarking is the procedure for embedding some real/genuine information of owner or organization into the digital data. The information which is embedding for watermarking can be a text or logo or image or particular times a videos, are referred as watermark. Watermark has been retrieve from real information when essential to verify its ownership. In general watermarking models have own significant characteristics like capacity of high embedding, host signal quality maintains , different

signal processing attacks and robust non-signal attacks such as scaling, rotation, cropping, noise addition, averaging of frames, dropping of frames and swapping of frames. The attacks which are mentioned above may cause by third party persons or unauthenticated user. Un-authorized persons intended to hack the video or images by modifies watermark logo/symbols to fraud the watermark detection model with above mentioned attacks. So necessary to implement new methods/optimizations, which are secure and robust against before discussed watermark detachable frameworks. There are various video watermarking methods have been used in today's life effectively, it is necessarily adapt new models for robust video watermarking for efficient authorization of

The image or video watermark sharing techniques and algorithms have been discussed in below sections, as per literature robust video watermark embedding and extraction have more limitations such that need machine learning and neural networks (deep learning) mechanisms. This chapter briefly explains about different robust digital video watermarking algorithms and techniques.

Figure 1. demonstrate that different attacks on watermarked video, in this Forcefully applying the attacks like rotation, frame averaging, frame swapping etc. as mentioned above discussion, At every attack, watermark in the video doesn't disturbed. Any watermarking model has implemented by using embedded processing unit and Extraction processing unit. In General, Two primary inputs are required for embedding processing, 1st is multimedia content 2nd is watermark.



Enhanced dielectric and magnetic properties in Mn-doped bismuth ferrite multiferroic nanoceramics

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Abstract

Multiferroic nanoparticles of manganese doped bismuth ferrite with the chemical formula, $\text{Bi}_{1-x}\text{Mn}_x\text{FeO}_3$, with x values of 0, 0.025, 0.05, 0.075 and 0.1, were synthesized by sol-gel autocombustion method. X-ray diffraction measurements and Rietveld structural refinements were performed on the samples to ensure the formation of rhombohedrally distorted perovskite phase for all the samples. Dielectric measurements of the samples have been carried out in a wide range of frequencies from 1 to 40 MHz and at different temperatures in the range from 30° to 450 °C. Temperature-dependent dielectric anomalies were observed and the same were attributed to structural inhomogeneities at around 150°–270 °C, and to typical free charge carrier hopping mechanisms and anomalies at around 270°–420 °C. Impedance analysis of the samples provides indirect support for the reasons discussed in the dielectric properties and the corresponding electrical conductivity behaviour in these samples. Magnetic measurements were carried out to understand the influence of Mn ions on the magnetic behaviour of the studied multiferroics. The results of all these measurements are well discussed, and they indicate a considerable enhancement in the magnetic order with Mn doping and also a decrease in the dielectric loss with an evidence magnetoelectric coupling and thus making them useful for device applications.

Keywords Multiferroic nanomaterials · Sol-gel auto combustion method · X-ray diffraction · Impedance spectroscopy · Magnetic measurements · Dielectric measurements

1 Introduction

Multiferroics are an important class of materials to explore as they simultaneously control ferroelectric and ferromagnetic orders leading to novel magnetoelectric properties, and they have vast potential for applications in spintronic devices, sensors and memories [1, 2]. In fact, the

magnetoelectric (M-E) coupling between magnetic and electric orders in these multiferroics helps to induce magnetic polarization by making use of electrical field or vice versa. It has been explored previously to understand the fundamental physics behind the emergence of multiferroic materials [3, 4]. From the theoretical background, ferroelectricity and magnetism are two reverse phenomena. It is well known that ferroelectricity requires empty “ d ” shell while magnetism needs partially filled “ d ” shell [5]. Interestingly, it is noticed that the “ d ” electrons in transition metals cause reduction in the tendency for off-centred ferroelectric distortion in many systems [6]. Hence, an extra electric or structural driving force should exist in any multiferroic system in order to achieve ferromagnetism and ferroelectricity simultaneously. Multiferroics, in general, depending on the constituent phases involved in their fabrication, are broadly categorized into two groups. One group is single-phase multiferroics, like BiFeO_3 , YMnO_3 , HoMnO_3 , TbMnO_3 , TbMn_2O_5 , and $\text{Ni}_3\text{V}_2\text{O}_8$. In this class of materials, the coupling strength between the ferroic orders is weak because

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OPTIMAL TRANSMIT POWER ALLOCATION FOR MAXIMIZING THE CHANNEL CAPACITY AND SINR IN MU-MIMO SYSTEM USING DIRTY PAPER CODING

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ABSTRACT

Massive MIMO is the emerging technology to design 5G wireless communication systems. Perfect channel state information(CSI) is the essential condition to design the performance metrics for MU-MIMO system since the inaccuracies present in the CSI reduces data rates and channel capacity. The objective of this paper is to design a optimum power allocation scheme for MU-MIMO using dirty paper coder precoding. An expression is derived to determine the optimum power allocation and the ambient condition with degree of perfection factor under channel reliability at the base station to reduce the transmit power and the results obtained are presented and analysed. 2018 The Korean Institute of Communications and Information Sciences. Publishing Services by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Key words: 5G Wireless Communication, Channel State Information, Channel Estimation, Multi User MIMO.

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1. INTRODUCTION

Now a days, the demand for a 5G wireless system increases to meet high data rates. As, 5G wireless systems are mainly designed to fulfil the needs of many applications such as smart cars, wearable devices, smart homes, health care, monitoring the infrastructure, and many other applications. Green communication gains a lot of advantages in designing the energy



Full length article

Deep learning with LSTM based distributed data mining model for energy efficient wireless sensor networks

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ABSTRACT

Wireless sensor network (WSN) comprises a collection of sensor nodes employed to monitor and record the status of the physical environment and organize the gathered data at a central location. This paper presents a deep learning based distributed data mining (DDM) model to achieve energy efficiency and optimal load balancing at the fusion center of WSN. The presented DMM model includes a recurrent neural network (RNN) based long short-term memory (LSTM) called RNN-LSTM, which divides the network into various layers and place them into the sensor nodes. The proposed model reduces the overhead at the fusion center along with a reduction in the number of data transmission. The presented RNN-LSTM model is tested under a wide set of experimentation with varying number of hidden layer nodes and signaling intervals. At the same time, the amount of energy needed to transmit data by RNN-LSTM model is considerably lower than energy needed to transmit actual data. The simulation results indicated that the RNN-LSTM reduces the signaling overhead, average delay and maximizes the overall throughput compared to other methods. It is noted that under the signaling interval of 240 ms, it can be shown that the RNN-LSTM achieves a minimum average delay of 190 ms whereas the OSPF and DNN models shows average delay of 230 ms and 230 ms respectively.

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1. Introduction

In general, Wireless Sensor Network (WSN) is a self-configured and infrastructure-less wireless networks that helps to observe the external and ecological status, like temperature, moisture, movements and pollutants to pass the information via network to sink from the data might be monitored as well as predicted. A sink or base station (BS) has been treated as interface among the network and user. By using such network, the user can able to derive essential data by inducing queries and collect the required details from BS. Generally, a WSN is composed of numerous sensor nodes. Here, sensors are capable of communicating with alternate nodes through the radio signals. It embeds processing units, storage, radio transceivers and power elements. A single node from WSN is composed of restricted computing speed,

memory, communication bandwidth and so on. Once the sensor node has been injected, it is responsible to self-organize in a suitable network infrastructure along with multi-hop communication process within the system. Furthermore, wireless sensors acknowledge for queries provided from a "control site" in order to process only particular rules and sensing samples. Global Positioning System (GPS) as well as local positioning techniques could be applied to derive the position and related data. It is constrained with actuator which is considered as to be used only in specific situations. Sometimes, it is assumed to be Wireless Sensor and Actuator Networks.

WSN is capable to adopt novel techniques and acquires non-conventional method for a protocol development because of various conditions. Due to the need for minimum complexity and energy utilization for prolonged network lifespan, an appropriate balance among signal and data computing abilities should be identified. It leads to providing maximum energy in scientific events. Recently, various types of developments in WSN takes place in developing energy and computationally effective techniques, whereas the domain is limited to simple data-oriented and reporting fields. Moreover, a Cable Mode Transition (CMT)

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Enhancement of voltage regulation using a 7-level inverter based electric spring with reduced number of switches

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ABSTRACT

Electric Springs has been testified recently to enhance voltage regulation in distribution systems using demand side management. In this paper, a 7-level Multilevel Inverter (MLI) with a resonant switched capacitor Converter based on sinusoidal PWM, is implemented to analyze the performance of an electric spring under voltage variations at PCC. By the proposed MLI based ES, voltage regulation of critical load voltage is studied for voltage sag and swell conditions. Remarkable features of the proposed topology are maintaining voltage balance in input capacitors and reduction of power components. Simulations have been done in MATLAB/ Simulink on distribution system with DGs equipped with MLI based ES under line voltage anomalies. Tested results are analyzed with THD% in critical load voltage.

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1. INTRODUCTION

Due to the high penetration of renewable sources of energy in distribution systems [1], voltage variations occur in the distribution system [2, 3]. In this scenario, it is a challenging task to maintain constant voltage to hospital and military loads, known as critical loads as per their voltage sensitivity requirement [4]. Renewable energy sources also lead to the paradigm shift from centralized control to the distributed control in demand side management [5, 6]. Electric Spring (ES) proposed in [7] by Hui *et.al.* when embedded in the less sensitive loads [8], is one of the simple ways to maintain constant voltage to the sensitive loads, without the need of any communication system [9, 10]. ES regulates the input voltage while allowing fluctuations in load voltage [11]. Initial versions of ES implemented half-bridge inverters for this [12, 13], but suffered with high THD of 2.19%. With the advent of multilevel inverters (MLI) in Power Electronics, they extend a great support to handle the intermittent renewable sources with increased power ratings and reduced THD [14]. Reducing the number of switches, THD and switching losses has always constituted a major area of research in Multilevel inverters [15, 16].

A 3-level Cascaded H-Bridge Inverter is implemented for ES control in [17]. Unlike the conventional MLI, it doesn't need a transformer. It is implemented in the distributed control of 4 Electric springs located at various locations in the distribution system. Simulations are carried out for inductive and capacitive modes of operation of ES, and results are discussed in terms of THD%, RMS values of the mains voltages. 5-level Inverters in Diode-Clamped topology and Neutral Point Clamped inverter topology are



Minor Loss Coefficient Estimation by Venturimeter Experiment Fitted in a Pipe System

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Abstract- The calibration of venturimeter pipe system periodically to be done to avoid the major and minor losses in the running condition. This paper work, based on the minor losses experiment conducted on venturimeter setup in the fluid mechanics & hydraulic machinery laboratory the values are taken accordingly and the calculations are performed. The minor loss coefficient associated with a venturimeter fitted with a pipe system is estimated. It is observed that the loss coefficient varies inversely with the increase in the Reynold's number and when it is compared with the Actual discharge the loss coefficient decreases with the increase of Actual discharge.

Index terms- Loss coefficient, fluid mechanics & hydraulic machinery, Venturimeter, Reynold's number, Actual discharge

1.INTRODUCTION

The flow in the pipes undergo different losses such as major Losses and minor losses are to be checked properly in order to maintain the required energy for the flow and the major loss or frictional loss is due to viscous effects in the pipes and minor losses are due to the additional components such as valves, bends and pipe geometry such as expansion and contraction in pipes. Venturimeter is widely used device to measure the discharge through the pipe. A venturimeter is a converging-Diverging nozzle of circular cross section. The principle of venturimeter is when a fluid flows through the venturimeter, it accelerates the convergent section and decelerates in the divergent section, resulting in a drop in the static pressure followed by a pressure recovery in the flow direction. Then by measuring the difference in the pressures at an axial station upstream of the convergent section and at the throat, the volumetric flow rate can be estimated the working of

venturimeter is based on the principle of Bernoulli's equation.

Bernoulli's Statement: It states that in a steady, ideal flow of an incompressible fluid, the total energy at any point of the fluid is constant. The total energy consists of pressure energy, kinetic energy and potential energy or datum energy. Mathematically, It is necessary to quantify the minor losses and design the energy requirement accordingly so that sustainability of the system can be ensured. Generally, the minor losses are expressed in the function of velocity head. To determine the minor loss due to fitting of venturimeter, the loss coefficient has to be estimated maintaining the Integrity of the Specifications.

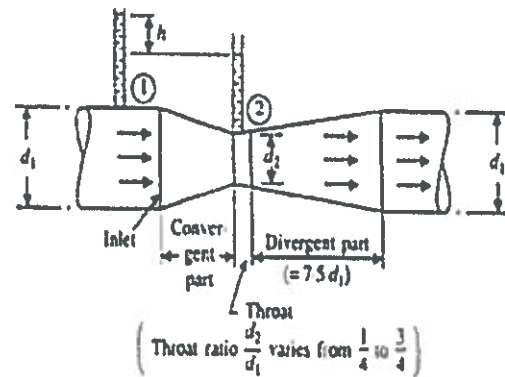
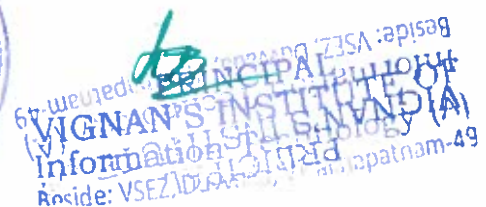


Figure.1.Venturimeter

Farsiroto in the year 2014 conducted experimental studies to estimate the minor losses associated with a Reynold's number indicated that for Reynold's number between 2000 to 5000, the non-dimensional number head loss (which is essentially the loss coefficient) decreased after which it remains constant within the statistical error. The present paper is focused on minor loss estimation with the venturimeter.



Experimental Analysis of Machining Parameters on Turning with Single Point Cutting Tool

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ABSTRACT

The metal cutting process for material removing in turning process using a single point tool on the work piece will influence, the machining parameters in terms of efficiency under variable cutting conditions such as speed of the spindle, feed rate and depth of the cut rate during the removal of material in the form of chips from the cylindrical work piece. The HSS Single point cutting tool is one of the important tool for machining operations in many manufacturing industries. In this paper, the experimental analysis is performed and the effect of parameters like variable speed on the spindle, depth of the cut and feed on surface roughness, tool life and MRR are determined and compared. The work piece chosen for the experiment is S50C medium carbon steel with HSS single point Cutting tool and the results are obtained, calculated and tabulated.

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KEYWORDS: Cutting Tool, depth, MRR, roughness, Tool life

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INTRODUCTION

Turning is metal cutting process to remove a metal from the outer part of the diameter of a rotating cylindrical work piece. Turning is used to decrease the diameter of the work piece, according to the required dimension and application, and to provide a smooth finish on the work piece. The cutter to remove the material is a single-point cutting tool and is tightly clamped to the tool holder the single point cutting tool feed into the rotating cylindrical work piece and cuts the material in the form of small chips. An orthogonal metal cutting process is used in this process

the side flank, the end flank and the base. The single tools are made up of different materials like high carbon steels, HSS, and Diamonds. Single Point Cutting Tool Geometry consists of *shank, Flank, Face, Heel, Nose, Nose radius and Cutting Edges* and tool angles consists of *side Cutting edge angle, end cutting edge angle, side relief angle, end relief angle, back Rack angle, side rake angle.*

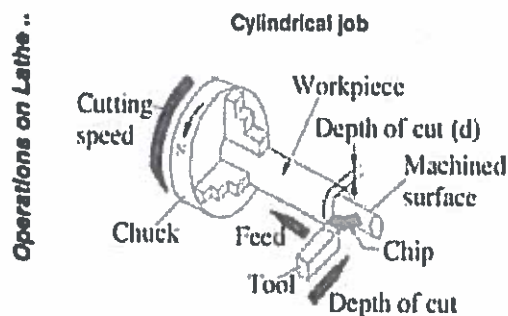


Fig.1. Turning of cylindrical work piece Single Point Cutting Tool Nomenclature

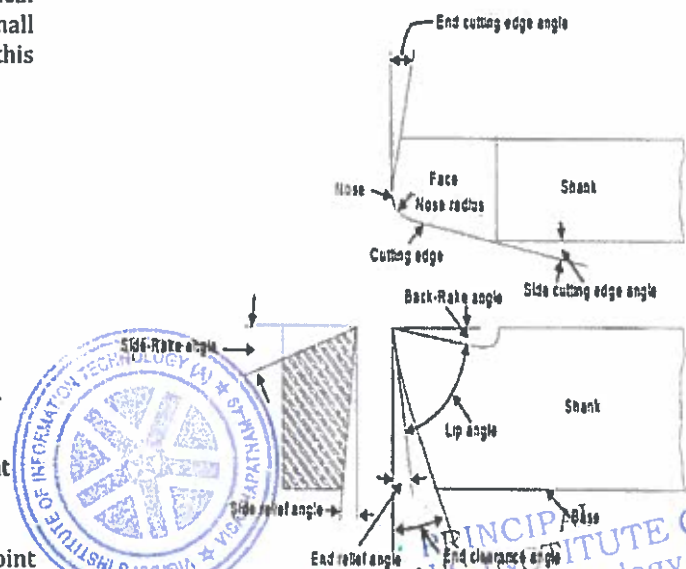


Fig.2. Single point tool Nomenclature

The single point tool consists of a sharp cutting point called as shank, the point of the tool is bounded by the face,


Design and Analysis of Avionic Structures For Aircraft Applications

[P. Venkatesh](#), [M. Viswanath](#) • Published 31 May 2020 •

Engineering, Computer Science •

International Journal for Modern Trends in Science and Technology

The Avionic enclosure is a electronic packed setup which are used in aircrafts and spacecrafts. Avionic enclosure is used for mechanical support to all the system elements and this is mechanically interfaced with the aircrafts. The avionic enclosures is a key role for the system performance. The avionic package has to be designed to withstand high dynamics. FINGS(FIBRE OPTIC GYRO BASED INERTIAL NAVIGATION SYSTEM) is a unit of aircraft for finding the navigation. In this paper the FINGS + GPS... Expand

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DESIGN AND ANALYSIS OF PICO HYDRO POWER PLANT USING A IMPULSE TURBINE

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¹Department of Electrical and Electronics Engineering, Vignan's Institute of Information Technology (A), Visakhapatnam, A.P., India.

²Department of Mechanical Engineering, Vignan's Institute of Information Technology (A), Visakhapatnam, A.P., India.

ABSTRACT

The practical design of pelton wheel and analysis is made to measure the flow rate of rain water entering into a small Pond by using a V-Notch wier .It was performed in a rural area with 50 houses. Every year during rainy season the amount of water used to go waste into the ponds with out any utility for the people living in the rural areas with less population,the water during the rainy season flowing into the pond from the small drains into a large single connected single drain.In this paper A practical attempt is made to utilize the rain water by measuring the total flow rate of the rain water and after measuring based on the discharge obtained a small Pico hydropower plant is constructed using pelton wheel and the amount of power is estimated.

KEYWORDS: V-notch , Flow Rate ,Discharge ,Pico hydro plant, Pelton wheel.

I. INTRODUCTION

The V-notch is a triangular shaped open channel section measurement and they are used for measurement of small flow discharge value. The upper part of the section is above the water level, and the channel is always triangular shaped , the cross-sectional area can be determined easily.V-notches is used for low discharge values and the head above the weir is most sensitive to changes in the flow compared to any other type of notches

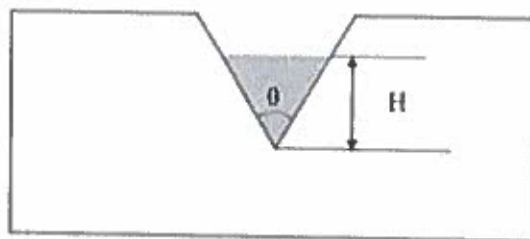
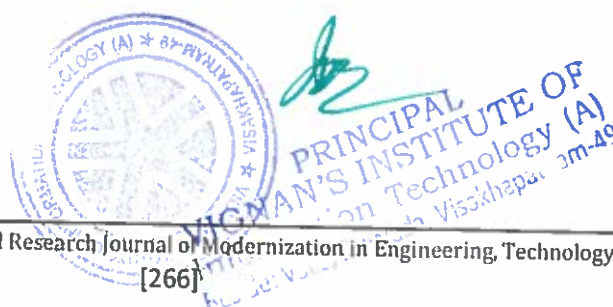


Fig-1:Triangle shaped Notch weir

The Hydro power plant uses the energy from flowing water to generate electrical energy or mechanical energy. In power plants the kinetic energy from the falling water is used to produce electricity. A coupling of turbine and a generator with a shaft is used to convert the energy from the water to mechanical and then to electrical energy.

The classifications of hydro power plants based on the power generation capacity:

- Large hydropower > 100 MW
- Medium hydropower 15 -100 MW
- Small hydropower 1 MW-10 MW
- Mini hydropower 100 kW-1MW
- Micro hydropower 5-100 kW
- (vi) Pico hydropower up to 5kW





Charismatic Document Clustering Through Novel K-Means Non-negative Matrix Factorization (KNMF) Algorithm Using Key Phrase Extraction

E. Laxmi Lydia¹ · P. Krishna Kumar² · K. Shankar³ · S. K. Lakshmanprabu⁴ · R. M. Vidhyavathi⁵ · Andino Maselena⁶

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Abstract

The tedious challenging of Big Data is to store and retrieve of required data from the search engines. *Problem Defined* There is an obligation for the quick and efficient retrieval of useful information for the many organizations. The elementary idea is to arrange these computing files of organization into individual folders in an hierarchical order of folders. Manually, to order these files into folders, there is an ardent need to know about the file contents and name of the files to give impression of files, so that it provides an alignment of certain set of files as a bunch. *Problem Statement* Manual grouping of files has its own complications, for example when these files are in numerous amounts and also their contents cannot be illustrious by their labels. Therefore, it's an intense requirement for Document clustering with data processing machines for enthusiastic results. *Existing System* A couple of analyzers are impending with dynamic algorithms and comprehensive analogy of extant algorithms, but, yet, these have been restricted to organizations and colleges. After recent updated rules of NMF their raised a self interest in document clustering. These rules gave trust in its performances with better results when compared to Latent Semantic Indexing with Singular Value Decomposition. *Proposed System* A new working miniature called Novel K-means Non-Negative Matrix Factorization (KNMF) is implemented using renovated guidelines of NMF which has been diagnosed for clustering documents consequently. A new data set called Newsgroup20 is considered for the exploratory purpose. Removal of common clutter/stop words using keywords from Key Phrase Extraction Algorithm and a new proposed Iterated Lovin stemming will be utilized in preprocessing step in assisting to KNMF. Compared to the Porter stemmer and Lovins stemmer algorithms, Iterative Lovins algorithm is providing 5% more reduction. 60% of the document terms are been minimized to root as remaining terms are already root words. Eventually, an appeal to these processes named "Progressive Text min-

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Extended author information available on the last page of the article

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Iridology based Vital Organs Malfunctioning identification using Machine learning Techniques

T.V. Madhusudhana Rao, P Srinivasa Rao, P.S. Latha Kalyampudi

Abstract

This paper proposes a non-invasive method based on computerized iridology that can identify the malfunctioning of vital organs like the heart, lung and pancreas. Data of 100 patients suffering either from diabetes, heart disease or lung disease is collected. The data is used to develop an algorithm that can identify vital organ malfunctioning based on iridology. Measures like accuracy, error rate, precision, recall, specificity and F-measure are applied on the algorithm for evaluation. The results show an accuracy of 0.9166, which shows the effectiveness of the proposed algorithm.

Keywords-Iridology, diabetes, heart disease, lung disease.

PDF

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Passive suspension optimization of a quarter car using preview control with the spectral decomposition method

V. S. V. Satyanarayana¹ · B. Sateesh¹ · N. Mohan Rao²

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Abstract

In this paper, control of a quarter car vehicle model with optimized passive suspension elements is presented. The vehicle is considered to travel on a rough road which is modeled as the power spectral density of the random road excitation given by integrated white noise that can be approximated by a deterministic step input. The weighted sum of the control force, suspension travel and road holding is minimized by using the optimal preview control law and the spectral decomposition method is used for obtaining the response. The parameters of a passive suspension system, namely spring stiffness and damping coefficient are optimally determined by the mean square equivalence of control force of the passive suspension to control force obtained by the stochastic optimal preview controller. The optimal parameters are also calculated by coordinating the passive suspension performance with the performance of the active preview control and the results show that the optimized passive system performance closely tracks the active system performance.

Keywords Quarter car · Vehicle suspension · Optimisation · Preview control · Spectral decomposition

1 Introduction

Vehicle suspension systems have been designed to attain conflicting goals of the vehicle performance indices, ride comfort, road handling and suspension stroke. Suspension spring stiffness and damping coefficient are the two key parameters of a conventional passive suspension system. Softer suspension results in good ride comfort and the stiffer suspension gives better road holding and the damping ratio influences the suspension working space [1]. The percentage effect of these parameters on impact harshness performance [2] of the road vehicles is estimated. Despite the development of many active and semi-active models for improving the performance, the passive suspension system has been widely used in transport vehicles such as passenger cars, buses, auto rickshaws, trucks, etc., because of its major advantages like cheaper cost and reliable performance. Hence, there is always a need for optimization of the suspension performance of a

passive system by choosing a suitable set of the parameters. The proper selection of the passive suspension parameters is intended not only to give the best ride quality but also to reduce the external energy requirement of an actuator in active systems. The major source of vibrations in a vehicle is the road surface irregularity, and the vibrations are excited and transmitted to the vehicle body through the wheel and suspension assemblies [3].

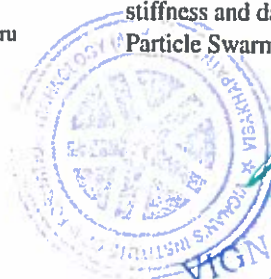
In the past, Dahlberg [4,5] formulated a criterion for optimal ride comfort and road holding. The optimal suspension parameters were obtained for a vehicle traveling on a random road profile and it was observed that the parameters depended on the vehicle speed. Flexible multi-body model was used by Gonçalves and Ambrósio [6] in the frame of optimization method where they optimized the vehicle suspension for ride comfort improvement. In the recent years, Mahmoodi et al. [7] applied genetic algorithms for optimizing vehicle suspension for improved ride and handling performance with an aim to minimize lateral force deviations. Teaching Learning Based Optimization technique was used in [8] to study the passive suspension optimization by considering a linear passive suspension vehicle traveling over a bump with varying speeds. A full car model was considered, and optimal stiffness and damping parameters were determined by using Particle Swarm Optimization and Sequential Quadratic Pro-

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Research Article

Structural and electrical properties of Nd³⁺ doped ferroelectric barium sodium niobate ceramics

B. Chandra Sekhar, **B. Dhanalakshmi**,  B. Srinivasa Rao, S. Ramesh,
P.S.V Subba Rao & B. Parvatheeswara Rao

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Abstract

Ferroelectric polycrystalline samples of Ba₄Na₂Nb₁₀O₃₀ with rare earth neodymium ion, member of the family of TB, were prepared using a high temperature solid state reaction technique and studied their electrical properties in a range of temperature (RT-to 300 °C) at 1KHz. X-ray diffraction analysis of these compounds shows the formation of single phase tetragonal structure at room temperature. Detailed studies of the dielectric properties suggest that they have undergone diffuse ferroelectric–paraelectric phase transition well above the room temperature. It has also been found that as the concentration of the neodymium



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Abstract

Structural damage index (SDI) is determined to implement damage-based design (DBD) which is a useful design philosophy in terms of safety and reliability nowadays. Literature is available to determine DI using different methods. Park-Ang damage assessment method is popular among them. In this method, first member damage is calculated then storey damage index is determined. From the calculated

SDI, global damage index (GDI) is estimated. Park-Ang method requires three steps to estimate DI of structure which is tedious and time-consuming procedure for a

IMPLEMENTED MODIFIED DIJKSTRA'S ALGORITHM TO FIND PROJECT COMPLETION TIME

S. ADILAKSHMI¹ AND N. RAVI SHANKAR

ABSTRACT. Longest path problems in network analysis provide an important functional method for planning and managing broad projects in the architecture, medical and different sectors. We may use PERT / CPM approaches to calculate the project completion time or the longest path in the diagram in question. Calculation of traditional Dijkstra's algorithm has been commonly used in the shortest path problems. Indeed, it's one of the most referenced. In this paper, traditional PERT compared to Modified Dijkstra's algorithm and calculate earliest and latest times.

1. INTRODUCTION

Lewis [2] describes project management as "the planning, scheduling and controlling of project activities to achieve project objectives-performances, cost and time for a given scope of work". A Project completion on time relies upon a right schedule strategy. There is a breakdown mechanism of the work technique in project management, which divides a project into smaller challenges. Every task has its own span of time; it needs necessary conditions and gives the outcome. Additionally, tasks are utilized in the project management approach, which is determined by the project scale, difficulty, and project duration. The approach must be an efficient and easy procedure. There are a few techniques that follow these

¹corresponding author

2020 Mathematics Subject Classification. 05C90, 68R10.

Key words and phrases. PERT, Dijkstra's algorithm, Modified Dijkstra's algorithm, Longest path, Earliest time, Latest time.

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Research Article

Influence of *Parthenium Hysterophorus* and *Impomea Pes-caprae* Fibers Stacking Sequence on the Performance Characteristics of Epoxy Composites

Vijay Raghunathan , Kumaran Palani, Pottathil Shinu,Jafrey Daniel James Dhilip  , Gunda Yoganjaneyulu & Saikrishnan Ganesh

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ABSTRACT

The application suitability of natural fibers is increased by the method of hybridization. The current study deals with the development and characterization of four different tri-layer composites by varying the stacking sequence of *Parthenium hysterophorus* and *Impomea pes-caprae* fibers with epoxy as a matrix, by using the conventional hand layup process. The mechanical properties, namely tensile, flexural, impact, Shore D hardness, and water absorption properties, were analyzed as per ASTM. The test results show that composites with upper layers of *Impomea*

High gain switched beam Yagi-Uda antenna for millimeter wave communications

High gain
switched beam
Yagi-Uda
antenna

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Revised 26 August 2020
Accepted 22 September 2020

Abstract

Purpose – The suggested antenna has a switched mechanism among the successive elements of the radiating patch. The purpose of this paper is to develop high gain and less interference at higher frequencies.

Design/methodology/approach – The design geometry of the suggested high gain switched beam Yagi-Uda antennas. The constructed antenna has been developed with Rogers Substrate, relative permittivity (ϵ_r) of 4.4, tangent of loss 0.0009 and with height of 1.6 mm. The proposed antenna has an input impedance of 50, and it is connected to input feed line with 2 mm.

Findings – In forthcoming life, the antennas play key role in all the wireless devices, because these devices perform with high gain and high efficacy.

Originality/value – The pivotal principle of this paper is to accomplish the gain as high, high directivity and interference is low at higher frequencies. Therefore, it is more applicable to 5G mobile communications and millimeter wave communications.

Keywords High gain, mm wave, Switched beam, Yagi-Uda

Paper type Research paper

1. Introduction

The present and future needs of human beings are linked to wireless compact devices and technology. Researchers face challenges because of various advancements in technology, and antennas play a key role in wireless devices, as they perform with high gain and high efficacy. The Yagi-Uda antenna (Alhalabi and Rebeiz, 2009) was developed with high radiation efficacy and accuracy by applying a very low phase angle (Tranquilla and Best, 1990) to reduce the F/B ratio and improve the beam width for the millimeter wave applications. By considering the conventional facet of the ground plane (Wong *et al.*, 2002)

The authors would like to acknowledge the RF and MWE group of Vardhaman College of Engineering, Hyderabad, for granting the permission to use the available simulation environment ANSYS-HFSS and to produce the results.





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Telecommunications and Radio Engineering (English translation of Elektrosyaz and Radiotekhnika)

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V band frequency reconfigurable antenna for millimeter wave applications(Article)

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Abstract

A compact V band frequency reconfigurable microstrip patch antenna is introduced in this paper. The introduced antenna is a Psi shaped patch designed to operate at 48 GHz. This basic structure is modified by introducing p-i-n diodes, radiating slots, and resistors on the surface of the patch which exhibits multi-band operation at 63 GHz, 68 GHz, 69 GHz, and 70 GHz and is well suitable for 5G applications. The compactness of the introduced antenna is 8 mmx8 mmx0.254 mm and operates at the millimeter-wave range, i.e., (30 GHz - 300 GHz). The two p-i-n diodes are arranged on either side of the feeder and two symmetric slots with resistors are placed on the substrate which controls the feed line and this structure achieves the frequency reconfigurability. The patch is made of copper material and the antenna is designed on a material known as ROGERS R03003 substrate with properties of $\zeta = 3$ and $\delta = 0.0013$ and due to the dielectric loss for high-frequency performance, used an EM simulator which is HFSSv16. The simulated results show optimum gain and wide bandwidth at the operating frequency. © 2020 by Begell House, Inc.

Author keywords

5G Millimeter-wave P-i-n diodes Resistors V band

Indexed keywords

Engineering controlled terms:

5G mobile communication systems Antenna feeders Dielectric losses Microstrip antennas Millimeter waves Resistors Slot antennas Structure (composition)

Engineering uncontrolled terms

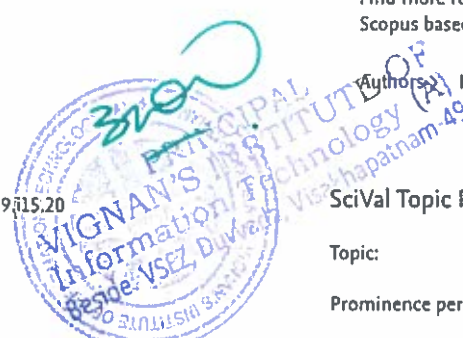
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Ajjitha, B.V.S. , Bharg, A.S.T.A. , Bandi, A.

Review on Switching Band Antenna Reconfigurability

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Shaik, K.Z. , Siddaiah, P. , Prasad, K.S.

CPW-Fed Microstrip Patch Antenna for Millimeter Wave Applications

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Bhuvaneshwari, N. , Suneetha, P. , Kethavathu, S.N.

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Correlative study and analysis for hidden patterns in text analytics unstructured data using supervised and unsupervised learning techniques

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Abstract: Two-third of the data generated by the internet is unstructured text in the form of e-mails, audio, video, pdf files, word documents, text documents. Extraction of these unstructured text patterns using mining techniques achieve quick access to outcomes. Textual data available at online contains different patterns and when those huge incoming unstructured data enters into the system creates a problem while organising those documents into meaningful groups. This paper discusses document classification using supervised learning by focusing on the concept-based algorithm and also deals with the hidden patterns in the documents using unsupervised clustering technique and topic-based modelling for the analysis and improvement of systematic arrangement of documents by applying k-means and LDA algorithm. Finally, this presents comparative study and importance of clustering than classification for unstructured documents.

Keywords: text analytics; concept-based method; data representation; storage; latent Dirichlet allocation; LDA algorithm.





Study of Different Types of Experience Competencies to Enhance the Environment

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Abstract

As a major aspect of an activity to make the experience of customer into the organization for improving the integration of the environment a phased and organized methodology is needed. Around the globe with scores of customers on the basis of working, the REAL world methodology is used. At "customer experience" when the operation and company become proficient the structure will "demystify" the end state and activities that should be able to recognize.

Keywords: Customer experience; Integration; REAL world; Organized methodology

1 Introduction

With a company if a customer have a good experience then it can recommend it to others, can repurchase it and try its new offerings. By including superficial changes several organizations try to enhance the customer experience (CX). To Create a customer-centric culture it can increase the loyalty and discover that the path to lasting differentiation (1-4, 10).

companies want to sustain and build a CX differentiation there are many different CX competencies used by the organization (5, 6).

1.1 Types Of Customer Experience Competency

1.1.1 Around Experience Company Wide Alignment

Numerous associations state they center on their "experience" of their customer yet few do the difficult work to characterize the phases of their experience from the client's perspective. Without this, the entirety of the working territories accomplishes their own thing, driven by their inner undertakings and motivation and scorecard. A ton of work is done, frequently for the sake of the client, yet it doesn't make any sense from the clients' understanding to convey a brought together encounter (7-9). The experience of customer unwavering quality isn't overseen on the grounds that every storehouse oversees undertakings to their own yearly needs and scorecards. The enormous things don't get foundationally fixed. It pass up on the chance for the enormous "stunning" condition (11, 12). Basic Checkpoint: Define the phases of the moments of truth and experience that involve the entirety of the experience contact focuses (13, 14).

1.1.2 Feedback And Listening Based On Experience

Organizing and collecting the data is critical to avert "one off" fixes and to join issues to the suitable stage in the client experience. It has to decide how it can associate these listening "funnels" to exploit the data that empowers to pattern and track it. Basic Checkpoint: Establish "ordinary" listening input, which empowers you to release dependence on reviews. It can make continuous move on the things that truly matter (15-19).

Five Competencies = Engine for Growth

A Discipline to Embed Experience Development Into Your DNA

Customer Experience Reliability	1: Customers as Assets. Knowing growth or loss of customers and caring about the "WHY"
	2: Align Operations Around Experience Design. Driving accountability to the stages as customers experience it, not down your silos. Identifying priorities to drive united focus.
Customer Culture Fundamentals	3: Customer Listening. Knowing and caring about real time emerging issues and mapping them to the customer journey. Uniting how you identify and act on issues/opportunities.
	4: Customer Experience Reliability. Proactively managing key cross-company process/KPI metrics and holding yourselves accountable to deliver experience reliability. Driving ongoing action on emerging issues before customers tell you.
Earn Advocacy & Growth	5: Leadership & CX Culture. Uniting your actions by clarity of purpose. Driving regular accountability for taking focused actions. Giving people permission and enabling them to deliver customer experience reliability.

Figure 1: Five Competencies of Customer experience

To find the difference between less successful peers and the leaders of CX it studied several companies and identified that if

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Strengthening Environment Resistance for Improving Quality Growth

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Abstract

In line with the development of the digital economy, various environment resources at this time can be utilized with the speed of distribution and increasingly good quality. The fast and dynamic digital economy penetration has shaped the landscape of the digital economy in Indonesia to help the environment. Nowadays, Indonesia does not only cover the demand services for environment, e-commerce and financial technology (Fintech), but they also provide internet of things (IoT) services. The projection of digital economy development in Indonesia is shown by the growth of value of e-commerce environment by 1,625 percent to USD 130 billion in the 2013-2020 period. Since economics is an open system, the three main processes (extraction, processing, or production and consumption) all involve the generation of waste that is ultimately disposed of to the environment (air, water or land). Excessive waste in inappropriate locations and time will cause biological changes in the environment, which in turn damages animals, plants and ecosystems. If environmental damage to human health or adversely affect human welfare, economists believe that economic pollution has occurred.

Keywords: Digital economy, Economic resources, National industry, Economic growth

1 Introduction

Economic development in the next five years is aimed to increase economic resistance as demonstrated by the ability to manage economic resources, and in using these resources to produce high value-added goods and services to meet domestic and export markets. The results are expected to encourage quality growth as indicated by the sustainability of the carrying capacity of economic resources that are used to improve welfare fairly and equally (1-4). Economic development will be carried out by two approaches, namely: (1) management of economic resources, and (2) increasing economic value addition. These two approaches form the basis for synergy and integration of cross-sector policies covering the food and agriculture sectors, maritime and fisheries, industry, tourism, the creative economy, and the digital economy. The implementation of these two approaches will be supported by improvements of data to become a reference in monitoring, evaluating development achievements, and improving the quality of policies. The general data protection regulation, a set of rules on data protection and privacy was a step in the right direction, giving citizens, at least, more control over their data (and prompting some Internet companies to extend similar rights to all user globally). As Artificial Intelligence (AI) systems start to be applied in areas like predictive policing,

prison sentencing, job recruitment or credit scoring, a second area of concern is that of algorithmic bias, the worry that when systems are trained using historical data, they will learn and perpetuate the existing biases. Advocates of the use of AI in personnel departments (for example, to scan the resume of job applicants) say using impartial machines could reduce bias. To ensure fairness, AI systems need to be better at explaining how they reach decisions (an area of much research); and they should help humans make better decisions, rather than making decisions for them. Mention AI and the term may bring to mind visions of rampaging killer robots, like those seen in the terminator films, or worries about widespread job losses as machines displace humans. The reality, heading into 2019, is more prosaic: AI lets people dictate text message instead of typing them, or call up music from a smart speaker on the kitchen counter. That does not mean that policymakers can ignore AI, however. As it is applied in growing number of areas, there are legitimate concerns about possible unintended consequences. The immediate concern is that the scramble to amass the data needed to train AI System is infringing on people's privacy (4, 5). Monitoring everything that people do online, from shopping to reading to posting on social media, lets Internet giants build detailed personal profiles that can be used to target advertisements or recommend items of interest.

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Document details - Investigations on premixed charge compression ignition type combustion using butanol-diesel blends

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Journal of Thermal Science and Technology

Volume 15, Issue 3, 2020, Article number 20-00230, Pages 1-11

Investigations on premixed charge compression ignition type combustion using butanol-diesel blends(Article)(Open Access)

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Abstract

Renewable biodegradable butanol blended to diesel fuel was used in an engine that operates on PCCI mode shows excellent combustion characteristics and offer efficient high load performance with minimum exhaust emissions. Its higher octane number prevents engine knock, higher cooling effects have potential to reduce the NO_x emissions and well-mixing ability with air substantially reduces the smoke emission. In the present experimentation, n-butanol and diesel blend B10, B20, B30 and B40 were tested on PCCI mode which was mainly accomplished by DI timing 20 degree CA bTDC and injection pressure 400 bar. For high load operation, B40 blend provided 6.9%, 8.1%, 12.9% and 13.7% higher brake thermal efficiency over B30, B20, B10 and neat diesel respectively at the cost of small increment in brake specific fuel consumptions. Smoke and CO emissions reduction were observed. However, NO and HC emissions produced were higher than the B30, B20, B10 and diesel respectively. Considering the benefits in terms of higher high load efficiency and lower emissions, in addition, delayed CA50 (50% burn at crank angle) than all fuel blends, B40 blend was preferred for higher premixing to attain higher performance. © 2020 The Japan Society of Mechanical Engineers.

Author keywords

Butanol Carbon monoxides (CO) Compression ignition (CI) engine Exhaust gas recirculation (EGR) Hydrocarbons (HC) Nitric oxide (NO) Smoke emissions

Indexed keywords

Engineering controlled terms:

Brakes Efficiency Emission control Fuels Ignition Smoke

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Krzemiński, A., Ustrzycki, A.
Effect of Ethanol Added to Diesel Fuel on the Range of Fuel Spray

(2023) *Energies*

Kuszewski, H., Jaworski, A., Madziel, M.

Lubricity of ethanol–diesel fuel blends—study with the four-ball machine method

(2021) *Materials*

Sitnik, L.J., Sroka, Z.J., Andrych-Zalewska, M.

The impact on emissions when an engine is run on fuel with a high heavy alcohol content

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Dichotomy and well conditioning of two-point boundary value problems on time scale dynamical systems

Article type: Research Article

Authors: [Suryanarayana, R.](https://content.iospress.com:443/search?q=author%3A%28%22Suryanarayana,R.%22%29) (https://content.iospress.com:443/search?q=author%3A%28%22Suryanarayana,R.%22%29)^a - | [Chatikam, Rajkumar](https://content.iospress.com:443/search?q=author%3A%28%22Chatikam,Rajkumar%22%29) (https://content.iospress.com:443/search?q=author%3A%28%22Chatikam,Rajkumar%22%29)^b | [Sharma, Santosh Kumar](https://content.iospress.com:443/search?q=author%3A%28%22Sharma,SantoshKumar%22%29) (https://content.iospress.com:443/search?q=author%3A%28%22Sharma,SantoshKumar%22%29)^c

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Abstract: In this paper, we establish close relationships between the stability constants on one hand and the global behaviour of fundamental matrices on the other hand to the two-point boundary value problems on time-scale dynamical systems. We introduce the concept of conditioning number k and show that conditioning number is the right criteria in estimating the global error due to small perturbations of two point boundary value problems on time scale dynamical systems. Further, the moderate stability constants imply a dichotomy with moderate k -bound will be developed. Further, the exponential behaviour of solutions of the Green's matrix will be investigated. We also investigate the conditions under which strong dichotomy exists for two-point boundary value problems when the boundary conditions are separable.

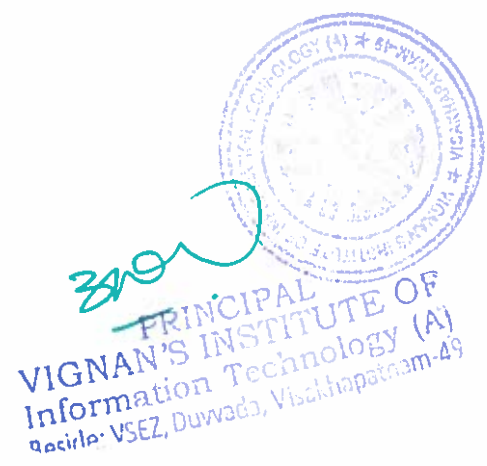
Keywords: Boundary value problems, time-scale dynamical systems

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An Optimal Least Square Support Vector Machine Based Earnings Prediction of Blockchain Financial Products

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ABSTRACT The booming applications of bitcoin Blockchain technologies made investors concerned about the return and risk of financial products. So, the return rate of bitcoin must be foreseen in prior. This research article devises an effective return rate prediction technique for Blockchain financial products based on Optimal Least Square Support Vector Machine (OLS-SVM) model. The parameter optimization of the LS-SVM model was performed using hybridization of Grey Wolf Optimization (GWO) with Differential Evolution (DE), called optimal GWO (OGWO) algorithm. The hybridization process is performed to eliminate the local optima problem of GWO and enhance the diversity of the population. To verify the goodness of the proposed model, the Ethereum (ETH) return rate was chosen as the target and experimental analysis was performed on it to verify the predictive results on the time series. The experimental outcome was analyzed in terms of two performance measures namely Mean Squared Error (MSE) and Mean Absolute Percentage Error (MAPE). The obtained simulation outcome infers that the OLS-SVM model yielded better predictive outcome of the return rate of financial products.

INDEX TERMS Blockchain, bitcoin, financial products, return rate, prediction.

1. INTRODUCTION

In recent times, the global economy has progressed rapidly and in parallel, several factors which hinder economic growth have been overwhelmed by the faster-growing economy. There is a rapid development observed in financial market. Economic market place is defined as the media of financial growth. It controls the resource allotment of whole financial system as well as public while it becomes a significant part of financial growth. The progressive growth of internet, throughout the globe, led to the development of various internet-based economic products like Yu'EBao, Baidu Financial Management, and so on concerning the society. Recently, new internet finance schemes emerged with global

influence such as crowdfunding, P2P, Blockchain as well as digital currency which might act as a vital part in the growth of global economic marketplace.

Blockchain model is defined as a scientific innovation in which the intervention has a great impact by transferring the functioning of business from centralized form to a decentralized form. It also has shifting of unreliable agents with no requirement of entity-based modules. On the other end, it modifies the way of detecting every transaction and activates extensive possibilities in various other regions like Multi-Party Computation (MPC) that has been applied in Decentralized Autonomous Organizations (DAC) and government sectors. There are three evolutionary phases in it such as Blockchain 1.0, 2.0, and 3.0 [1]. Initially, Blockchain 1.0 is dedicated for commercial applications with money transfer, remittance, and digital payment which got vastly

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Performance Analysis of LTE and DSRC: An Intelligent safety application for Vehicular communication

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A Comparative Assessment on Implementation of Human Resource Development Practices impact on Employee Productivity in Public and Private Banks - An Empirical Study on Banks in India

 Auadhathi Datta, Sivajee Vavilapalli, Dr.P. Tirumala, P. Harika and Noolu Kiran Kumari

Abstract

The "Human Resource Development (HRD)" will be developing perception today that no organization with long term objectives might give to ignore in instance it requires to attain the principles of quality. The HRD will be a significant element for achievement of any organization. The effective organization of human assets behaves an important part in "management of sound" is a central sub framework of modern management framework. The HRD in banks, under current situation in country will be significant to know bank's contemporary HRD philosophy, preparation and result with a view to provide ideas for formulation of right viewpoint and HRD practices in Banks. The current survey is undertaken considering the nonappearance of organized studied on subject. The nationalization has transformed dimensions & complexion have located the changing responsibilities on shoulders of commercial banks like development branch offices to unbanked and remote rural regions on a enormous scale so as to cover artisans, self-employed persons, small scale sector, cottage and rural industries, weaker sections of the society, small traders and other persons of small means. This manuscript covers all significant regions of HRD.in banks. These regions incorporate theoretical explanation about Human Resource and HRD in Banks, fundamentals of HRD, the sub-system of HRD such as Training & Development, Organization Development, Performance Appraisal, Career Planning and Development, Participative Management, Quality Circles etc. It also efforts to know the observation of employees to HRD Climate and how is a bank faring in OCTAPACE culture regarding experience & age. These main regions of HRD are surveyed systematically to most amounts through means of accounts, discussions, reports, and observations etc.

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A Study on Public Assistance and its Impact on Women Workers for Achieving Work Life Balance with Reference to it Sector

👤 Sivajee Vavilapalli, Suguna Tentu, Divya Kundrapu, B. Rajesh Kumar and Venkata Laxmi

Abstract

The economic pressure, education alongside varying trends within the value system and lifestyle has confident more number of girls to hitch the company environment Women are India has always been the one within the family to be the only caretaker since ages and work-life stability of women employees has always been the research focus for several researchers, Hence the researcher deliberates work-family balance with reference to family, domestic and colleagues among working married and unmarried women in Hyderabad, which is India's largest IT hub. Motivation of selection of this subject is how social support assists the ladies employees to satisfy out demands of labor also as family life in Information technology sector. The scope of the study is restricted to women employees with reference to Information technology sector alone. Main theme of preparation of this dissertation is to walk around the life of working married and unmarried women who balance work and family tasks and identify impact thereon. The study adopts correlation analysis to spot the impact of social network in harmonizing work and family tasks. The reading considers three variables which include family, domestic and colleague. It is observed from the study that family, domestic and colleague support has an impression on married women employees to realize work and family life balance. Whereas family and domestic doesn't impact on unmarried women employees but colleague support does impact to realize work family balance. As a result Changes in family automatically affects the social network which in turn affects the work and family balance.

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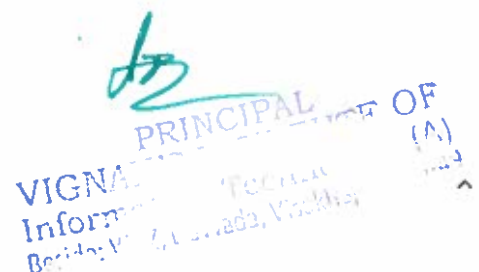
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ENHANCED DBSCAN WITH HIERARCHICAL TREE FOR WEB RULE MINING

NEELIMA GULLIPALLI* AND SIREESHA RODDA†

Abstract. Like other mining, web mining is also necessary to increase the power of web search engine to identify the intended web page and web document. While processing with large datasets, there arises several issues associated with space availability, similarity relationships between different webpage's and running time. Hence, this paper intends to develop an enhanced web mining model based on two contributions. At first, the hierarchical tree is framed, which produces different categories of the searching queries (different web pages). Next, to hierarchical tree model, enhanced Density-Based Spatial Clustering of Applications with Noise (DBSCAN) technique model is developed by modifying the traditional DBSCAN. This technique results in proper session identification from raw data. Moreover, this technique offers the optimal level of clusters necessitated for hierarchical clustering. After hierarchical clustering, the rule mining is adopted. The traditional rule mining technique is generally based on the frequency; however, this paper intends to enhance the traditional rule mining based on utility factor as the second contribution. Hence the proposed model for web rule mining is termed as Enhanced DBSCAN-based Hierarchical Tree (EDBHT). It benefits in providing the search results depending on high level information (e.g., location), so that the ability of search engine in providing the interesting association rules can be improved. Next, to the implementation, the performance of proposed EDBHT is found to be enhanced when compared over several traditional models.

Key words: Rule Mining; Hierarchical Clustering; Searching Behaviour; DBSCAN; A priori Algorithm.

AMS subject classifications. 68M11

1. Introduction. With the increase in usage of devices [35], weblog analysis software can be used to analyze the server logfile obtained from web server and depending on the standards present in the log file, insights into the manner in which pages are accessed, the user accessing the relevant webpages and the duration for which particular webpage is accessed, are gained [1]. The web server normally generates log files earlier; hence the original data is available in advance. Also, the web server consistently files each deal it makes [2]. Log files include details on visits from search engine spiders. Companies and organizations depend on the corresponding websites to communicate with their clients [3,38]. Maintaining present customers and drawing effective websites thrust such companies, associations, and foundations to come across the striking way to create their websites helpful and capable [4,34,37]. To attain this objective, several reviewing efforts have to be made [5]. These tasks can be done in two random modes. Clients of a particular website could be sought to assess their practice of browsing [5,6]. Subsequently, the performance will be engaged in progressing the construction and/or content depending on the response that is arrived to offer a feedback [2,7,36]. The involuntary navigational account recorded by clients' is also checked up consequently [1,8].

Web Mining [9,10] can be categorized into three diverse categories, based on the types of data to be mined. They include web content mining, web usage mining and web structure mining [11,12]. A lot of web testing equipment subsist however they were restricted, and the effectiveness of such equipments is in a state of excellence [13,14]. Several data mining algorithms have been successfully employed to weblog analysis to better understanding of the user behaviour. Clustering and classification are proving helpful with such issues [3,15,16]. There exist a lot of schemes for producing association rules. A priori algorithm [17] is a well-known and significant approach to discover association rules [5,18]. Improvements obtained from the research that are held over years are integrated to existing web systems for acquiring more successful suggestions.

In addition, data mining approaches have been helpful to deal with sparsity and presentation issues as they were not only dependent on invention assessments but also on various other attributes [19,20]. Hence,

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Evaluation of Low-cost GNSS Single Frequency Receiver Using Satrack Software

D.Abhishek Reddy, K.Dinesh Reddy, V. Appala Raju, A. Purna Sai Chandra Reddy, GSV Prasad

ABSTRACT: Satrack is an evaluation software, providing system integrators and end users with a quick and simple way to interface with ALLYSTAR GNSS chipsets, modules and boards. It supports easy Satellite communication, geographical information, logging data receiving, GNSS messages analysing, satellite tracking and graphical representation of signalling. Satrack is designed to communicate with ALLYSTAR's Cynosure GNSS receiver via serial port or USB port. It provides general GNSS functions as well as real time and playback evaluation tools. The tested modes of operations are Static and Dynamic. The data required for evaluation were obtained from low-cost Global Navigation Satellite System (GNSS) receiver. The low-cost receivers used were Allystar TAU1302. Information including raw carrier phase measurements are provided by this receiver. Centimetre-level precision of positioning can be achieved by this receiver.

Keywords: GNSS Receiver, Low-cost, Evaluation, Tracking, Static, Dynamic.

I. INTRODUCTION

Global Navigation Satellite System(GNSS) at present includes many satellites that revolve around Earth without interruption. With the help of a code or pseudo range signal, the users of GNSS can establish their position, example: latitude, longitude, and height on the Earth by measuring distance from satellite for a minimum of 4 satellites at a time. GNSS is used in many applications with accuracy ranging from several meters to millimeters [1, 2]. The receiver for geodetic survey that has a dual frequency will give positioning accuracy up to mm. But this mentioned equipment is of high cost. Now a day's receivers are available for GNSS users at a very low cost. These receivers can be easily handled and embedded [3, 4]. Real Time Kinematic (RTK) is also equipped with the receiver which is one of the precise positioning methods which can secure accuracy of position up to centimeter level utilizing phase data measurement in real time. Only single frequency is supported by low cost receivers. Using a low-cost receiver namely RTKLIB, an open source program package for RTK is developed by [5]. This program enables the receivers to acquire measurement of raw of GPS data. By Using RTK approach, the low cost GPS can be improved to secure a good accuracy. In this paper, we will analyze the working of single frequency low cost receiver: Allystar TAU1302. Thus, we contrast their performance with the survey-grade receiver: Topcon GB-1000.

II. DESCRIPTION OF SOFTWARE AND HARDWARE

Software

Satrack is an evaluation software figure [1], which gives end users and system integrators a quick and simple way to interface with ALLSTAR GNSS board modules and chipset. It can give information about logging data receiving, satellite communication, GNSS message analyzing, satellite tracking and Graphical representation of signaling & information. It provides general GNSS functions as well as play back evaluation tools and in real time. Satrack is designed such that, communication with ALLYSTAR'S cynosure GNSS receiver via USB port or serial port. Most of the GNSS users have sensors which are at low cost. The benefit of purchasing or using a low cost receiver is they are small in size, embedding and easy handling [9]. We use RTK-library file to plot the signals that are received by the receiver and compare the position, velocity and error rate. GOOGLE EARTH is used

in observing the position of an object while in resting position and in motion.



Figure1.Satrack Main Screen

Position Information:

"Aero Position Information", this platform includes all the information of aero position. Here we can see the latitude and longitudinal positions of the receiver [12] as well as the altitude, mode, PDOP, HDOP, VDOP, Satellites in visibility and satellites in usage. The heading point and the UTC is also calculated by receiving the signals from the satellites. That information is displayed as below

COM5 - Position Information	
Latitude	11.4492133
Longitude	10.8219713
Altitude	-54.3 m
Mode	Valid
PDOP	2.57
HDOP	1.99
VDOP	1.83
Sat in View	27 GPS 15 (2020.01.20.11)
Sat in Use	8
Speed	0 km/h (0 m/s)
Heading	272.83
UTC	15-11-2019 12:28:17.0

Figure 2. Position Information

Port Monitor:

This platform allows user to view ASCII message data. A



Influence of Stacking Sequence on the Mechanical and Water Absorption Characteristics of Areca Sheath-palm Leaf Sheath Fibers Reinforced Epoxy Composites

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ABSTRACT

Hybridization of natural fibers in polymeric composites is used in various applications due to its many advantages. The present study deals with the development of four different tri-layer composites by varying the stacking sequence of areca sheath and palm leaf sheath fibers with epoxy as a matrix by conventional hand lay-up process. The assessment of the developed composite's properties was done by analyzing tensile, flexural, compression, impact, shore D hardness, water absorption as per ASTM (D 638-14, D790-10, D695-15, D256-10, D2240-15, D570-96, respectively). It was found from the test results that the composites with skin layers of areca sheath and a core layer of palm leaf sheath fibers showed better mechanical properties with a higher ultimate tensile strength of 46 MPa, ultimate flexural strength of 51 MPa, ultimate compression strength of 54 MPa, and reduced water absorption proving its suitability for lightweight applications. A scanning Electron Microscope highlighted the fiber bonding, and void characteristics of the tested composites.

摘要

防起球和易护理（树脂整理）是两种最常见的纺织品整理剂。本文对100%人造丝和50:50人造丝/棉混纺无烧毛缎纹织物的抗起球及易护理整理性能进行了评价。本研究选择了四个因素：织物混纺比、阿普坦N9211的浓度、Arkofix-NF和固化方法。织物混纺比和固化方法在两个水平上进行测试，而Appretan N9211、Arkofix NF的浓度在三个水平上进行测试。通过测试水洗前后起球、尺寸稳定性、撕裂强度、berger白度、黄度指数、平滑度、耐光性等8个响应变量，对整理剂的性能进行了评价。研究表明，含有100g/l Appretan N9211、100g/l Arkofix NF和正常固化（在150°C下持续3分钟）的配方可改善起球、尺寸稳定性、光滑外观和撕裂强度。然而，伯杰白度降低，黄度指数增加最小。但织物的耐光性变化不大。

KEYWORDS

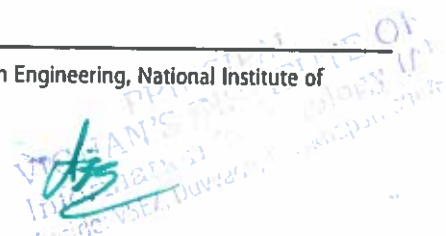
Areca sheath fiber; palm leaf sheath fiber; hand Lay-up; hybridization; epoxy composites; scanning Electron Microscope

关键词

缎子; 人造丝; Easy care容易护理; Pilling起球; 光滑外观; 尺寸稳定性

Introduction

The need for alternative materials for existing synthetic fibers in various applications has increased the demand for natural fibers in globally. Natural fibers have multiple advantages such as low cost, being lightweight, easily available, and being biodegradable in nature (Thakur, Thakur, and Gupta 2014). Natural fibers are divided into three types plant, animal, and mineral-based. Plant-based fibers are



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Predictive Model For Abnormality In Blood Pressure

M Srinivasa Rao, Ch Sekhar, B Sunayana, Pappu Tejaswi, P Ratna Kumari

Abstract

In the previous hardly any years, there have been critical improvements in how Machine Learning can be utilized in different industries and research. A health service is one of the quickest developing segments today and is right now in the center of a total worldwide upgrade and change. In this paper we have structured a model which will take previously existing clinical information Blood pressure is the power applied in the corridors by blood as it flows. It is isolated into systolic and diastolic weights. It has been estimated that an expanded hemoglobin level lifts circulatory strain and the other way around bringing about hypertension and hypotension separately. While epidemiological examinations have improved our comprehension of ecological factors comparable to pulse, particularly with respect to abstain from food and exercise, the specific job of hereditary qualities in this setting has been trying to prod separated from the common condition frequently found in families and networks. Considering every one of these elements we construct a forecast model that can be utilized to foresee the anomaly in the pulse here we utilize hereditary family coefficient, BMI, physical movement, feelings of anxiety as free factors, information will be removed from wellbeing records and different ML characterization algorithms will be applied the best performing model will be tuned and last execution surveyed utilizing split-set approval.

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Channel Estimation and Equalization for Vehicular Network by Novel Pilot

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Keywords:

Channel Estimation, IEEE 802.11p, Network Simulator, Orthogonal Frequency Division Multiplexing

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Abstract

In this paper, we proposed a new technique for channel estimation using Orthogonal Frequency Division Multiplexing, (OFDM). Channel estimation is an integral part of the OFDM system based on the latest high speed transmission technology. Channel estimation is a vital technique used at the receiver side in order to estimate actual transmitted signal which gets affected by Interference. In OFDM, the known pilot signal is inserted to get a channel estimate and then the channel response is obtained by interpolation algorithms. We propose two algorithms and studied their characteristics qualities in channel estimation by simulation in NS-2. Firstly, the channel estimation scheme named Frequently Constructed Pilot Based Channel Estimation (FCPCE), which fully utilizes the pilot symbols is used to estimate the channel response and then the equalizer technique Maximum Minimizing Null



Taking the Business Organizations into Account in Improving Environment

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Abstract

The links between the economy and the environment are manifold: the environment provides resources to the economy, and acts as a sink for emissions and waste. ... Poor environmental quality in turn affects economic growth and wellbeing by lowering the quantity and quality of resources or due to health impacts, etc. Environmental impact of economic growth. Economic growth means an increase in real output (real GDP). Therefore, with increased output and consumption we are likely to see costs imposed on the environment. Also, economic growth caused by improved technology can enable higher output with less pollution. This study aims to investigate the consequences of interfering economic organizations into activities which help the environmental treatment. Based on researches done through this study the slope of the number of such companies which their works are in tune with positive environmental activities is increasing.

Keywords: Customer Experience, Integration, REAL World, Organized Methodology

1 Introduction

With a company if a customer have a good experience then it can recommend it to others can repurchase it and try its new offerings. By including superficial changes several organizations try to enhance the customer experience (CX). To Create a customer-centric culture it can increase the loyalty and discover that the path to lasting differentiation (1, 3). To find the difference between less successful peers and the leaders of CX it studied several companies and identified that if companies want to sustain and build a CX differentiation there are many different CX competencies used by the organization (4).

2 Types of Customer Experience Competency

2.1 Around Experience Company Wide Alignment

Numerous associations state they center on their "experience" of their customer yet few do the difficult work to characterize the phases of their experience from the client's perspective. Without this, the entirety of the working territories accomplishes their own thing, driven by their inner undertakings and motivation and scorecard. A ton of work is

done, frequently for the sake of the client, yet it doesn't make any sense from the clients' understanding to convey a brought together encounter.

Five Competencies = Engine for Growth

A Discipline to Embed Experience Development into Your DNA

Customer Experience Reliability	1: Customers as Assets. Knowing growth or loss of customers and caring about the "WHY"
	2: Align Operations Around Experience Design. Driving accountability to the stages as customers experience it, not down your silos. Identifying priorities to drive united focus.
Customer Culture Fundamentals	3: Customer Listening. Knowing and caring about real time emerging issues and mapping them to the customer journey. Uniting how you identify and act on issues/opportunities.
	4: Customer Experience Reliability. Proactively managing key cross-company process/KPI metrics and holding yourselves accountable to deliver experience reliability. Driving ongoing action on emerging issues before customers tell you.
Earn Advocacy & Growth	5: Leadership & CX Culture. Uniting your actions by clarity of purpose. Driving regular accountability for taking focused actions. Giving people permission and enabling them to deliver customer experience reliability.

Figure 1: Five Competencies of Customer experience

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NUMERICAL & AERODYNAMIC ANALYSIS OF CLARK Y AIRFOIL IN AN OPEN WIND TUNNEL

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ABSTRACT

In the current world almost all the aerodynamic bodies are designed and then analysed for preliminary results. These designs however need to be verified and tested in real time. To study various flow parameters and response of any aerodynamic body under varying conditions and orientations, wind tunnels are used. These tunnels are usually of open or closed types which can be used to conduct studies over flows past any aerodynamic body or structure. The work focuses on aerodynamics design of a Wind Tunnel to simulate and disseminate results of subsonic flows, measurement of lift coefficient (CL) and drag coefficients (CD) which can be used to determine performance of any aerodynamic body. The proposed tunnel was designed based on flow theories to obtain a preliminary design of subsonic tunnel. An open type wind tunnel is designed using CAD tool which is further simulated using ANSYS CFX. The CFD results are examined to decide an optimized design which is then fabricated to carryout experimentation. The model comprises of three parts namely contraction cone which is a convergent tract, test section and a diffuser commonly referred to as diverging tract. The wind speed of the tunnel is varied with the use of a variable transformer. The tunnel manufactured is used to study lift and drag forces acting on different aerodynamic structures and designs. The aerodynamic study of CLARK Y air foills carried out for testing in wind tunnel after a standard calibration.

KEYWORDS: *Open Wind Tunnel, Aerodynamics, Subsonic Flow, CFD Analysis*

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INTRODUCTION

A Wind Tunnel is a tool that is used to study the effects of air and the quality of flow and its aerodynamic characteristics. The phenomenon of flow separation to aerofoil is associated with the break-off of the thin layer at the wing surface. How the separation of flow develops to the moment of the full separation, is dependent on various factors: an aerofoil thickness (thin, moderate, and thick), an airflow type (turbulent, laminar, and supercritical), the angle of attack, an aerofoil surface quality (smooth or with roughness), flow conditions (altitude and air turbulence), and Reynolds number [1]. Computational Fluid Dynamics (CFD) has now reached a high degree of confidence so that the researcher in aerodynamics considers that it is an excellent good means to understand the physical reality as well as the measurements acquired during flight tests or in Wind Tunnels. Moreover, taking advantage of the constantly improved reliability of digital means, the concept of computer-aided Wind Tunnels was born. This process aims to correct the results of tests by the results of numerical calculations in conjunction with the tests in the same Wind Tunnel environment. The characteristics of the test are taken into account to determine the effect of the walls, the effect of the support, and, more generally, of anything that could affect the experiment. Furthermore, the numerous Wind Tunnel construction projects in emerging countries show that the use of experiments in the aerodynamics domain is still relevant [2]. Apart from that, the simulation is carried out only to the Test section by considering the Full-scale model of the Wind Tunnel instead of the conventional approach which allows for the



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Heat Transfer Enhancement of Heat Pipe Exchanger by Incorporating Perforated Conical Nozzle Rings

Journal: International Journal of Mechanical and Production Engineering Research and Development (IJMPERD) (Vol.10, No. 3)

Publication Date: 2020-06-30

Authors : A. Shanthiswaroopini V. Savitri K. Harish Kumar; P. Harisha;

Page : 9467-9476

Keywords : Heat pipe exchanger; Perforated conical rings (PCR's); CFD analysis & Conical nozzle inserts;

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Abstract

Numerical analysis of the air flow characteristics has been experimentally studied and conducted by equipping a simple plain heat pipe with perforated conical rings (PCR's) under constant wall temperature conditions. The air is taken as working fluid and the pitch ratio of the conical rings is assumed to be 1. Dimensionless quantities like Reynolds number and Nusselt number are used in calculations to study the flow of the fluid and the rate of heat transfer coefficient. The work is aimed at enhancing heat transfer rate of the heat pipe exchanger for which experimental investigation is carried out which are further supported by CFD simulations. The results showed increased heat enhancement where the losses in kinetic energy for a flow through heat pipe are compensated by equally spaced conical rings. In addition, the perforations over the nozzle rings enhanced heat transfer rate by creating turbulence thus enabling flow to form vortices that increases heat pipe effectiveness to some more extent. These tubes with conical nozzle inserts are suitable for industrial cooling and heating equipment's where increase in heat pipe effectiveness improves the overall efficiency of the power plant.

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HEAT TRANSFER ENHANCEMENT IN A HEAT EXCHANGER TUBE WITH OVERLAPPED DUAL TWISTED TAPE INSERTS AND NANO FLUIDS

ROKKALA RUDRABHIRAMU¹, K. KIRAN KUMAR², K. MALLIKARJUNA RAO³, U.S.RAMAKANTH⁴, K. HARISH KUMAR⁵

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Abstract:

The compactness of a tube Heat exchanger improves the performance and reduces the space by incorporating various inserts and Nanofluids. Experimental investigations and modeling analysis is carried out in this paper to enhance the heat transfer rate for the same operating parameters with and without inserts as well as Nanofluids. Overlapped dual twisted tape (ODTTs) inserts play a vital role to increase the heat transfer rate by increasing the heat transfer coefficient. The impact can be prevailed by changing twisting ratios in between 1.5 to 2.5. Concerning manufacturing constraint, three possible ratios have been identified as 1.5, 2.0 And 2.5. The thermal performance can be increased further by introducing Al₂O₃ nanoparticles by changing its volume. Here nanofluid concentrations of 1% and 2% are chosen and mixed with plain water. The experiment has been carried out initially with plain tube and water without inserts and compared the performance against inserts with different twist ratios and nanofluid concentrations. These results are compared with Numerical simulation with ANSYS Fluent. The tube with 1% nanofluid concentration by volume and twisting ratio of 2 yielded better performance. The heat transfer coefficient is improved by 8% with 3 % accuracy between experimental results and numerical study.

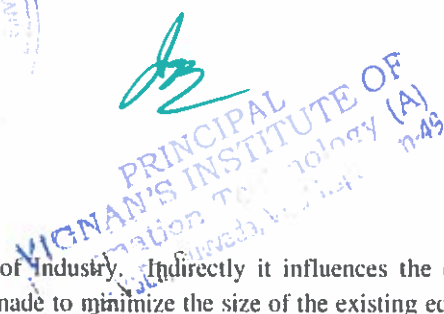
Keywords: Overlapped dual twisted tapes (ODTTs) , Al₂O₃ nanoparticles, Nanofluids, ANSYS fluent, Thermal performance factor.

Nomenclature

- W Width of the tape insert, m
- ϕ Nanofluid concentration, % by volume
- Cp(np) Specific heat of nanoparticles, J/kg K
- ρ_{np} Density of nanoparticles, kg/m³
- ρ_w Density of water, kg/m³
- A Heat transfer surface area, m²
- D Diameter of the pipe
- k Thermal conductivity of nanofluid, W/mK
- m Mass of nanofluid, kg/s
- Cp Specific heat of nanofluid, J/kg K
- Ti Temperature at the inlet, °C
- To Temperature at an outlet, °C
- Tw Wall temperature, °C
- Tb Average bulk fluid temperature, °C
- Yo Overlapped pitch length of the tape insert, m
- Y Pitch of the twisted tape insert, m
- Yo/Y Overlapped twist ratio
- U Average velocity, m/s
- μ Dynamic viscosity, kg/s m

1. Introduction:

Space management is the primary concern for any kind of industry. Indirectly it influences the cost and performance of the system. With this concern, an attempt has been made to minimize the size of the existing equipment



A REVIEW ON ENANTIOSELECTIVE SYNTHESIS OF SPIROCOMPOUNDS BY VARIOUS ORGANOMETALLIC COMPOUNDS

[A. Ramya](#), [S. Y. Rao](#), [B. Varalakshmi](#) · Published 2020 · Chemistry

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A STUDY ON CHALLENGES OF REFORMING INDIAN TAX SYSTEM

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Abstract

The objective of this paper is to look at the improvement of the cost system in India since the mid 1990s. There have been noteworthy changes in control systems in a couple of countries all through the latest two decades for a variety of reasons. The paper depicts and assesses the introduction of new sorts of quick and circumlocutory charges, their pay and worth recommendations and the triumphs achieved in their use. The paper derives that following eight years of progress improving the appraisal structure remains a critical test in India. There have been noteworthy changes in control systems of countries with a wide arrangement of financial structures and levels of headway during the latest two decades. The motivation for these progressions has moved beginning with one country then onto the following and the push of changes has differentiated from time to time depending upon the improvement methodology and hypothesis of the events. In many countries, the brisk reason behind cost changes has been the need to redesign livelihoods to meet moving toward money related crises. As Bird (1993) states, "fiscal crisis has been exhibited to be the mother of obligation change". Such changes, in any case, are every now and again uniquely designated and are done to meet brisk exigencies of salary. A significant part of the time, such changes are not in the possibility of essential moves up to improve the since a long time back run benefit of the appraisal structure. One of the most huge purposes behind late, cost changes in many making and transitional economies has been to propel an evaluation structure to meet the requirements of overall competition (Rao 1992). The advancement from an overwhelmingly halfway orchestrated improvement framework to exhibit based resource assignment has changed the perspective of the activity of the state being created. The advancement from an open portion based, significant industry administered, import subbing industrialization technique to one of distributing resources as demonstrated by exhibit signals has required essential changes in the obligation system. In a toll drove open economy, the evaluation system should not simply raise the fundamental salaries to give the social and physical establishment yet moreover limit twisting. In this manner, the appraisal system needs to change as per the essentials of a market economy to ensure worldwide earnestness.

Keywords: JEL classification: E 62: Taxation; H2: Taxation, Subsidies and Revenue

Introduction

This paper endeavors to audit charge strategy and changes in India. Like other creating nations, India faces a significant test of raising assets to meet open use necessities while limiting asset twists. Charges matter since they influence the residents and organizations. Expenses change the conduct of the individuals, and especially the financial operators in an assortment of ways, they decide the motivators to work, spare and contribute. Nobody likes settling charges. Some utilization bright approaches to keep away from them, some others unhesitatingly avoid them and just a couple think of it as their genuine obligation to pay them.

Composing on monetary strategy, Lord Keynes expressed, "The thoughts of business analysts and political logicians, both when they are correct and when they are incorrect, are more remarkable than is regularly comprehended.

Without a doubt the world is controlled by little else. Commonsense men who trust themselves to be excluded from scholarly impacts are generally the captives of some dead business analyst. Psychos in power, who hear voices noticeable all around, are refining their free for all from some scholarly scribbler of a couple of years back Before long or late, it is thoughts, not personal stakes, which are hazardous for acceptable or malicious". In any case, the encounters wherever has indicated that the effect of personal stakes on charge arrangements is critical. Johnson and Myles (2011; p. 323) while summing up the Mirrless audit state, "In reality, proposition for charge change are compelled by legislative issues. The individuals who free from charge changes will in general be wrathful while the individuals who gain from them will in general be selfish. This can prompt duty strategy, maybe, more than some other approach, to an 'oppression of business as usual.'" The current paper is an endeavor to comprehend the difficulties of defeating this oppression.

There are various purposes behind endeavor the audit of Indian duty strategy. To start with, in spite of the endeavored changes in India, the proportion of assessment to GDP has remained strikingly stale and in later years has even indicated a decay. The strain to contain financial shortfalls to comply with the objectives, welcomes the attention on the examination of the expense framework to recognize change zones. Second, the inspiration for changing the expense framework has emerged additionally from the longing to confer more prominent intensity to the economy. Third, the government idea of the nation has presented challenges in adjusting charge strategies in an organized way to develop

LINEAR PHASE ARRAY PATTERN SYNTHESIS WITH OPTIMIZED UNIT CIRCLE BOUNDARY CONDITIONS

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Abstract— The present work perturbs the synthesis of linear array patterns in periodic phases in the presence of asymmetric element pattern and mutual coupling. To mitigate the above problems in small linear phased arrays, an approach proposed using a Schelkunoff's unit circle z-plane coupled with PSO, with zeros in z-plane constrained using intelligently defined solution space boundary conditions. In addition to mutual coupling for scanned low-side lobe beam sum pattern and wide-band sector-beam pattern, the proposed optimisation scheme achieves better radiation pattern objectives. Comparisons of convergence efficiency have shown that the chosen method, IzBC-PSO, is quicker, more reliable and more effective than other techniques of optimisation. Significant improvement in the results is obtained by using a Bow-tie dielectric resonator antenna in 4.5 to 5.5 GHz frequency ranges.

Keywords-IZBC-PSO, Schelkunoff's Unit Circle, Bowtie dielectric resonator antenna, Mutual Coupling, intelligently defined solution space Boundary Condition

I. INTRODUCTION

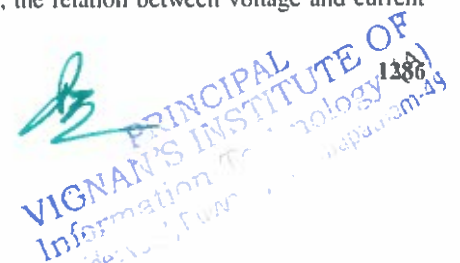
Due to small array size, conventional pattern synthesis techniques fail to produce required results. The conventional pattern synthesis approach produced results with sub-optimal gain, side lobe level and 3dB beam width due to limited number of the elements and the effects of mutual coupling involved. Performance of the small array antennas can be limited and the estimation of the infinite array is not adequate with existence of mutual coupling. In practical small phased arrays, inaccuracy in beam pointing, beam widening and higher sidelobe level occurred with a single linear phase gradient applied to beam scanning. For low gain applications the resolution of scanned arrays reduced because of broadening the beam [1].

In the classic paper of Dolph [2], to obtain smallest beamwidth for a specified sidelobe level the current distributions are derived for equally spaced symmetric broadside linear arrays in which the elements are in phase and are symmetrically positioned from the center of the array with less than half-length element spacing.

Taylor [3] proposed an excellent technique on the design of the continuous line source with narrower beam width of the main beam and decaying low sidelobes for continuous array apertures. For discrete networks, these aperture distributions are sampled and the performance of the pattern indeterminate and a recompensation is necessary. Bayliss [4] developed a method to produce monopulse difference patterns, used a technique alike to Taylor's method, for

optimize the phase taper for the end fire array. Majority of the synthesis techniques reported is for only low-sidelobe narrow-beam array factors.

A sector pattern is a shaped beam pattern that ideally has uniform radiation in the main beam with zero side lobe levels. The realized patterns are found to contain the sector beams which are close to the desired ones over specified angular regions with reduced SLLs. However, for synthesizing small arrays many classical methods such as Schelkunoff's Polynomial method, Fourier transform method, Woodward-Lawson method, etc. They are suitable for the synthesis of beam patterns with little limitations, because of undesired ripples in trade in region. To control these pattern synthesis problems different researchers proposed a variety of solutions [5-7]. Mutual coupling is major problem in practical antenna arrays. In antenna array systems to represent mutual coupling, there are two approaches. After deriving coupling matrix various methods have been initiated to mitigate the effect of mutual coupling that includes matching point techniques in characteristic mode. The main limitations of all these approaches are lack of generality because they assumed coupling can be fully defined by an invertible mutual coupling matrix. For more practical systems all the techniques are based on active element pattern, for more complex elements without applicable of added scattering and coupling matrix inversion [8-9]. The current distribution of antenna elements are complicated in higher order modes in presence of mutual coupling and also, the relation between voltage and current





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Data distribution method with text extraction from big data(Review)

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Abstract

Right now, Enormous information extraction strategies incorporate the recognition of examples and secured connections between factors numbering and acquire the necessary data. A quick examination of monstrous information can prompt the development and ideas of the hypothetical worth. Contrasted and comes about because of mining between customary informational indexes and the immense measure of huge heterogeneous information associated it can extend the information and thoughts regarding the objective space. Data isolating in immense data examination is creating as a helpful resource for outfitting the force of unstructured scholarly data by separating it to expel new data and to perceive essential models and connections concealed in the data. At present, we isolated the information on gigantic measures of the pages and examined the pages of the site using Java code, and we incorporated the removed information into a remarkable database for the site page. We utilized the information arrange capacity to get precise consequences of assessing and classifying the information pages discovered, which recognizes the believed web or unsafe site pages, and imported the information onto a CSV expansion. Large information emerges new difficulties for IE methods with the quick development of multifaceted likewise called multidimensional unstructured information. Conventional IE frameworks are wasteful to manage this tremendous downpour of unstructured large information. The volume and assortment of huge information request to improve the computational capacities of these IE frameworks. It is imperative to grasp the competency and limitations of the present IE methods related to data pre-taking care of, data extraction and change, and depictions for gigantic volumes of multidimensional unstructured data. Different assessments have been driven on IE, watching out for the challenges and issues for different data types, for instance, content, picture, sound, and video. © 2019 by Advance Scientific Research.

Author keywords

[Classifying](#) [Heterogeneous](#) [Hypothetical](#) [Multidimensional](#) [Strategies](#)

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Cited by 4 documents

Narayana, V.L., Patibandla, R.S.M.L., Rao, B.T.

Use of machine learning in healthcare

(2022) *Advanced Healthcare Systems: Empowering Physicians with IoT-Enabled Technologies*

Medikonduru, M.S., Bypureddy, P., Kancharla, V.P.

Structured Analysis on Movie Recommendation System using Machine Learning

(2022) *Proceedings - 2022 6th International Conference on Intelligent Computing and Control Systems, ICICCS 2022*

Patibandla, R.S.M.L., Narayana, V.L.

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CELLULAR ACCOUNT CLUSTERING TECHNIQUES FOR IDENTIFICATION OF LOCATION OF USERS

Aswadhati Sirisha, P.Radhika, V.Pavani, K. Santhi sri

Abstract

The improvement of versatile system innovation gives an incredible potential to long range interpersonal communication administrations. This paper uses information mining for interpersonal organization examination reason, which focuses on locate individuals' informal community examples and area by breaking down the data about their cell phone use. Right now, genuine database of MIT's Reality Mining venture is utilized. Area Based Social Networks (LBSN) present up until this point, the most clear acknowledgment of the intermingling of the physical and virtual social planes. Right now, propose a novel methodology on displaying human movement and topographical territories by methods for place classes. We apply an otherworldly grouping calculation on territories and clients of two metropolitan urban communities on a dataset sourced from the most energetic LBSN, Foursquare. Our philosophy permits the recognizable proof of client networks that visit comparative classifications of spots and the think about the Embodiments of a versatile dating framework using an area based interpersonal organization supervisor process are depicted. The recognizable proof of action areas in ceaseless GPS directions is a fundamental primer advance in acquiring individual excursion information and for movement based transportation request anticipating. Right now, two-advance approach for distinguishing movement stop areas is proposed. Right now proposed a technique for ID of area of clients dependent on their portable use.



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Disruptive Technologies for Smart Healthcare Systems using Artificial Intelligence for Hospital Management System

Dr. B. Prasad, Dr.Achyuth Sarkar,Dr.E.Laxmi Lydia,N.Sharmili, Denis Alexandrovich Pustokhin, Irina Pustokhina

Abstract

An effective way of communication between machines and humans got advanced using Artificial Intelligence. Technologies using Artificial Intelligence brought tremendous growth in automatic processing instead of manual processing in healthcare. Necessity and demand for healthcare system from past to current decades took many transformations with the design and implementation of autonomous devices. Due to high computational power, Artificial Intelligence has reached the top level for the best technologies. This paper analyzes the top technologies using Artificial Intelligence for a range of firmness in the area of healthcare in the hospital management system. Artificial Intelligence applied in different areas like decision making, Data Management of patient records, disease diagnosis. Artificial Intelligence emerging with innovative disruptive technologies increases the quick status report of patient health and effective treatment of the disease.



How to Cite

Dr. B. Prasad, Dr.Achyuth Sarkar,Dr.E.Laxmi Lydia,N.Sharmili, Denis Alexandrovich Pustokhin, Irina Pustokhina.(2020). Disruptive Technologies for Smart Healthcare Systems using Artificial Intelligence for Hospital Management System.

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K Leela Prasad

A NOVEL APPROACH TO TWEET ALERT FOR IDENTIFYING REAL TIME TRAFFIC

Authors PILAKA ANUSHA G RAVI KUMAR, KAKI LEELA PRASAD

Publication date 2020/8

Journal GIS SCIENCE JOURNAL

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Issue 8

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K Leela Prasad

Heart Disease Prognostic Through Machine Learning Approach

Authors **BODE PRASAD KAKI LEELA PRASAD, KODUGANTI VENKATA RAO, G RAVI KUMAR, PILAKA ANUSHA**

Publication date 2020/8

Journal GIS SCIENCE JOURNAL

Volume 7

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Cloud Services for Remote Healthcare Monitoring System using the Internet of Things (IoT)

B. Prasad, Barzan Abdulazeez Idrees, E.Laxmi Lydia, T. Pavani, Victoria V. Efimova

Abstract

One of the most helpful ways to support society is to provide them better health care services using technology devices. There were tremendous growth and existence of various diseases in our society. Researchers and Scientists for the medical field are developing quick prevention as well as curing technological relief equipment using deep learning machines through Artificial Intelligence. Technological devices have become much more advanced in society by connecting various medical resources throughout the world using internet-connected devices (Internet of things). Currently used PHRs as electronic applications maintaining interoperable hospital information system. Patients are also provided with Context-based Security and Privacy for Healthcare IoT as Patient-centric information. This paper has identified some various intelligent processing techniques and wireless technologies of smart IoT applications in health care. Identified some specific areas like Web technologies for smart healthcare using Data Collector, IoT Gateway, Backend Facilitator, and Access Applications, Smart system Sleep Monitoring 3-level architecture by integrating IoT with Big Data tools on Cloud Computing which supports smart monitoring system, Healthcare in Monitoring Environments using LAN, WLAN and highly technological equipment over Cloud Computing for distributed processing over smart phones and Personal computers, Wearable IoT sensor network Devices known as WISE (Wearable IoT- cloud-based health monitoring system), Alarm System for health monitoring using IoT is an automatic appliance for alert system by maintaining health parameters like temperature, respiration, sugar levels, heart rate. It includes deep learning, machine-learning algorithms to extract higher information from the patient and analyze the information. By this patient medical data is recorded and analyzed on cloud services.

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Investigations on Metamaterial based Log Periodic Dipole Antenna

T. Pavani¹ Ch. Usha kumarai¹, A. Naga Jyothi², Y. Rajasree Rao³, Taha Ahmed⁴

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Publication: 09 April 2020

Abstract

In this paper, the application of metamaterial to the accustomed log periodic dipole antenna (LPDA) for ground penetrating radar is presented. The metamaterial based Split Ring Resonator (SRR) is loaded with dipole in accustomed LPDA. The proposed antenna is printed on FR4 substrate with length and width 81.9 x 65.5mm. The antenna has 68% size reduction as compared to accustomed antenna. The simulation results show that the proposed antenna has wide bandwidth and high gain, which is suitable for Ground Penetrating Radar (GPR) applications.

Keywords: Split Ring Resonator, Log periodic dipole antenna, Ground penetrating Rada

INTRODUCTION

Ground Penetrating Radar (GPR) is most widely used geophysical technique for detecting and identifying aquifer water and non metallic mines. Antenna is the one of the most significant hardware components for the conduct of ground penetrating radar (GPR) [3, 4]. Ground penetrating radar is specific application using ultra-wideband antennas. It operates within frequency range from 10 MHz to 10 GHz (Archaeology and Architecture (0.01–2 GHz), military (0.5–3 GHz)) [1].

Most of the works reported on modifying dipole length or shape for enhancing bandwidth and miniaturization in size of the Log periodic dipole array (LPDA). For the first time, metamaterial based Log periodic dipole array is investigated for GPR applications [2-4].

ANTENNA GEOMETRY

The name “log periodic” comes from the uniform spacing between the resonance frequencies of the antenna, when plotted in a logarithmic scale. The

log periodic antennas are frequency independent antennas, introduced by Du Hamel and IsBell in 1957 [5]. The designed accustomed LPDA structure and SRR loaded LPDA are shown in Figures (1-2).

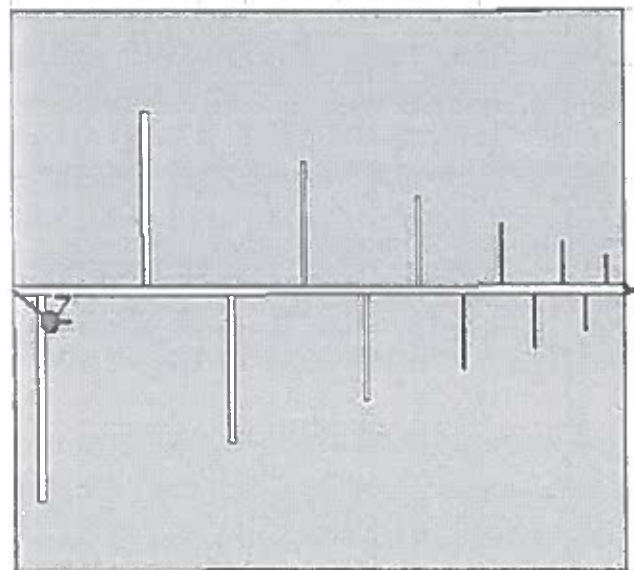


Fig. 1. Accustomed LPDA.

Article

HEART DISEASES CLASSIFICATION AND FEATURE EXTRACTION BY SEGMENTATION AND MACHINE LEARNING MODEL

April 2020

Project: [Biomedical research](#)

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Abstract

The heart is one of the major organ part that stimulates the blood pressure for body parts. If this heart has damaged by any diseases or infections than automatically, the body parts are inflicted. Heart diagnosis is mainly possible by MRI scan, Ultra scan and ECG machine analysis. In this research work, coronary heart diseases are identified using ultrasound imaging process. For this segmentation, feature extraction and classification has performed by advanced methodologies. This work is most useful for researchers and doctors for easy of diagnosis the heart diseases. At final calculating the performance measures i.e. Recall, F1 score, True positive rate and efficiency. Outputs are challenging the existed models and increasing the accuracy at diagnosis of the heart.

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Volume 24 - Issue 2

Design and Simulation of Frequency Modulation Continuous Waveform (FMCW) For Automotive Radar Systems

 Dr.A.NagaJyothi, Dr. T. Pavani, G.V. Sai Swetha

Abstract

Safety in car driving has become essential with the use of various radar systems. In this paper we consider the design and simulation of Frequency Modulation Continuous Waveform (FMCW) for Automotive Radar Systems. Here the FMCW radar is demonstrated in SystemVue which generates saw tooth waveform, frequency sweep in 24GHz band. Target model and clutter are set accordingly. Measurements included in this work are saw tooth waveform generation, frequency Vs time transmitted waveform and received waveforms.

Paper Details

Volume: Volume 24

Issues: Issue 2

Keywords: Frequency Modulation Continuous Waveform (FMCW), Sawtooth Waveform, Range, Velocity.

Year: 2020

Month: February

DOI: 10.37200/IJPR/V24I2/PR2020918 (<https://doi.org/10.37200/IJPR/V24I2/PR2020918>)

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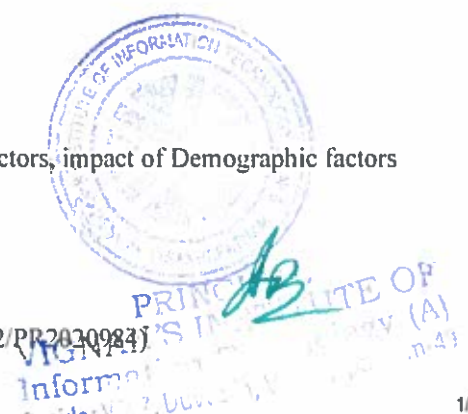
Home ownership is an Indians dream: A Comparative study on Impact of Demographic Factors on Home Ownership

 Ch. Hari Govinda Rao, M.Srinu, P. Sanyasi Rao

Abstract

Because of fast populace development, there is a hurried amplification in housing sector and consequently housing related activities are also sensible prompted the development of Housing Finance Sector in India. Consequently, large number of private and public sector financial institutions have into the housing sector. Though India has an enormous history of establishing housing finance institutions, still there is a need to give much attention to adopt appropriate policies & procedure to cater to housing loan. The demographic factors are the major key factors that influencing the borrower's decisions and thus there is a need for the study and the due influence. At this juncture, this paper makes an attempt to understand influence of demographic factors of borrowers and there is desperate need to the impact of each factor. This paper provides useful insight to explore the ground reality which helps to policy makers and for constructive judgment. At this juncture, the researcher has conducted a sample survey and examined the influence of socio-economic factors of respondents' demographic factors that had influencing factors of homeownership through financial institutions. The study applied MLR (Multiple Linear Regression) analysis of critical autonomous variable with the assistance of Z-tests and also adopts ANOVA tests to discover the degree of variety in choices of home loan borrowers.

Paper Details

Volume: Volume 24**Issues:** Issue 2**Keywords:** Housing and Housing Finance, Relationship of socio-economic factors, impact of Demographic factors on determinants of home-ownership.**Year:** 2020**Month:** February**DOI:** 10.37200/IJPR/V24I2/PR2020984 (<https://doi.org/10.37200/IJPR/V24I2/PR2020984>)

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The Enhancement of Selectivity in Big Data Systems That Pin Point the Data Which is Valuable in Any Organization: A Use Case Approach

Subba Rao Peram, Ch. Praneeth, B. Premamayudu, K. Venkata Rao

Abstract

Driven by the tremendous saw capability of "enormous information," Internet organizations, sponsors, and governments are aggregating immense amounts of individual information clicks, areas, social associations, and that's only the tip of the iceberg. While information offers novel chances to make strides individual and business viability, its forceful accumulation also, long haul chronicled posture noteworthy dangers for associations. Hacking and misusing delicate corporate also, legislative data have turned out to be ordinary. Protection transgressing representatives have been found snooping into information stores to keep an eye on companions furthermore, family. Although associations endeavor to limit access to especially delicate information, (for example, passwords, SSNs, messages, keeping money information), appropriately overseeing access controls for different and possibly touchy data is an open issue.

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SEIR Model for Tracking Covid-19 Outbreak

Pasam PrudhviKiran, Dr. E. Laxmi Lydia, Dr.T. Pavani

Abstract

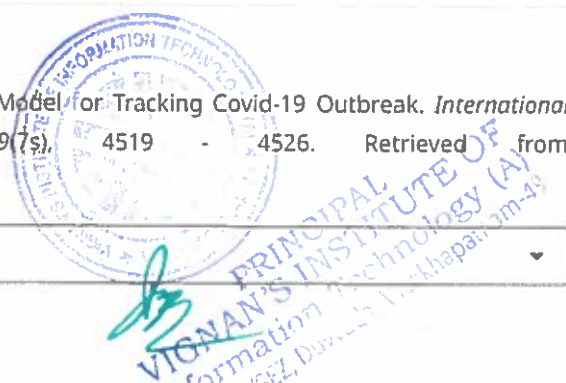
China was identified as the initiative of 2019-2020 Coronavirus a widespread disease. The first case in India was reported on 30 January 2020. Scientists and doctors signify that the testing rate in India was low when compared to the large number of infections all over the world. India has accounted COVID-19 infected rate to 1.7, very much lower to worst affected countries. The emergence of Simulation studies is set to transform almost every aspect of daily life by provoking us to develop various prediction algorithms with best possible computation time, without significantly sacrificing the output accuracy. Here in this proposed system, Simulation studies are going to play a big role in our effort to define a pandemic disease such as covid-19 scenario prediction. It is very important to understand the severity and containment of pandemics, to achieve this we focus on developing an efficient simulation model which uses techniques of Artificial Intelligence to learn and accurately predict.

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PEDAGOGICAL INTERVENTIONS ON SUMMARIZING DIFFICULTIES IN EFFECTIVE ACADEMIC WRITING

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Sekhara Rao⁵

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Abstract

In order to improve Effective Academic Writing, the students require a good grasp of the source material in terms of understanding, analyzing, synthesizing the information and selecting information, drafting and revising the content of the material. Thus the usage of summarizing plays a key role in the Academic Writing. There have been several investigations made in L2 students and their difficulties in summarizing; the present paper focuses on the cognitive aspects of the critical activities from the students' point of view. The examination is made on 60 undergraduate engineering students from a private UGC approved institution in India, it is recorded qualitatively resolve their identified difficulties when summarizing the skills. There are four major drawbacks are identified in the examination. They are;

1. Lack of proficiency in English
2. Poor Reading comprehension skills
3. Lack of vocabulary
4. Lack of documentation skills.

The Findings of the examination build foundation for presentation of classroom instructions to address these identified drawbacks.

Keywords: Drafting Complications, Efficient scholastic Writing, L2 Students and Summarizing.

Introduction

Acquiring Knowledge and its Transformation improves various styles of effective writing. It is the major problem of the L2 learners come across in their regular academic writing. They naturally struggle incorporate the factual information acquired through their study into their own style of academic writing. In this context, Acquiring Knowledge display their ability to understand of what they read and Transformation of such knowledge into documentation show their skill in using source information. Both are widely accepted as cognitive tasks which require a good snatch of understanding the information. The major writing skills found which help L2 learners to display their Acquired knowledge and its transformation is summarizing. There are many investigations made on this area, it is expressed a need to further investigate from the learners' point of view. The present paper investigated a qualitative study of the contemplative essays written by 60 undergraduate engineering students to identify their problems when they were asked to summarize the source material. This paper focused on the challenges they face while doing so, and endeavoured to calculate the intensity of the problem areas. It is determined through this investigation that the L2 learners need to enhance their writing skills. At this juncture, the role of teacher takes on how they encourage and



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A model of employee satisfaction amongst health-related professionals in South Africa
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The study's main objective was to come up with a model of employee satisfaction for the health-related professionals in South Africa. Among the reasons for this were high levels of health-related professional attrition and low levels of employee satisfaction within the health-related professions of South Africa. This original study derives its relevance on the basis of lack of a model for measuring employee satisfaction in the health-related profession in South Africa. Also, studies on employee satisfaction in South Africa focus hugely on medical doctors and nurses, without a commensurate interest in health-related professionals such as pharmacists, emergency medical services personnel, optometrists, and...

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THE INFLUENCE OF JOB SATISFACTION ON ORGANISATIONAL COMMITMENT AND PRODUCTIVITY OF LIBRARIANS IN UNIVERSITIES IN SOUTH-SOUTH ZONE OF NIGERIA

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Background of the study The effectiveness and efficiency of the service organisation such as the library is measured in terms of quality of service rendered to its users. The quality of service mainly depends upon the quality of its workforce, which in turn directly depends on professional knowledge, adaptability, satisfaction and commitment levels of the professionals working in a given library. The productivity





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Volume 24 - Issue 2

An Effectiveness of Empowering Leadership on Employees and their Productive Voice Behavior: Empirical Study on Mediating role of Psychological safety and Leader Member Exchange

👤 Sivajee Vavilapalli, Auadhathi Datta

Abstract

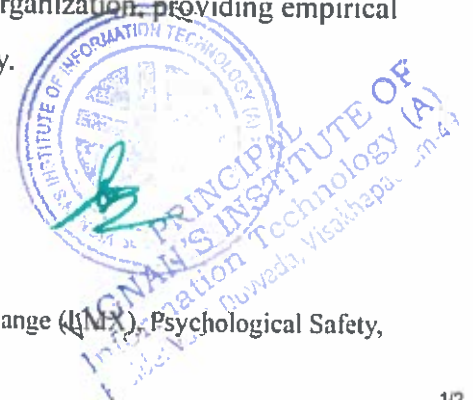
The relationship between empowering leadership and employee voice behavior and the role of psychological safety and LMX (Leader member exchange) as mediators is the same. The study utilizes structural equation modeling for analyzing the data collected from Indian service industry employees through the questionnaire developed for the study. The study demonstrates the significant impact of empowering form of leadership on employees' constructive voice behavior. By supporting results were observed for the mediating impact of leader member exchange (LMX) and psychological safety between empowering leadership and employees' constructive voice behavior. Intervening mechanisms by linking leaders' empowering behavior with employees' constructive voice, while also highlighting the potential importance of LMX relationship in organizations and psychological safety in context of constructive voice behavior. The piece of work is assumed to benefit the leaders in organizations by providing them the basis for adopting empowering form of leadership in light of results displayed and its revealed impact on the constructive voice behaviour. The study brings forth the relevance of quality LMX for promotive constructive voice behaviour in the organization. The study establishes the new form of leadership, 'empowering leadership' for fostering the better exchange of ideas, opinions, and suggestions between leaders and followers which tend to benefit the organization, providing empirical evidence of the sequential mediation of LMX and psychological safety.

Paper Details

Volume: Volume 24

Issues: Issue 2

Keywords: Constructive Voice, Empowering Leadership, Leader Member Exchange (LMX), Psychological Safety, Sequential Mediation





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An Assessment of the Factors Effecting the Occupational Health and Safety Practices – An Empirical Study in Ethiopian Flori Culture Industry

Dr. S.M. Murali Krishna, Auadhathi Datta, V. Sivajee, N. Ramya

Abstract

Horticulture is known as the science, innovation, and business which are associated with serious plant development for human utilization. It is finished by the person in a nursery and it's likewise performed by the global organization, which is exceptionally different in its exercises, consolidating plants for nourishment (natural products, vegetables, mushrooms, culinary herbs) and non-nourishment crops (blossoms, trees and bushes, turf-grass, jumps, restorative herbs). Floriculture or Flower cultivating which is a control in the field of agriculture worried about the development of blooming and fancy plants for gardens and for floristry, involving the flower business. The improvement plant reproducing of new assortments is a significant control of floriculturists (Dagnachew, 2014). The bloom business is at present extending everywhere throughout the world. As indicated by the Journal of Environmental Health Perspectives, the horticulture business at present utilizes around 190,000 individuals all through the creating scene. Consistently, around 30 billion dollar is produced from the International blossom industry (EHP, 2002). Keeping the Occupational Health and security (OHS) of representatives is one of the most significant part of human concern. OHS goes for an adjustment of workplace to labourers for the advancement and support of the most elevated level of physical, mental and social being of labourers in all occupations (Takele and Mengesha, 2006). Nonetheless, Different examination's shows that the Importance of Occupational wellbeing and security rehearses are dismissed front. The gardening business in Ethiopia additionally in spite of its tremendous commitment to the national economy it is intensely condemned for infringement of Occupational wellbeing and security rehearses (Amman. 2011 and Wudineh, 2012). So as to diminish the Occurrence of word related rates in the work place and to propose the proper worker wellbeing and security measures, first it is important to get to the representatives' wellbeing and wellbeing rehearses association under examination.

Volume 24 - Issue 6

Exploitation of Time Value of OTM Options through Fully Covered Short Strangle

 M. Srinu, Dr. Ch. Hari Govinda Rao, Dr. P. Sanyasi Rao, K.V. S. Praveena

Abstract

Stock markets are perceived as a fool's paradise especially in India and more specifically by small investors. In fact they are proven wealth creators for big players and unproven for small investors. The present study is an attempt to prove that stock markets can create wealth for the small players as well. Options are derivative instruments² which provide much more flexibility for speculation. One can combine different options to develop their own strategy to win in the market place. The logic for the big player's success and small player's failure is that the right strategy development and perfect execution. The researcher has developed a strategy and back tested with the past data. The objective of this study is to back test the Out of the Money hedging⁷ strategy for a short period using the combination of algorithmic and statistical methods to decide on its consistency & future scope for implementation. The study is made on Bank nifty weekly option contracts and significant towards retail investors as the study is only based on price action but not on any other factors like market sentiments, news, fundamentals, micro or macro economics and global scenarios etc.

Paper Details

Volume: Volume 24**Issues:** Issue 6**Keywords:** Option writing, covered short strangle, hedging, positional, time value, intrinsic value**Year:** 2020**Month:** April**DOI:** 10.37200/IJPR/V24I6/PR261321 (<https://doi.org/10.37200/IJPR/V24I6/PR261321>)**Pages:** 13626-13639[Login / Register \(/register-login\)](#)



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Volume 24 - Issue 6

Deep Machine Learning Based Neural Networks Reference and Full-Reference Image Quality Assessment

*G.Mani, G.Jyothi, Ch.V.Bhargavi

Abstract

We introduce an IQA (IQA) story based on profound neural networks. The system is taught start-to-end and comprises of ten matrix multiplication layers as well as five pooling layers for removal of features, also two completely linked correlation layers, making it considerably deeper than related I.Q.A designs. Exclusive characteristics of suggested design are that: 1) it is used in such a no-reference (NR) as well as in a complete reference (FR) IQA environment with slight changes and 2) it enables joint teaching of local quality and bench presses, i.e. the comparative significance of local value to the worldwide performance assessment, in a coherent context. Our strategy is ambitious information exclusively and does not focus on hand-crafted characteristics or other kinds of previous domain knowledge about both human nervous system and image statistics. We assess the suggested strategy for the apps for L.I.V.E, C.I.S.Q, and TID2013 as well as the Reside in the Wild Picture Quality Challenge Box and demonstrate superior results for proposed NR and FR IQA techniques. Ultimately, multiavailable data assessment demonstrates a strong capacity to generalize between distinct databases, showing a strong precision of the characteristics obtained.

Paper Details

Volume: Volume 24

Issues: Issue 6

Keywords: Image Quality Assessment (IQA), deep machine learning, neural networks, full reference image

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Volume 24 - Issue 2

Compact MIMO antenna design for upcoming 5G applications

 K. Srinivasa Naik, Sourav Roy, D.Madhusudan, S.Arana

Abstract

In this article, we designed a low-cost MIMO antenna for 5G based IoT applications. The antenna covers the frequency spectra from 25.8- 29.4 GHz. The gain found near about 5.7 dBi at 28 GHz. The Antenna is design, simulated, and analyzed on ANSYS HFSS. The ECC and DG performance of the fourelement MIMO antenna is studied and found that both performances are useful in that range. The different antenna structures analyzed in MIMO Antenna. The maximum antenna dimension found near about $9.48 \times 7.36 \text{ mm}^2$.

Paper Details

Volume: Volume 24

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Keywords: IoT, Compact, MIMO, 5G

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Comparative Performance Analysis of Apache Spark and Map reduce using K-Means

E. Laxmi Lydia¹, R.M. Vidhyavathi², Irina Pustokhina³ and Denis Alexandrovich Pustokhin⁴

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(Corresponding author: E. Laxmi Lydia)

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ABSTRACT: All around the globe, computer science grabbed its interest in Big Data that has developed extremely high with its continuous raise of data generation in social media and the aim for industrial and borstal Hercules institutions to facilitate additional investigation of their knowledge. This paper provides a deliberate correlation regarding two Apache frameworks such as Apache Hadoop MapReduce and Apache Spark (advanced). The two frameworks present a design structure to partition the tremendous data to appropriate information. Although these preferences rely on the BigData objective, individual achievement conflict from collective perspective utilization and its implementation purpose. Such an idea alternates the two commendable analyses for the variation and selection of BigData in dynamic possibilities. In this paper, we contradict the mentioned two designed framework structures together and offereffectiveness in evaluating through handling an approved machine learning approaches for data assembling using K-Means. From the beginning, the observations of this working paper determine the relative performance measures and approximating specifications for MapReduce such as velocity, throughput, and dynamism consumption of energy.

Keywords: Big Data, Apache Hadoop, Apache Spark, Apache Mahout, Machine Learning, HDFS, MapReduce, MLlib, K- Means.

I. INTRODUCTION

Resilient distributed Datasets are imposed from memory enclosed by many different questions beyond any necessity of replication. Significant to the renovating of the misplaced information was setback with the appropriate origin. Respective RDD will recognize and collect the performed work from various data sets to regenerate itself (such as a map and sometimes join). RDDs authorize Spark to overwhelm the actual design by involving various passes over analytics [16] up to 100x. These RDDs were used to reinforce an extensive combination of continual computations, along with data mining perceptive and a completely useful SQL generator Shark [8]. Fig. 1 testifies the Hadoop Ecosystem System.

MapReduce is a distributed manipulating approach that performs designed models using Java. It is designed depending upon two primary jobs to be performed such as map (also known as mapper) and reduce (also known as reducer). Mapper schedules the data accordingly and support a similar process for scheduling of other data, where unique data segments are partitioned into tuples represented as pairs of key-value. Likewise, reducer scripts the inputs from a mapper and accompanies data tuples (key-value pairs) within a limited provision of key-value pairs of data. As per the series of mapper the continuous job process is maintained through reducer. The evident support role of MapReduce work on entire data but hard to proportion data composition over abundant nodes. Subsequent primitives for the data preparation through Map Reduce acknowledged as mappers and reducers.

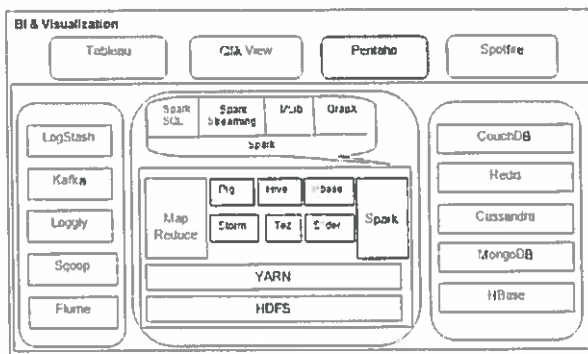


Fig. 1. Hadoop Ecosystem System.





Document details - Identification of attackers using blockchain transactions using cryptography methods

1 of 1

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Journal of Critical Reviews

Volume 7, Issue 6, 2020, Pages 368-375

Identification of attackers using blockchain transactions using cryptography methods(Review)

Pasala, S., Pavani, V., Lakshmi, G.V., Narayana, V.L.

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Abstract

Blockchain is inventive approach to manage taking care of information, executing trades, performing limits, and working up trust in an open space. Many consider square chain as an advancement accomplishment for cryptography and digital security, with use cases going from comprehensive sent computerized cash structures like Bit-coin, to sharp understandings, insightful cross sections over the Internet of Things, and so forth. Regardless of the way that Blockchain has gotten creating interests in both academic network and industry in the progressing years, the security and insurance of Blockchains continue being at the point of convergence of the conversation while sending Blockchain in different applications. This paper presents a total layout of the security and insurance of Blockchain. To empower the discussion, we at first present the idea of Blockchains and its utility concerning Bit-coin like on the web trades. By then we portray the essential security properties that are maintained as the fundamental necessities what's more, building discourages for Bit-coin like advanced cash structures, trailed by presenting the additional security what's more, insurance properties that are needed in various Blockchain applications. Finally, we review the security and assurance systems for achieving these security properties in Blockchain-based structures, including delegate accord figuring's, has joined limit, mixing shows, puzzling imprints, non-instinctive zero-data check, and so on. We surmise that this investigation can help per clients with increasing an all-around perception of the security and assurance of Blockchain concerning thought, qualities, systems and structures. © 2019 by Advance Scientific Research.

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(2022) Proceedings of the International Conference on Electronics and Renewable Systems, ICEARS 2022

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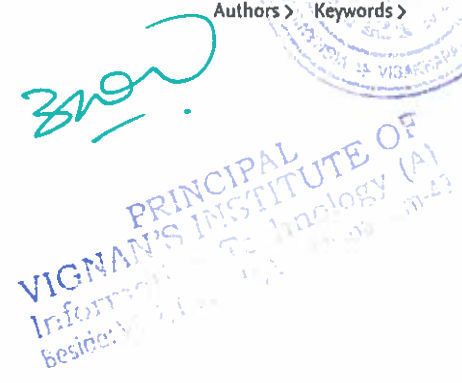
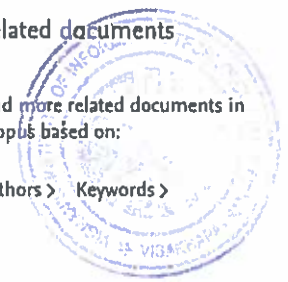
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IMPLEMENTATION OF REFERENCE TRACKING CONTROL USING DIFFERENTIAL EVOLUTION-A COMPARATIVE STUDY

Ramesh Kumar Patro, P. S. Kumar, +1 author K. Kumar · Published 2020 ·

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Controller design, in the presence of disturbances is a challenging task to ensure the tracking performance. In this paper a comparison study of two tracking controllers is presented. First, the control is achieved by conventional $h-\infty$ tracking control. Receding horizon strategy is combined with $h-\infty$ tracking control to improve the tracking effectiveness of the system. Differential Evolution is applied for the same systems. It is found that Differential Evolution is very easy to apply and... Expand

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USE OF BLOCK CHAIN TECHNOLOGY IN PROVIDING SECURITY DURING DATA SHARING

[B. Minnika](#), [P. Anusha](#), +1 author [G. V. Lakshmi](#) • Published 2020 • Computer Science

This article overviews a chain based methodologies for a few security administrations. The Existing framework is contrasted and the proposed framework and it was discovered that the proposed framework has preferred execution over the existing one. Square chain offers a creative way to deal with putting away data, executing exchanges, performing capacities, and building up trust in an open situation. Many consider the square chain as an innovative leap forward for cryptography and digital...
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[Yaswanth Kumar Alapati](#), [Suban Ravichandran](#) • Computer Science • International Journal of Safety and Security Engineering • 2020

TLDR A strong cryptographic method is proposed, which generates and maintains keys and distribute keys safely to trusted nodes avoiding malicious nodes, which detects the malicious nodes and avoids them to participate in communication to improve packet delivery rate and to reduce delay in the network. Expand

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A Trust Based Efficient Blockchain Linked Routing Method for Improving Security in Mobile Ad hoc Networks

[V. Narayana](#), [Divya Midhunchakkaravarthy](#) • Computer Science • 2020



TLDR The proposed work introduces a Trust Based Efficient Blockchain Linked Routing Method (TbEBCLRM) for a system of trusted and untrusted nodes to improve security in the ad hoc networks and to avoid malicious activities during communication is initiated. Expand

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A Time Interval based Blockchain Model for Detection of Malicious Nodes in MANET Using Network Block Monitoring Node

[V. Narayana](#), [Divya Midhunchakkaravarthy](#) • Computer Science • 2020 Second International Conference on Inventive Research in Computing Applications (ICIRCA) • 2020

TLDR A Time Interval Based Blockchain Model (TIBBM) for security related information assortment that identifies malicious nodes in the MANET is proposed and the results show that the proposed model exhibits better performance in malicious node detection. Expand

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Lecture Notes in Networks and Systems

Volume 105, 2020, Page ix

Preface(Editorial)

Fiaidhi, J., **Bhattacharyya, D.**, Thirupathi Rao, N.

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Power Quality Improvement of Wind and Solar Hybrid Energy Sources Interface to the Grid Using UPQC

 Boga Jyothi, Sudheer Vinnakoti, Pinni Srinivas Varma, B. Mary Pushpa Latha

Abstract

In distribution systems with non-conventional energy sources, power electronic converters are being utilized. The enhancement of power quality characteristics for the wind, solar energy systems merge with grid connected system is predominantly concentrated in this paper. The wind, solar energy power plant is designed by using the corresponding equations. The inverter is used to feed the power in to transmission grid and it is used as a power converter based shunt active power filter. Everyfunction may be accomplishing either separately or concurrently. The UPQC is regulated based on the PWM controller and is formulated depending on the conviction of PQ theory. Nevertheless in the existence of non-linear load also balanced load currents are acquired by using this control. This workis done in MATLAB and simulation results are verified.

 Volume 12 | Issue 2

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Article

Analysis of brain stroke and its occurrences

January 2020 | Asia Life Sciences 29(1):21-38

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Abstract

The physiological functioning of human brain involve in processing the input with sensory nerves, combing the existed information with new one, decision making power, human intelligence, emotions and daily activities. The neural processing unit is responsible to for carry out all human activities in various regions of the brain. If the stroke takes place immediately the flow of oxygen level decreases along wherein also reducing the blood flow from heart to brain and to other organs will be affected simultaneously. This results more death mortality. For every brain stroke: Ischemic and Hemorrhagic, one need to go through various medical treatments to find out the affected region in brain which takes time delay for processing the better results. In this paper, we propose the various stroke diagnosis results with slender parameters that which can be used to identify the severity of the stroke that has occurred in the brain.

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Investigation of a 7-Level Inverter-based Electric Spring Subjected to Distribution Network Dynamics

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Abstract—This paper aims to provide solution to mitigate the voltage variations in critical load caused by the high penetration of DGs into distribution system using Electric Springs (ES). In this regard, there is a need for its exploration with various converter circuits. The improvised topology opens new avenues in the renewable energy powered micro grids for the implementation of ES with a Multi-Level Inverter (MLI) comprising a voltage balancing circuit providing a better quality of power system stability and voltage regulation. This paper captures the voltage dynamics of distribution system dominated by Renewable variability for varying reactive power of the DGs and constantly changing consumer demands. These are analyzed and explained using voltage profiles and power flows in Matlab/Simulink environment. It is practically shown that with the developed ES topology %THD in the system is conspicuously reduced and voltage regulation is seamlessly improved.

Keywords—Electric spring; critical load; multilevel inverter; voltage balancing circuit; voltage regulation

I. INTRODUCTION

Increasing Distributed Generation in Smart Grid systems impacts the reactive power flow in the feeder and thereby leads to voltage variations in the distribution system [1]. Also, constantly fluctuating consumer load demands effect the load of the distribution system. It is observed that the distribution system is prone to voltage collapse under critical loading conditions. There are several strategies to maintain power quality in the distribution network [2] strengthened through proper placement of the devices [3]. Another way of providing the solution is Demand Side Management (DSM) wherein power demand follows the supply [4]. Creation of new technologies in research, stimulate to achieve the Sustainable Development Goals established by the United Nations (2015) [5]. Among the various profound DSM technologies, Electric spring has emerged to provide voltage and frequency regulation [6][7]. When embedded within a less voltage sensitive load, ES forms a smart load and enables the demand to follow the Renewable variability. The improved regulation is practically executed with power electronics.

In the emerging paradigm of power electronics, balancing the number of power switches, harmonic distortion with the preferred multilevel inverters and investigation with diverse

PWM schemes [8] is important to meet the requirements of the microgrids and nanogrids [9]. Existing inverter topologies for ES focused on the %THD, number of switches and PWM techniques [10], but there is not a method that would attend to the concern of frequent non-critical load changes, in addition to the former phenomena. This paper explores the relation between dynamic loads and various modes of operation of MLI based ES. Switching operation of the loads influences the PCC voltage. This influence is efficiently handled and the same is evidently illustrated in the 4 case studies.

II. WORKING OF MLI BASED ELECTRIC SPRING

Electric Spring is a new voltage compensating device employed in smart grids using demand side management. As shown in Fig. 1, this custom power device is connected in series with a less voltage sensitive load like refrigerator, music system, etc. that have inbuilt Switched Mode Power Supply circuit to withstand voltage variations. This comprises a smart load. Smart load is connected across voltage sensitive load, termed as critical load, to maintain voltage constant. ES senses the voltage fluctuations line voltage, V_s with respect to its reference voltage, V_{s_ref} and operates analogous to mechanical spring [11], as outlined in Table I. The magnitude and phase of the voltage injected by the ES is controlled by the ES controller. Existing inverter topologies for ES [12]-[14] focused on the %THD, number of switches and PWM techniques. A major benefit of realizing 7-level output voltage with the topology under consideration [15] as illustrated in Fig. 2 is reduction in number of power switches and reduced switching losses. The proposed ES configuration consists of 8 MOSFETS, 4 diodes and 3 capacitors for input voltage division.

TABLE I. ANALOGY OF MECHANICAL AND ELECTRIC SPRING

Mechanical spring		Electric spring	
State of spring	Mode of Operation	State of voltage	Mode of Operation
Neutral	Neutral position	$V_s = V_{s_ref}$	Neutral
Compressed	Mechanical push (upward force)	$V_s < V_{s_ref}$	Capacitive Mode (voltage boosting)
Extended	Mechanical pull (downward force)	$V_s > V_{s_ref}$	Inductive Mode (voltage reduction)



Main Assumption for Treatment the Natural Resources in Environment

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Abstract

The limited natural resource is a real challenge that can hinder the achievement of the goal of Environmental treatment. Holistic and integrated efforts from various sectors are needed to overcome the challenges of limited natural resources. In addition, the development planning needs to pay attention to balance the use of natural resources and the achievement of development targets and to pay attention to the reaction that the environment may depict against using its natural resources. In this regard, economists are taught that long-term economic growth should be maximized. However ecologists and environmentalists believe we can have too much of a good thing. The models used by mainstream economists do not properly take into account a few details – such as melting iceberg, shrinking resource stocks, or the opinions on all this of future generations. In fact, the real credit crunch is not the one involving banks, but the one involving the environment. For centuries we have been depleting forests, oceans, fuel sources, and other species, and the bill is about to become due. Economists' cherished belief in economic growth is colliding with the reality that we are just one part of larger ecosystem. It explores new economic approaches that aim to resolve the conflict and bring our financial system into balance with the rest of the world.

Keywords: Natural resource, Ecological economics, Mainstream economics, Human population, Environment

1 Introduction

Ecological economists believe that when the human economy becomes too large relative to the natural systems that support it, then the problems caused by economic growth can outweigh any benefits. The world is already stretched to capacity to feed the current human population. We can increase production by improved efficiency, but there is always the trade-off between efficiency and robustness-intensive monoculture farming, for example, is inherently fragile and requires large amounts of fertilisers and pesticides to maintain it. Our agricultural system exhibits the same lack of modularity, redundancy, and diversity as our banking system, but it is even more important for our survival. Development constraints (natural resource development constraints) can be defined as a condition of natural resource limitations that can be exploited as the main capital of development that needs to consider aspects of availability and quality (which is increasingly diminishing) as well as characteristics that are classified as vulnerable and high risk to support development. Based on the analysis of the Strategic

Environmental Assessment conducted by the Ministry of PPN / Bappenas, several natural resource parameters that need to be considered in terms of development planning aspects.

2 Primary Forests on Peatlands

Indonesia's primary forest cover tends to decrease gradually. Although the rate of deforestation has decreased significantly compared to before 2000, the area of primary forest cover is decreasing so that it is estimated that there will be only 18.4 percent of the total national land area (189.6 million ha) in 2045 compared to conditions in 2000 which reached 27.7 percent of the total national land area. In addition, the primary forest moratorium policy which has been implemented since 2011 has not been able to completely prevent the decline in primary forest area. Based on an analysis of land cover, for seven years the implementation of the policy of delaying the issuance of new permits and improving the management of primary natural forests and peatlands of at least three million hectares of primary natural forests and peatlands or roughly equivalent

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Digital Economic Challenges and Economic Growth in Environmental Revolution 4.0

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Abstract

Nowadays, the world has transformed as an environmental revolution 4.0 eras. The revolution provides challenges and opportunities for future environmental development. In addition, digitalization, automation, and the use of artificial intelligence in economic activities will increase productivity and efficiency in modern production which also provides convenience and comfort for environmental issues. Digital technology also helps the development process in various fields including environmental improvements, like global warming, acid rain, air pollution, urban sprawl, waste disposal, ozone layer depletion, water pollution, climate change and many more affect every human, animal and nation on this planet. In addition, the growth of various environmental activities and online-based buying and selling has not been accompanied by efforts to optimize state revenue and supervise tax compliance on these transactions. This is very important part, because digital transactions are cross country and it's an aid for environmental changes.

Keywords: Economic growth, Economic challenges, Industrial revolution

1 Introduction

The products of the data society are anything but difficult to see, with a cellphone in each pocket, a PC in each rucksack, and enormous change innovation frameworks in back workplaces all over. In any case, less perceptible is simply the data. 50 years after PCs entered standard society, the information has started to amass to the point where something new and exceptional is occurring. Not exclusively is the data is becoming quicker. The difference in scale has prompted a difference in state. The quantitative change has prompted subjective one. The sciences The 2015-2019 Medium-Term Development Plan (RPJMN) implementation faced various challenges of global economic problems, such as the Greek debt crisis, Brexit, US policy uncertainty, for instance, trade protectionism and monetary policy normalization, China's economic rebalancing process, and the end of the commodity boom era. This has led to the slow recovery of world economic and trade growth after the 2008 global financial crisis (1-6).

However, the domestic economy continued to grow at an average of 5.0 percent per year during the first four years of

the implementation of the RPJMN (2015-2018), which is higher than the developing countries average at 4.5 percent per year. This achievement was supported by a variety of structural reform policies, including the policy to improve the investment climate, industrial competitiveness, logistics efficiency, export stimulus, tourism promotion and strengthening people's purchasing power (7-10, 12).

The relatively high economic growth was driven by various sectors' growth. The processing industry grows an average of 4.3 percent per year. Furthermore, the agricultural industry grows an average of 3.7 percent per year, such as by improving the agricultural infrastructure to encourage the productivity. Meanwhile, the service industry is able to become the engine of economic growth, including the information and communication services industry and the transportation and warehousing industry which grew respectively by 8.8 and 7.4 percent per year. From the expenditure, the investment grows on average of 5.6 percent per year and becomes a major encouragement of economic growth. The supporting investment growth is mainly supported by improving the investment climate, infrastructure development, and investment services. Furthermore, household consumption is able to grow an average of 5.0 percent per year. In addition, government consumption grew by an average of 3.0 percent per year amid the downward

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Document details - An improved control scheme of electric springs for voltage regulation in distribution systems with renewable energy sources

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An improved control scheme of electric springs for voltage regulation in distribution systems with renewable energy sources(Article)

Deepika, K.K., Vijaya Kumar, J., Kesava Rao, G.

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Abstract

Penetration of renewable energy sources in the distribution systems paved way to the development of smart load device, Electric Springs (ES) that makes voltage regulation more flexible. The voltage disturbances are caused due to the power electronic converters, solar irradiation and wind speed variations. This paper implements Radial Chordal Decomposition technique to stabilise the voltage profiles at the chosen six locations in the distribution system. Performance of Electric springs based on PI controller and RCD controller is compared and verified on a modified IEEE-15 distribution network. Demonstration of the results is carried out in MATLAB Simulink GUI environment. © 2020, Institute of Advanced Scientific Research, Inc. All rights reserved.

Author keywords

- DFIG (Doubly Fed Induction Generator)
- ES (Electric Spring)
- GUI (Graphical User Interface)
- MATLAB (Matrix Laboratory)
- PVA (Photo Voltaic Array)
- RCD (radial-chordal decomposition)

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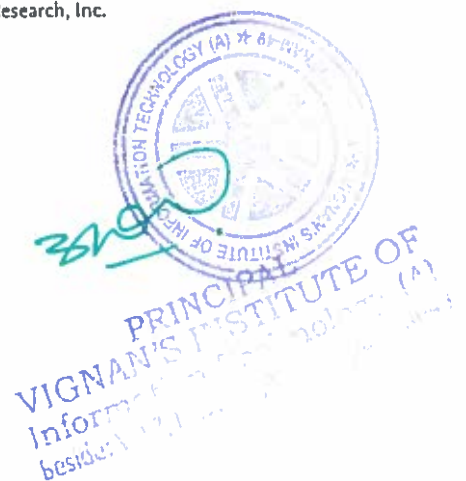
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Developing Region to Reduce Economic Gap and to Support Large Environment Activities

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Abstract

The Long Term Development Plan (RPJP) 2005-2025 emphasizes the establishment of a strong environment structure based on competitive advantage in various regions supported by quality and competitive human resources. To create high competitiveness in various regions, regional development approaches and strategies are not only about environment improvement, however, the equitable development in all regions and communities must be watched over. In 2020-2024, regional development is carried out through two main strategies, namely the growth strategy and the equalization strategy as reflected in the growth corridor approach and the island-based equal distribution corridor. The growth strategy is the transformation and acceleration of island and island development. The development focus is the important corridors on each island and archipelago that can drive significant growth in the next five years. The identification of growth corridors on each island and archipelago is carried out by considering the potential of its main economic bases outside Java. The environment bases that have been identified are natural resource processing centers, strategic tourism areas, service centers including metropolitan areas and new metropolitan supporting cities. In this main environment base, it is necessary to strengthen the facilities and infrastructure supply to support large environment activities, including transportation, electricity, communication tool, and infrastructure.

Keywords: Region, Economic activities, Growth strategy, Development approaches

1 Introduction

The equalization strategy is adjusted to the goal of sustainable development, which does not ignore any single community group (leave no one behind). The development focus is the area near the center of growth that can be given input to pursue growth in the nearest growth corridor. Identification of equal distribution corridors is focused on administrative areas which can be rapidly driven, by providing basic infrastructure. The equal distribution bases that have been identified are mainly disadvantaged areas, transmigration areas, rural areas that function as Regency Strategic Areas and border areas (1-5). The growth and equity strategy requires evenly distributed primary, secondary and higher education facilities, highly specific local research and innovation centers to encourage regional growth improvement. In addition, the linkages between regions and strengthened chains between

resource producers, upstream industries, downstream industries and local, regional and global trade centers are also needed. Both strategies were developed to achieve the goal of improving the quality of human resources in the two corridors, increasing productivity and added value, reducing poverty in all regions, and equitable distribution of development between regions. Strengthening of governance, innovation in public services, including village government is needed to accelerate development in both corridors (6-9).

2 Regional-based development achievements

Regional-based development achievements in 2015-2019 were prepared by referring to the goals and targets set out in the 2015-2019 RPJMN. For regional equity and inter-island contributions, the contributions of Java Island are still dominant and do not indicate a shift. Only the islands of

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Indexing documents with reliable indexing techniques using Apache Lucene in Hadoop

E. Laxmi Lydia, Sivakoti Satyanarayan, K. Vijaya Kumar and Dasari Ramya

Published Online: 24 Jan 2020



Abstract

Mostly 85% of the data is presented in the form of text, which is the human-readable format. Present educational, business, medical organisations, etc. making use of big data analytics for storage of data and processing that stored data by using information retrieval. Often time's text documents have been transferred from one system to another system without any restrictions like, structured, unstructured and semi-structured data. Systems are well performed with high speed and less complexity only when it has all the data arranged in an orderly way. This paper describes how documents of text data are being Indexed using Apache Lucene with approaches in Hadoop. Most of the applications that deal with huge data over the internet are completely lacking. Use of effective analysis and techniques allow users in resulting high-performance and a challenging option in leading big data analytics.

Keywords

Apache Lucene, indexing, big data, indexing techniques

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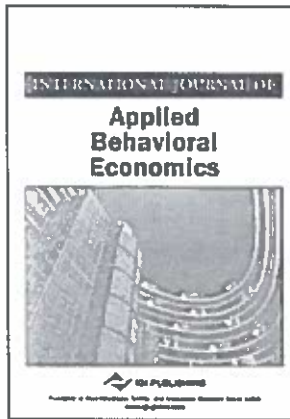
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A Pragmatic Study of Employee Perception on Service Quality Management Practices in the Banking Sector

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Abstract

Service quality is regarded as an essential success factor for any organization to stand out from its competitors. In the present competitive environment, the banking sector to be successful should not only focus on providing a wide range of product lines but also emphasize the importance of its services, particularly in maintaining service quality. The employees should be contented with the service quality management practices adhered to by the banks. When internal customers perceive higher value, they can provide better quality services to external customers. The study examines employee perception of service quality management practices in public sector banks. The results reveal that there is a significant association between demographic factors and employee perceptions of service quality management practices in public sector banks. The findings may be helpful to infer the niceties of business needs and promote necessary strategies in improving service quality to satisfy employee as well as customer expectations in the banking sector.

Article Preview

Introduction

A Conceptual Study on Women Empowerment: Comprehensive Analysis

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Article Info

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Abstract:

As the population of women comprises about half of the entire population over the globe; they have the right to be strengthened and rejuvenated to be the key to various affirmative and multidimensional transformations. Empowering the women enables them to entirely participate in various spheres which is substantial to build grandeur economies, attain internationally agreed goals for sustainability, development and to enrich the quality of living for women, men, families, and communities. By enhancing women's control over economic, cultural, social, and political spheres; as well as participation in decision making, leads to better prospects and general well-being for the present as well as for future generations. This research paper is a comprehensive analysis of various International initiatives, National attempts, and strategies for the betterment of women and the nation as a whole. The paper is split into four parts, namely; Introduction: Theoretical Perspectives: Initiatives: International and National level; and Conclusion.

Article History

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Keywords: Women, Empowerment, Political, Economic, Social, Feminism, Conventions.

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Article

BRAIN CONTROLLED ASSISTIVE APPLIANCES FOR PHYSICALLY CHALLENGED INDIVIDUALS USING BRAIN-COMPUTER INTERFACES

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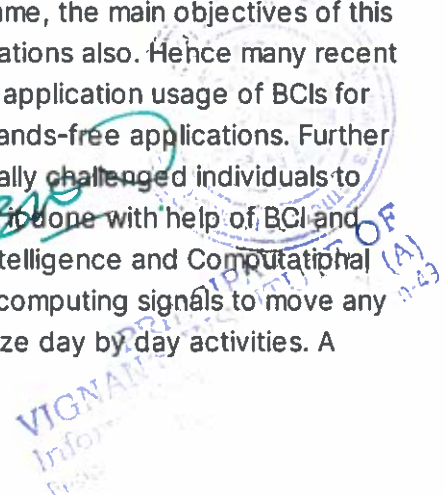
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Abstract

Brain-Computer Interface is an emerging automation field in terms of resource and application. Mind Machine Interface (MMI) also referred to as Brain-Computer Interfaces were device able to acquiring brain signals activity for Brain-Computer Application Interface. We have listed various application of BCI based mind assistive application for physically challenged people. This technology helps at medical areas of preventing minor issues and treatment of severe damage to human body parts. At the same, the main objectives of this study are further increased by including non-medical applications also. Hence many recent research has Targeting normal people can also explore the application usage of BCIs for input device and such investigation analysis for upcoming hands-free applications. Further exploration works in this discipline have empowered physically challenged individuals to control various activities which we are taking an activity get done with help of BCI and would be helpful in numerous fields including the Artificial Intelligence and Computational Intelligence. In this article, we have studied the use of EEG computing signals to move any electronic or electrical mind assistive device which we utilize day by day activities. A



DYNAMIC MODELING AND SIMULATION OF ELECTRIC VEHICLES

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ABSTRACT: This paper presents the benefits of EV's with conventional IC vehicles. Along with that we discuss about various Motor drive technologies (MDT), Battery charging technologies (BCT), Energy source technologies, configurations of EV's and HEV's. Based on the dynamic modeling of EV's we reduce the tractive effort on the Electric vehicles.

KEYWORDS: Electric vehicles (EV's), Hybrid Electric Vehicles (HEV's), Internal Combustion Engine (IC Engine).

I. INTRODUCTION

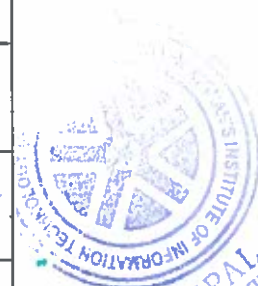
It seems the population has been increasing globally to around 10 billion by 2050. And if all these vehicles are of IC Engine type then all the cities will be covered by smog and severe air pollution. This leads to damage of health, As per Air Research Board in California almost 9000 people die due to fine air dust particles. So the only promising solution to reduce this is by using EV's and HEV's [1],[2]. So based on the benefits of EV's we study about the Dynamic modeling of Electric vehicles to develop an efficient Hybrid Electric Vehicle which consumes less energy, more efficient, less emissions.

Electric vehicles can be classified into different types on the terms of energy sources, propulsion devices, energy carriers that are uses as medium to transfer energy to propulsion devices from energy sources.

II. EV'S BASED ON VARIOUS INPUT METHODS

Electric vehicles are mainly classified into different types based on the various input methods adopted the table below shows the classification of different EV's.

Types of Electric Vehicles	Propulsion type	Energy carriers	Energy sources
Micro Hybrid EV'S	IC Engine + motor	Liquid fuel+ Electricity	Liquid fuels+ Battery
Mild Hybrid EV'S			
Full Hybrid EV'S			
Plug in Hybrid EV's			
Range Extended EV's			
Battery EV's	Electric motor	Electricity	Battery
Ultra fly wheel EV's			Ultra fly wheel
Ultra capacitor EV's			Ultra capacitor
Fuel cell and Battery			Hydrog



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THE DIFFERENCE ASSUMPTIONS AND VIEWS BEHIND ECOLOGICAL AND MAINSTREAM ECONOMICS

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Abstract

The limited natural resource is a real challenge that can hinder the achievement of development targets. Holistic and integrated efforts from various sectors are needed to overcome the challenges of limited natural resources. In addition, the development planning needs to pay attention to balance the use of natural resources and the achievement of development targets and to pay attention to the direction of the spatial function in regional development. Economists are taught that long-term economic growth should be maximized. However ecologists and environmentalists believe we can have too much of a good thing. The models used by mainstream economists do not properly take into account a few details - such as melting iceberg, shrinking resource stocks, or the opinions on all this of future generations. In fact, the real credit crunch is not the one involving banks, but the one involving the environment. For centuries we have been depleting forests, oceans, fuel sources, and other species, and the bill is about to become due. Economists' cherished belief in economic growth is colliding with the reality that we are just one part of larger ecosystem. It explores new economic approaches that aim to resolve the conflict and bring our financial system into balance with the rest of the world.

Keywords: natural resource, ecological economics, mainstream economics, human population, Environment.

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Introduction

Ecological economists believe that when the human economy becomes too large relative to the natural systems that support it, then the problems caused by economic growth can outweigh any benefits. The world is already stretched to capacity to feed the current human population. We can increase production by improved efficiency, but there is always the trade-off between efficiency and robustness-intensive monoculture farming, for example, is inherently fragile and requires large amounts of fertilisers and pesticides to maintain it. Our agricultural system exhibits the same lack of modularity, redundancy, and diversity as our banking system, but it is even more important for our survival. Development constraints (natural resource development constraints) can be defined as a condition of natural resource limitations that can be exploited as the main capital of development that needs to consider aspects of availability and quality (which is increasingly diminishing) as well as characteristics that are classified as vulnerable and high risk to support development. Based on the analysis of the Strategic Environmental Assessment conducted by the Ministry of PPN / Bappenas, several natural resource parameters that need to be considered in terms of development planning aspects.

Primary Forests on Peatlands

Indonesia's primary forest cover tends to decrease gradually. Although the rate of deforestation has decreased significantly compared to before 2000, the area of primary forest cover is

decreasing so that it is estimated that there will be only 18.4 percent of the total national land area (189.6 million ha) in 2045 compared to conditions in 2000 which reached 27.7 percent of the total national land area. In addition, the primary forest moratorium policy which has been implemented since 2011 has not been able to completely prevent the decline in primary forest area. Based on an analysis of land cover, for seven years the implementation of the policy of delaying the issuance of new permits and improving the management of primary natural forests and peatlands of at least three million hectares of primary natural forests and peatlands or roughly equivalent to 5 times the area of Bali Island has been completely converted for use other. In the same period, thousands of fire hotspots had destroyed the forest areas that were protected in the Moratorium map every year.

For the primary forest loss trend to not continue, the area of primary forest cover must be maintained at a minimum area of 43 million ha (conditions in 2019). Therefore, the area of the primary forest moratorium becomes an absolute boundary that must be considered in development planning. The area of forest cover, both primary and secondary forests located on peatlands is increasingly reduced. The 2015 moratorium on peatlands has not been able to fully prevent the decline in forest cover on peatlands. In the future development plan Total forest cover on peatlands should be maintained at a minimum of 9.2 million ha, such in 2000. Besides, the additional peatland restoration of 2





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Journal of Critical Reviews

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Corporate social responsibility (CSR): Concept of the responsibility of the corporations(Review)(Open Access)

Sari, W.P., Ratnadi, N.M.D., Lydia, E.L., Shankar, K., Wifilhani

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Abstract

A self-regulating business model that is use to help public, a company be socially accountable-to itself and its stakeholders is known as Corporate social responsibility (CSR). By rehearsing corporate social duty, additionally called corporate citizenship, organizations can be aware of the sort of effect they are having on all parts of society, adding environmental, economic, and social. To take part in corporate social responsibility implies that, in the standard course of business, an organization is working in manners that improve society and the earth, rather than contributing adversely to them. © 2019 by Advance Scientific Research.

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A system dynamics model for sustainable corporate strategic planning

(2022) Production

López-Concepción, A. , Gil-Lacruz, A.I. , Saz-Gil, I.

Stakeholder engagement, Csr development and Sdgs compliance: A systematic review from 2015 to 2021

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Pascua, D.S.

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FACTORS INFLUENCING INTERNET BANKING ADOPTION AND CUSTOMER SATISFACTION: EMPIRICAL STUDY IN INDIA

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ABSTRACT: The banking sector has adopted information technology for efficient and effective operations. This technology has led the bank customers to face severe concerns and challenges in the use and usefulness of use. Ultimately the banks should ensure that the technology has been accepted by customers at the early stage to recoup the investment in technology. For this, banks have to understand what factors are influencing the customer adoption of internet banking so that banks can focus more on such factors marketing their internet banking. In light of these facts, we have analyzed public and private sector bank customers' opinion on the factors important for internet banking adoption. It turns out that public and private sector bank customers significantly differ in their opinion on banks' timeliness of service, website upgrade, and information availability on bank websites. The most striking revelation is that there is a significant difference in awareness and usage of internet banking. These differences appear in both groups, i.e., public and private sector bank customers. Confirming the existing literature, it turns out that ease of use, promptness in service and security features have a significant association with internet banking customer satisfaction.

KEYWORD: Internet banking, IT in banking, Customer satisfaction of internet banking, internet banking security, internet banking adoption, technology acceptance model in banking.

I. INTRODUCTION

The banking sector plays a central role in any country's economic development. Banks are the essential intermediaries encouraging people for savings to meet the needs of those who want funds. Through this role, banks help continuous economic activity in a country. They make funds available from surplus to deficit sources, thereby ensure the funds are not lying idle. The banking industry has been facing many external and internal forces (Rajann R. G 1998). These unavoidable forces have necessary implications on the way how banks operate and provide services. In turn, these forces affect customer satisfaction and long-term association with banks, thereby influencing the banks' profitability. Technological change has a profound impact on the banking industry. Technological developments have dominated the revolution in the banking industry (Gandy.A, 1998). This technology has enabled several players to come into the market and thereby increased competition. Internet, in particular, is a significant force of internal changes. The Internet has allowed the banks to operate at low cost compared to traditional banking operations (Wylie, I. 1999). Through Internet banking; customers can perform a variety of banking transactions from check writing to fund transfer, enquiries and many more. Banks survival is highly dependent on their adoption of internet banking (Burnham 1996). Today, almost all banks are offering internet banking service. Internet bank service is a cost factor for banks. They have to invest heavily in technology. They are also bound to know what customers value the most and how satisfied they are with the internet banking service. However, Information technology adoption and usage has a direct bearing on the bank's value creation (Lin, B. W. 2007)

According to the technology acceptance model (TAM), the adoption of any IT is dependent on two constructs, i.e., ease of use and usefulness in using IT. However, Wang et al. (2003) have added the 3rd dimension to TAM. That third dimension is "Perceived Credibility of IT". Hence, the three most important factors for the success of internet banking is (1) perceived ease of use, (2) Perceived usefulness and (3) Perceived credibility of internet banking transactions. It is imperative to the banks to know whether customers are satisfied with these factors and whether these factors have significantly associated with the length of customer associating with the bank.

Optimization of Wire Cut EDM of Aluminium Alloy 6063 by using Taguchi Technique

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ABSTRACT

The cold work applications like aluminium extrusion, it allows complex shapes to be formed with very smooth surfaces and it is popular for visible architectural applications such as window frames, door frames, roofs, and sign frames should have high toughness, wear resistance, compressive strength, high corrosion resistance, high surface finish and complex profiles. AA 6063 is an aluminium alloy, with magnesium and silicon as the alloying elements. This material can satisfy the above requirements, because of its hardness and strength AA 6063 cannot be machined easily through traditional machining processes. Advanced machining processes are used only when there is no suitable traditional machining process to meet necessary requirements efficiently and economically. Among them wire cut EDM is employed because of its tight tolerances and high surface finish. Based on intense literature survey, it was noticed that very few works were reported on WEDM of AA 6063. As a part of our thesis, WEDM of AA 6063 is considered for the study. In this work Pulse on time, pulse off time, peak current, wire speed, wire tension and flushing pressure of dielectric medium are considered as parameters and their effect on performance measures, metal removal rate (MRR) and surface roughness will be studied through experimental investigation. Using Taguchi approach, considered parameters will be optimized for maximum MRR and minimum for Surface roughness separately. Taguchi method will be applied to generate mean S/N ratios to identify the optimum process parameters.

KEYWORDS: Compressive Strength, Complex Profile, EDM, MRR, Surface Roughness, Taguchi Approach

INTRODUCTION

As a part of our theory WEDM of Aluminium alloy 6063 (Silicon-0.2 to 0.6%, Iron-0.35%, copper-0.10 Manganese-0.1%, Magnesium-0.45 to 0.9%, Zinc-0.10%, Titanium-0.1%, Chromium-0.1max remaining is balanced by Aluminium) is considered for the study. In this research Peak Current, Pulse On time and Pulse Off time are considered as input process parameters. The effect of these parameters on performance measure i.e., metal removal rate (MRR) and Surface Roughness (Ra) is studied through experimental investigation. Taguchi Method is applied to identify the optimum process parameters at which MRR is maximum and Ra is minimum.

Applications of AA6063

AA6063 is an medium strength alloy and having high hardness.

Typical applications for AA6063:

- Architectural applications
- Extrusions
- Window frames
- Doors
- Shop fittings
- Irrigation tubing

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WIRE ELECTRIC DISCHARGE MACHINING:

Electrical discharge machining (EDM) is a nontraditional, thermoelectric process which erodes material from the work piece by a series of discrete sparks between a work and tool electrode immersed in a liquid dielectric medium. These electrical discharges melt and vaporize minute amounts of the work material, which are then ejected and flushed away by the dielectric. The sparks occurring at frequency continuously remove the work piece material by melting & evaporation. The dielectric acts as a deionizing medium between two electrodes and its flow evacuates the solidified material debris from the gap assuring optimal conditions for spark generation. The material removal protocols for both EDM and WEDM are identical but the functional characteristics are different. Mainly, WEDM requires a thin wire for continuously feeding through the work piece by a microprocessor based control system which supports the various complex parts such as, shapes are machined with better accuracy. Due to such advantages the various kinds of micro shaped holes, micro gears, complex micro parts and dies etc. can be machined with a better performance by WEDM process than other machining process. According to the requirements of the product for industrial use the development of the WEDM machine has been done with the same principle as that of EDM. Wire electrical discharge



DESIGN OF VENTURIMETER DIAMETER FOR THE PRACTICAL APPLICATION IN AGRICULTURE SECTOR

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Abstract—The importance of Agriculture is increased and the crop productivity with high quality and quantity are produced. In order to maintain the proper quality and the growth of the crop the rich nutrients are required and these are supplied to the crop with the fertilizers. The fertilizers are available in the form of powder based and liquid based. It is not possible for the farmers to supply the fertilizer in time with the required quantity. In this paper to minimize the effort and the required quantity of fertilizer with water is made available to each plant. A case study of Mango Plantation was chosen to design a venturimeter such that uniform rate of flow of the liquid fertilizer to be supplied to each Mango Plant based on the requirement in this process the required diameter of the venturimeter throat is calculated.

Keywords—Venturimeter, Quantity Throat, Liquid Fertilizer

I. INTRODUCTION

A venturimeter consists of convergent, Divergent and throat with a circular cross section[6].In venturimeter the fluid flows from the it convergent section with high acceleration and decelerates at the divergent section,which results a static pressure drop and recovery of the pressure happens in the direction of the flow.Then the pressure difference is measured at upstream of the convergent section and other at the throat. the volumetric flow rate can be determined.The venturimeter is works on the principle of Bernoulli's equation[6].The Bernoulli's statement states that in a steady, ideal flow of an incompressible fluid, the total energy at any point of the fluid will be constant.

The total energies are sum of pressure energy, kinetic energy and datum energy. Mathematical equation can be written as,

$$\frac{p_1}{\rho g} + \frac{v_1^2}{2g} + z_1 = \frac{p_2}{\rho g} + \frac{v_2^2}{2g} + z_2$$

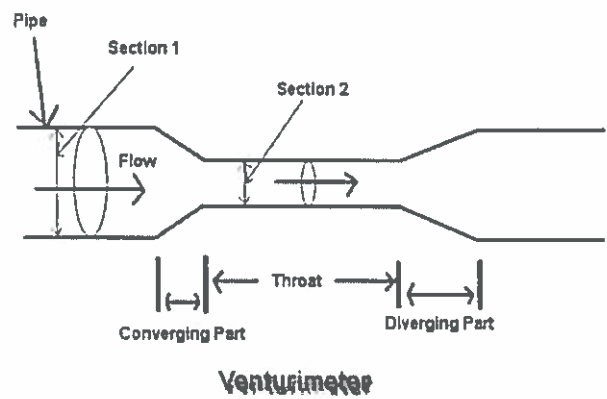


Figure.1. Venturimeter

II. FLOW METER IN AGRICULTURE SECTOR

The application of flow meters [4] in cultivation and dams are increased within increase in the demand of irrigation, drinking water and power supply using hydraulic power stations. These water flow meters are tool for the cultivators. The case study from a farm filed with mango plantation was collected from the district Agriculture officer and based on the data the required para maters are evaluated. The agriculture if updated day to day with the reforms and agriculture policies in the country, with this the farming is implemented with the natural fertilizers and led to organic farming. Organic farming is a method of crop production that involves not to use pesticides, fertilizers, genetically modified organisms, antibiotics and growth hormones, but for the organic farming also required sufficient uniform flow of water.



Figure.2. Mango Plantation





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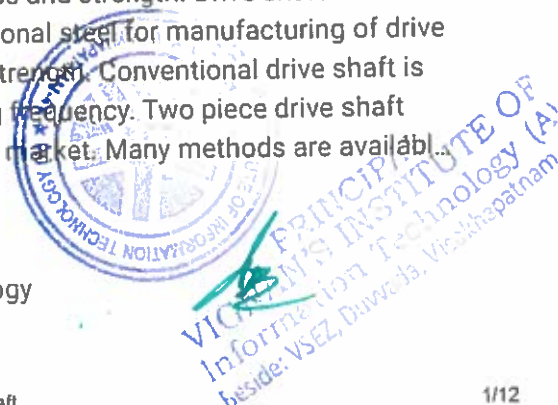
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Abstract: This study deals with the review of optimization of drive shaft using the Genetic Algorithm and ANSYS. Substitution of composite material over the conventional steel material for drive shaft has increasing the advantages of design due to its high specific stiffness and strength. Drive shaft is the main component of drive system of an automobile. Use of conventional steel for manufacturing of drive shaft has many disadvantages such as low specific stiffness and strength. Conventional drive shaft is made up into two parts to increase its fundamental natural bending frequency. Two piece drive shaft increases the weight of drive shaft which is not desirable in today's market. Many methods are available

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A New Spatial Domain Filter for Impulse Noise Removal with Improved Accuracy Based on Multiple Conditions



Prudhvi Raj Budumuru, Madhusudan Donga, Asha Korada

Abstract: Numerous filtering methods are proposed for impulse noise removal, it is an important task in the field of image restoration. The familiar spatial domain algorithm to remove impulse noise is Standard Median Filter (SMF). Most of the existing algorithms are based on median filtering and recent algorithms are Modified Hybrid Median Filter (MHMF) and New Modified Hybrid Median Filter (NMHMF). These two are worked up to 20% noise density. In this paper proposed a new algorithm for impulse noise removal above 20% noise density conditions with different samples of images. The implementation of proposed method compares with known existing methods by comparing Mean Square Error (MSE) and Peak Signal to Noise Ratio (PSNR).

Keywords: Impulse noise, SMF, MHMF, NMHMF, MSE, PSNR.

I. INTRODUCTION

Digital image is having $M \times N$ pixel values ranging from 0 to 255 in 8-bit gray scale image. Generally, Noise happened in digital images during transmission and reception the images through the noisy channel. Impulse noise is particular kind of noise and frequently existing in digital images which happens due to the image acquisition, sudden disturbances, processing and A/D conversion. Essentially, impulse noise can be classified into two types called as Fixed-Valued Impulse Noise (FVIN) and Random-Valued Impulse noise (RVIN) [5]. The FVIN has two corrupted pixel values minimum (0) or maximum value (255) and another word for FVIN is salt and pepper noise.

$$FVIN = \begin{cases} 0; & \text{with probability } P \\ 255; & \text{with probability } 1 - P \end{cases}$$

The RVIN is uniformly distributed in the range of 0 to 255 and it is closes to adjacent pixels.

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II. LITERATURE REVIEW

Impulse noise removal is difficult task in digital images and eliminates this type of noise by different existing filtering techniques those are classified into Linear filtering techniques and Non-Linear filtering techniques. Linear Filtering technique is simple to design but the disadvantage is loss of image details [4].

A. Standard Median Filter (SMF)

In Median filter [1-3], it is a one kind of Non-Linear filtering technique and it arranges all the pixel values are in increasing or decreasing order and then find the median

value. The target pixel value is replaced with median value. Flow of SMF is represented in Fig. 1.

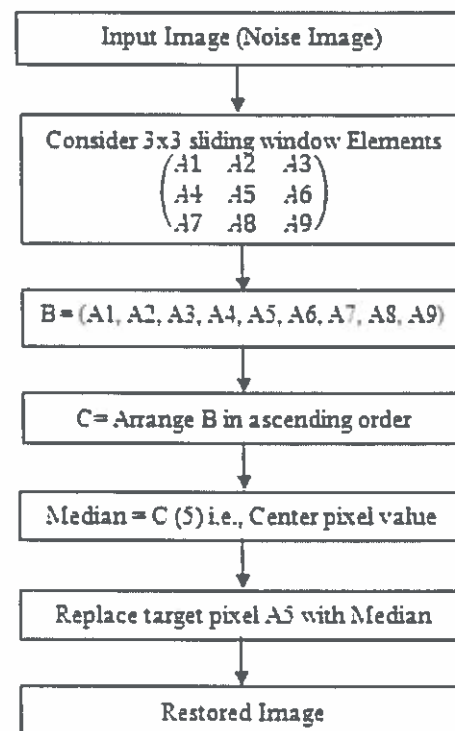
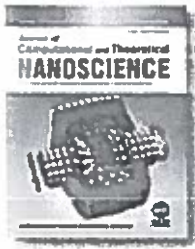


Fig. 1: Flow of SMF Algorithm

The failing of median filter is losses the lines and edges of the image [1-3]. To rectify the median filter disadvantage, introduce different filters based on median filter but these filters are takes a computation period is high.





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DOI: <https://doi.org/10.1166/jctn.2020.9440>



Abstract



References



Citations



Supplementary Data



Suggestions

Most of the people requires genuine information about the online product. Before spending their economy on particular product can analyze the various reviews in the website. In this scenario, they did not identify whether the product may be fake or genuine. In general, some reports in the websites are good, company technical people itself add these for making the product famous. These people belong to media and social organization teams, they give reviews with a good rating by their own firm. Online purchasers did not identify the fake product because of this falsification in the reviews of the website. In this research, the SVM classification mechanism has been used for detect the fake reviews by using IP address. This implementation helpful for users find out the correct review of online product. In this accuracy is improved by 98.79%, F1-Score increases by 10%.

Keywords: Data Mining; Fake Reviews; Online Product; Real Time Marketing

Document Type: Research Article

Affiliations: Vignans Institute of Information Technology (A), Department of Information Technology, Visakhapatnam 530049, Andhra Pradesh, India

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The Home Security System which dependent on face Recognition

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Abstract : Security is one of the major issues for home, corporations, and organizations. The security alert system can be used by individuals, corporations and organizations which require reliable security system. The proposed work is to provide security during the unwanted events for home through face recognition. Face recognition is a very difficult and complex problem. In proposed work, the face recognition is done by using open CV (Open Source Computer Vision) module in python. The principle component is Cascade Classifier to capture the faces and then we store those images into the database. Then we train our system with the captured images by using the Local Binary Pattern Histogram Face Recognizer (LBPH Face Recognizer) [1]. When a person enters the zone, the system captured a series of snapshots and compare with our training data. If the person is match with the training data, then it sends the alert to the owner with that person name. Otherwise it alerts the owner that the unknown person is identified. The advantage of the proposed work is to prevent the robberies in homes, corporations, and organizations.

Keywords: Face recognition, Security, Training data and Classifier

2. INTRODUCTION

The Home related applications which are mainly concentrate on security are playing significant role in the market [2]. An effective and precise home security framework which depends on face acknowledgment is significant for wide scope of security application. A large portion of the nations are bit by bit receiving home security framework. Face acknowledgment is presumably the most normal approach to perform confirmation among individuals and it is the most mainstream biometric validation characteristic, after unique mark innovation. The greater part of the security frameworks fabricates utilizing face acknowledgment innovation product executing a Principle Component Analysis (PCA) [3]. Computations which denotes the face acknowledgment on equipment stage for its dimensionality decrease and straightforwardness. Remote advancements for instance Radio Frequency Identification (RFID) [4], ZigBee [5] and so on are utilized in get to control frameworks. This proposed work likewise go about as home related security framework for both Intruder discovery and furnish security applied on house with the assistance of the alarm by utilizing facial acknowledgment based on home condition.

Individual is recognized as a gatecrasher inside a home reason accomplished by catching live video from web camera. At that point, the mostly caught from video edges to recognize the face identification of the interloper. The web-based camera to catch the arrangement of pictures when the individual's movement is distinguished in certain territory premises of home and furthermore its sends the programmed alarm to the proprietor to take the important activities.



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Article

Removal of impulse noise from a noisy image by using adaptive median filter

May 2020 · *Xi'an Jiaozhu Keji Daxue Xuebao/Journal of Xi'an University of Architecture & Technology*, XII(V):1385-1392

Authors:



Prudhvi Raj Budumuru
Vishnu Institute of Technology

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Abstract

Abstract- In the modern world the digital images are the priori information source to variant fields like Science and Engineering. As per the requirement this digital images are stored and transferred in various formats. But at the time of Transmission this digital image is corrupted with various kinds of noise. Here we consider the impulse noise because the images are mostly affected by this impulse noise which is also known as the salt and pepper noise. Due to the presence of these noise the image is losing its valid information. There are many previous filtering techniques which are used to remove the impulse noise instead our proposed algorithm makes the better filtering even at the high noise densities. The proposed algorithm which can perform the better peak signal to noise removal (PSNR) factor at different noise densities. The different previous algorithms like MF, AMF, AWMF are compared with the proposed algorithm.

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FACIAL DETECTION IMPLEMENTATION USING PRINCIPAL COMPONENT ANALYSIS (PCA)

K Leela Prasad

Authors G Ravi Kumar Kaki Leela Prasad, Pilaka Anusha

Publication date 2020/7/8

Journal Journal of Critical Reviews

Volume 7

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RESOURCE MANAGEMENT AND SUSTAINABLE DEVELOPMENT GREAT "MACRO" THEMES OF THE CENTURY

by Slamet Riyadi

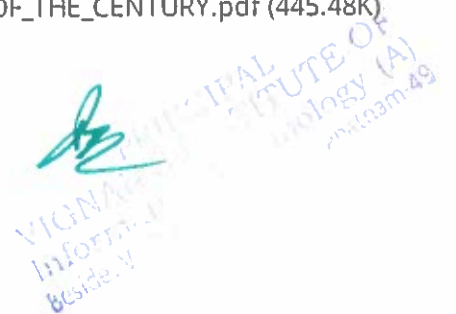
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ARCHIVES

Re-encryption Identity-based Proxy Broadcast Revocable for Data Sharing in Clouds

Ch. Srinivasa Reddy, M. Somasundara Rao, B. Venkatesewara Rao and G. Krishna Karthick

Abstract

Disseminated processing gives a versatile and supportive course for data sharing, which brings various favorable circumstances for both the overall population and individuals. In any capacity, there exists a trademark restriction for customers to legitimately redistribute the common data to the cloud server from that point forward the information frequently contain significant information. Along Thusly, it is essential to put cryptographically improved Accessed control on regular (common) information. Identity based encryption or (CBE) is a cryptographically crude approach to build a sensible data sharing structure.

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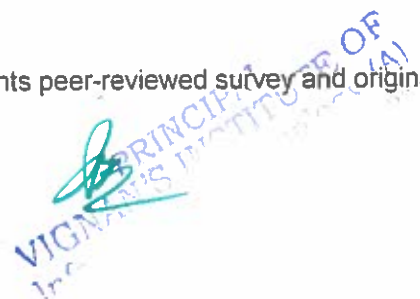
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Classification of Clinical data Abnormality using Neural Network and Machine Learning Models

K Venkata Rao, Ch Sekhar, M Srinivasa Rao, M Somasundarara Rao

Abstract

In the era of data explosion, the need of great importance is to recover data or information that is intriguing. This has to be mined from the raw facts available, for which various data mining techniques are employed. Clinical data are perceived to be a critical corporate resource and give essential proof of a medication's adequacy and its potential monetary incentive to the market. A regular structure of clinical data is an arrangement of perceptions of clinical parameters taken at various time minutes. Hence clinical evidence is time-variant. In this kind of contexts, the temporal dimension of information is a crucial variable that ought to be considered in the mining procedure. Using valid data mining methods to manage clinical data can enhance the speed and accuracy of the medical diagnosis and disease prediction process. Classification is a trivial data mining task that is being utilized by knowledge finding and decision support systems, especially in medical diagnosis and clinical decision support systems. In this process, we propose to develop a domain-specific intelligent classifier like neural networks, gradient boost methods to classify the heart abnormality of the patient. Principal Component Analysis (PCA) and Linear Discriminant Analysis (LDA) used for attributes reduction in the dataset. To enhance the performance, we mentioned the classifier model tuned by a domain expert based on a dynamic error reporting scheme by further using Swarm Intelligence concept.

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SURVEY OF VARIOUS ML AND DEEP LEARNING ALGORITHMS FOR BRAIN TUMOR DETECTION

K Leela Prasad, P. Anusha · Published 2020 · Computer Science

In current days brain tumor has become one of the serious problems for the patients who suffer with some severe headache. However, most of the people often worry about their headache is caused due to some critical issue, such as a brain tumor, in particular if they get head ache more frequently with severe pain for more time. In general almost some brain tumors will not cause headaches at all, because the brain itself has the capability to control the pain .Some tumors will cause head ache... Expand

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AUTOMATIC DETECTION OF WHITE MATTER AND GRAY MATTER FROM MRI IMAGE FOR DIAGNOSIS OF NEUROLOGICAL DISEASES

Chandra Mouli D^{1*}, Asmita Ray², Venkatesh B³, Madhusudhana Rao T V⁴
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Abstract

The brain is the most complex organ which acts as the centre of the nervous system of the human body. Quantitative analysis of Gray Matter (GM) and White Matter (WM) is vital part for detection of multiple brain disease such as asymptomatic unruptured aneurysms, Alzheimer's disease, vascular dementia, and multiple sclerosis (MS). MRI is very useful medical imaging technique which helps the doctor for diagnosis and therapy of these kinds of complex neurological diseases. Quantification of white matter lesions is necessary for drug treatment assessment multiple sclerosis, while in schizophrenia and epilepsy, volumetric of gray matter, white matter, and cerebrospinal fluid is important to characterize morphological differences between subjects. Manual segmentation is too time consuming since vast amounts of data are required for such studies. Moreover, such manual segmentations show large inter and intra observer variability. Hence, there is a need for automated segmentation tools. This paper proposes an efficient algorithm for automatic segmentation of brain tissues such as gray matter and white matter regions from MR images. An efficient algorithm has been proposed for skull stripping. Hybrid clustering method which is combination of k-means and Fuzzy C-Means (FCM) has been achieved optimal result. Intensity values and statistical feature based values are used to measure the accuracy of our proposed hybrid segmentation algorithm. Final result of clustering gray and white matter compared with the manually marked ground truth using standard accuracy measurement coefficients. The performance of the statistical feature clustering is more promising and produce prominent result compare to intensity based clustering. In this study experimental result and validation indicate the accurate detection and segmentation from MRI brain image.

Keywords: Gray Matter, White Matter, MRI, Multiple sclerosis, Brain Diseases.

1. Introduction

Most complicated and significant organ of the human body is Human Brain. Analysis of brain tissues such as GM and WM is essential for the medical diagnosis and therapy of neurological diseases [1]. For Neurosurgery and Neuro-diagnosis, perfect segmentation of brain tissues is required from Magnetic Resonance image. There are two kinds of cells in brain. Neurons and Neuroglia / Glial. Neurons helps in communication and processing with in the brain. Neuroglia cells supports and protects neurons [2]. Human brain has been divided in to three regions. Lateral region is represented as Sagittal. Frontal region is represented as Coronal. Axial region is represented as Horizontal. Grey matter is accountable for all brain activities. All body parts and grey matter is connected using white matter. Various parts of the brain and body are connected using white matter. Cerebral cortex and other brain regions connected with elinated axons. Elinated axons are subset of white matter.



Review Article

EFFECT OF ENVIRONMENT OF WORKPLACE IN THE GROWTH OF AN EFFICIENT BUSINESS SYSTEM

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Abstract:

Employee morale are often compact in each positive and negative ways that by the geographic point atmosphere. Geographic point atmosphere is role plays a serious within performance associate degreed product of a worker. Most business have associate degree insecure geographic point atmosphere and most unhealthy time too. This paper is geographic point atmosphere is the targeted on during a clinic and the way it affects the medical expert. associate degree unsafe clinic atmosphere like unsuitable article of garniture, designed workstations, ventilation of lack, noise excessive, lighting inappropriate, poor supervisor, support to poor work house, support to communication poor, safety measures the poor hearth for emergencies, and thousands of non-public protecting instrumentation, will adversely have an effect on the creativeness of the worker. Health worker's creativeness and executions will less thanks to poorly arranged geographic point atmosphere as this contrarily affects their goals and should produce to poor stimulation and no stratification with their job as an output, the management challenges for the supply a secure atmosphere work for the staff to confirm efficiency, creativeness, health and sensible action. The link between the medical expert, work and also the geographic point atmosphere is incredibly important associate degree thus it becomes an undivided part of work itself. Personal Management, personal motivation and substructure of the worker the effort in guaranteeing a vigorous personnel ought to be targeted on worker atmosphere.

Keywords: Business environment understanding, work of Business system, Business understanding, Work Environment of a business system, Set up a business management system

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INTRODUCTION:

In these paper geographic point surroundings impacts worker aim, creativeness, negatively and action each absolutely. The place surroundings of work in an exceedingly many of trade is insecure and ailing. These workstations, unsuitable article of furniture, lack of ventilation, inappropriate lighting, excessive noise, inadequate safety measures in fireplace urgently and thousands of non-public protecting instrumentality is includes poorly designed. Individuals operating in such surroundings square measure susceptible to business disease and employee's activity impact on the action of worker. Therefore creativeness is weakened thanks to the geographic point surroundings. It is the standard of the geographic employee's point surroundings that the majority impacts on the motivation level and resultant action of worker.

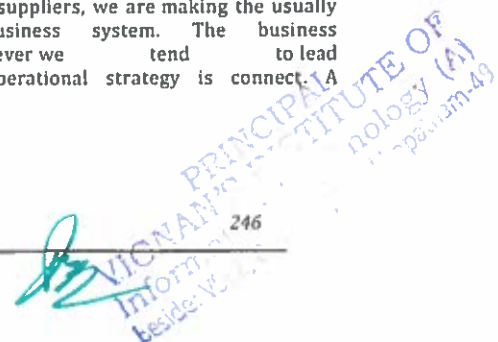
However, well they have interaction with the organization, particularly with their urgently surroundings, influences to a good extent their error rate, level of freshness and copartner ship with the alternative workers, absence and ultimately, however long they keep within the labor, Making a

piece surroundings within which workers square measure productive is important to the organization and inflated profits for your business system, micro business or little business. The connection between the work, the geographic point and tools also the labor, geographic point becomes associate the part of work is undivided itself. However, the management that dictate, surely, to decrease the worker creativeness focus on two major areas of focus: personal support to the motivation of worker and also the substructure of work surroundings. The result for organizations of business system other than a work brimful with unhappy, stressed-out and sickly people includes costlier insurance premiums, reduced innovation, a negative leader whole, hyperbolic absence, lower employee productivity, and more.

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Technology based Learning in Engineering Colleges

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Abstract

This paper explores the changes that English language teaching have undergone from the course of literature to teaching in engineering colleges. What other inputs can be added to the teaching that is happening right now in the technical universities? How bias is shown to technical departments compared to Humanities department especially English department? In addition to these many other problems were addressed and practical and most probable solutions are discussed in this paper. This paper speaks the suppressed voices of many English teachers who are facing difficulties due to various reasons which are related to the infrastructure of the colleges as well as Human resources. How technology can be used to achieve the best results in teaching English language.

"Language is "the infinite use of finite means"
- Anonymous

The prominence of teaching profession can be surmised from the above quote. In teaching profession 'humanities' carryout a very special role of carving the students' ethical personality while rest of the departments are busy honing students' skillset.

Teaching English in engineering colleges requires a lot of background work. Because the students who sit before the teachers are not a homogenous set of people. There are many shy students who have a lot of spark in them and yet afraid to open their mouth only because of one factor that is stage fear. This is the greatest enemy for both student and teacher. Owing to the stage fear students never speaks and teacher thinks that students lack the capability. In this way it creates a chasm between teachers and students. That's why it's important to eliminate the fear from the students in the very beginning stage itself. And even after shedding the fears, they face another challenge in working with

the team. There are many students who work so bright when they are alone but are unable to mingle with the team. This is also going to be a major obstacle for students as they sit for group discussion or debate or any other group activity. This is one thing that teacher must notice in students

English as a subject in university course is a comprehensive kind of study, because it includes almost all genres in the language, be it spy fiction, new literature, colonial literature, American, Indian, socio-linguistics whatever might be the kind that is fairly comprehensive. English in university course can't be compared to Engineering College teaching, because work place is a technical university whereas the study place is mostly of literature background. English in workplace includes mostly the job-oriented skill training sessions like that of Resume writing, letter writing, interviews, Business communication skills, Group discussions, Team Dynamics, Non-verbal communication, body language and the list keeps



Strength analysis of value added composite materials from shells of crabs

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Department of Mechanical Engineering, Vignan's Institute of Information Technology, Visakhapatnam, A.P., India

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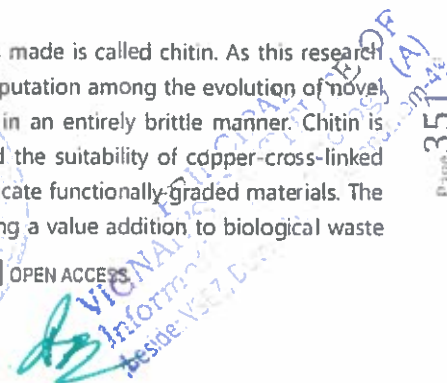
ABSTRACT

The external skeletons of crabs contain chitin fibers in excess quantity. The chitin powder can be manufactured by mechanical treatment with several purification processes. Chitin powders are manufactured by grinders and water jets. The acidic treatment is done to fibrillation. Surface modification is done to mechanical fibrillation. The surface modification is done to change the surface property. After grinding the crab powder is used to manufacture functionally graded material.

Keywords: laminates; chemical properties; chitin; chitosan; grinding of crab powder

1. INTRODUCTION

The present work is to invent a novel material from the shells of the crabs. The powder thus made is called chitin. As this research work triggers towards the usage of biological waste, the work is expected to get the good reputation among the evolution of novel materials. There was discontinuity in their tensile stress-strain curves. The crab cuticle fails in an entirely brittle manner. Chitin is widely and freely in nature and its annual production is very high. This study demonstrated the suitability of copper-cross-linked chitosan scaffolds [1]. The powders made from the shell material of crabs can be used to fabricate functionally graded materials. The novel method of expelling micro powders from the bio wastes serves two purposes like giving a value addition to biological waste





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Grinding, Sieve Shacking and Evolving a Material From Shells of Crabs used for Light Weight Bio Medical Applications

Journal: International Journal of Mechanical and Production Engineering Research and Development (IJMPERD) (Vol.10, No. 3)

Publication Date: 2020-06-30

Authors : K.S. Raghuram S.N. Padhi R.C. Mohanty; K. Suresh;

Page : 2625-2632

Keywords : Chitin; Chitosan; Grinding of Crab Powder; Laminates & Chemical Properties;

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5. [Determination of the correction factor for computation of the soil-digging force's component by the multipurpose ground-digging machine](#)

Abstract

The external skeletons of crabs contain chitin fibers in excess quantity. The chitin powder can be manufactured by mechanical treatment with several purification processes. Chitin powders are manufactured by grinders and high pressure water jet systems. The acidic treatment is done to facilitate mechanical fibrillation. Surface modification is done to mechanical fibrillation. The surface modification is done to change the surface property. Acetylation, deacetylation phthaloylation, naphthaloylation meyleylation, chlorination, tempo-medicated oxidation and graft polymerization is the step by step procedure to purify the exoskeleton of the crabs shell. After grinding the crab powder is used to manufacture functionally graded material.

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THEORETICAL AND EXPERIMENTATION COMPARISON OF PRESSURE DROP IN ORIFICEMETER

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Abstract: Orificemeter is used as flow meters in chemical industries, water treatment industry, oil industry and other mechanical equipment's. They are available at the lowest cost, less maintenance and can be used for long life. The drawback with the orifice meter is that the amount of pressure drop occurs in the pipeline due to the presence of orifice (small opening) in these types of flow meters and the permanent pressure loss depends on the shape of obstruction, diameter ratio and properties of the fluids. Generally the shapes are in cross section of circular, eccentric, ellipse and many other. In this present paper, experiment is conducted in fluid mechanics & hydraulic machinery and the values are taken, tabulated and calculated and compared with the theory values to determine the permanent pressure loss and relative pressure loss for incompressible fluid for orifice plate.

Index Terms - Fluid mechanics & hydraulics, orifice, orificemeter, pressure drop

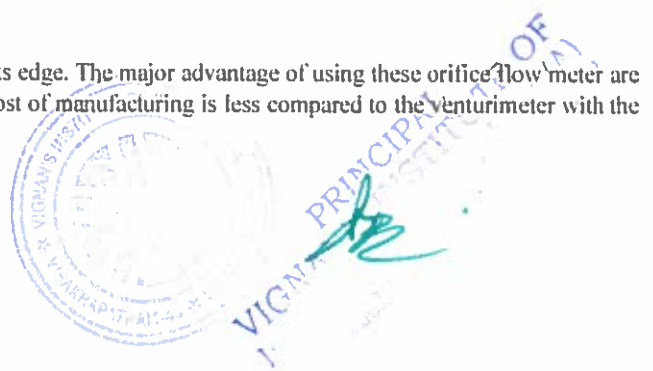
1. INTRODUCTION

Orifice plate is simple shape with long operating life and reliable for measurement of fluid flow; it is mostly used in chemical processing industries, natural gas, Petrochemicals and refineries, Water Treatment Plants, Oil Filtration Plants, and steam. In applications of orificemeter, the most important drawback is to confirm the pressure drop, which is usually influenced by the β ratio, Re_D , roughness of the tube and the viscosity. The orifice meter has high pressure loss and correspondingly high pumping cost, they are still the most common meters used for fluid flow measurement because these are rugged, simple in construction and replacement, without having any moving parts, economic, measurement flexibility with high range ability, can be used for liquids, gases or slurries, well suited for use under extreme weather conditions, etc. High pressure drop is frequently required in the process line of Nuclear and Powerplants. In the situation of low pressure drop, some throttling components such as nozzle, Venturimeter, orifices are mostly used. Orifice meter is the application of Bernoulli's Equation.

Bernoulli's Statement: It states that in a steady, ideal flow of an incompressible fluid, the total energy at any point of the fluid is constant. The total energy consists of pressure energy, kinetic energy and potential energy or datum energy. Mathematically,

$$\frac{p_1}{\rho g} + \frac{v_1^2}{2g} + z_1 = \frac{p_2}{\rho g} + \frac{v_2^2}{2g} + z_2$$

Most of these orifices are circular type, with the hole having a certain finish to its edge. The major advantage of using these orifice flow meter are they don't have moving parts, requires no lubrication or maintenance and the cost of manufacturing is less compared to the Venturimeter with the pipe size.



PARAMETRIC OPTIMIZATION OF DIE SINKING EDM USING RSM-GRA-TLBO APPROACH FOR M2 DIE STEEL

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Abstract

Modern machining processes are become excessive dependent to meet with common needs of modernization in civilization. In this attempt EDM is taken up in to primary consideration as it is sharing prominent role in the entity of modern machining processes. It was observed that the salient feature like high energy generation for highly sophisticated surface generations. In order to highlight the role of EDM, simulation was developed to inter relate process parameters to extend the range of applications. In this paper experiments are carried out with respect to process parameters pulse on-duration (Ton) and peak current (I_p) with the help of Response Surface Methodology (RSM). By make use of Grey Relational Analysis (GRA) various responses like Surface roughness (SR), White layer thickness (WLT), and Material Removal Rate (MRR) have been transformed into an unique response. Simultaneously the empirical model was executed by TLBO (Teaching Learning Based Optimization). Ultimately Multicriteria decision making (MCDM) based on RSM-GRA-TLBO is used to investigate optimum parameter values. The MCDM approach based on RSM-GRA-TLBO indicates the optimal configuration for MRR, SR, and WLT will be $I_p:3A$, $Ton:42\mu s$. In SR, WLT and MRR, respectively, the percentage errors for the expected and experimental tests are 5.5%, 4.4% and 7.3%.

Keywords – I_p , Ton, MRR, SR, WLT, RSM, GRA and TLBO.

1. Introduction

Electro discharging machine (EDM) is becoming increasingly an integral part of the tool space. It is increasingly becoming an important manufacturing method for the production of hard materials and alloys used in the industries of aerospace, machinery and die. Continuous advances in the efficiency of metal removal and the introduction of numerical control have significantly improved the feasibility of the process, both in terms of the product form and the content. Nevertheless, there are a variety of problems related to using EDM, the key one being surface integrity after machining. To order to prevent future failures resulting from surface defects, an accurate understanding of the type and degree of surface damage incurred under various machining conditions is important. It was observed during EDming of M2 that the machined surface is characterized by too many unwanted features such as white layer formation, development of cracks that eventually cause material failure [6]. During cooling, the white layer on the machined surface is formed by re-solidifying the molten metal, which is not flushed away by the dielectric fluid. White layers are strong, brittle and usually associated with tensile stress, thus reducing the fatigue life of machined components, and also having negative effects on surface finishing [1]. The formation of cracks may be attributed to the presence of thermal and tensile stresses within the component being machined. When the electrode discharges bombard the sample surface during the machining process, thermal stress is produced. Tensile stress inside the sample is created because the dielectric does not fully sweep the material that melts during the machining process away from the machined surface. It is noticed that cracks are created when the tension in the surface exceeds the ultimate resistance of the material. This further leads to reduction in fatigue as well as corrosion resistance. In order to minimize probability of failures related to surface defects it would be better to emphasize on adequate understanding of the nature and degree of surface damage under different machining conditions. It is evident that setting the optimum machining parameters is essential to improve the quality of the EDM_{ed} product. A proper modelling technique, correlating the input process parameters with that of the EDM_{ed} job surface integrity will help to obtain optimal machining parameters to get machined surface as good as possible. Due to the complicated stochastic process mechanism of the EDM method, it is very difficult to compare the input parameters such as pulse duration and peak current through specific mathematical model focused on the device dynamics to the surface integrity over the length. Since the MCDM method focused on RSM-GRA-TLBO is a highly scalable modelling device with the potential to learn the mapping between input and output without having a previous connection between them, it may be a reasonable option for modelling such a random and complicated process when M2 die steel is being machined [2]. The present research emphasizes the creation of a soft computing model focused on an MCDM method based on RSM-GRA-TLBO to compare the higher-order effects of major electro-discharge machining (EDM) process parameters like pulse on-duration (Ton) and peak current (I_p) with different aspects of surface integrity such as material MRR, SR and WLT,

SURVEY ON FAKE ONLINE REVIEWS USING MACHINE LEARNING ALGORITHMS

P. Anusha, K Leela Prasad · Published 2020 · Computer Science

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Review Article

IMPORTANCE OF DATA SECURITY IN BUSINESS MANAGEMENT PROTECTION OF COMPANY AGAINST SECURITY THREATS

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Abstract:-

To run a business with success, knowledge security is crucial. It doesn't matter whether or not you're little startup or international conglomerate, knowledge Security will build or break a company. Yes, knowledge security essential for each enterprise, regardless of its size. During this digital world, businesses principally place confidence in knowledge storage and transactions to perform sure operations. Usage of knowledge has inflated business profitableness and potency. At an equivalent time, it additionally has potential security risks that would devastate a corporation. Companies square measure in control of the protection and confidentiality of its consumer knowledge and worker info. It's a tedious task that's changing into progressively troublesome as hackers return up with a sophisticated mechanism to evade safety and security measures

Keywords: Data security, Security Threats, Protection of Business Management

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INTRODUCTION

The importance of knowledge security is most effective factor for business management. Data security is significant for each business whose bottom line are going to be affected additional and therefore for those that lack the resources and information to resolve the difficulty once an information breach happens. Irrespective of the sort of knowledge breach, your company will definitely expertise severe consequences like time period and dearly-won legal fees. It's thus imperative that firms use knowledge security mechanisms and procedures to guard your knowledge against threats to guard your whole name. Digital structures area unit used every among the industrial enterprise world furthermore as in our non-public regular lives. There area unit varied digital systems and that they area unit used for all kinds of functions. The sole part that each one electronic structure has in commonplace is that the truth that they'll be won't to perform with data. A reliable digital system of any kind needs ok facts protection so as to perform in complete running order.

INVESTMENT IN KNOWLEDGE SECURITY

For some businesses, justifying value and pay is crucial - they have higher level buy-in so as to implement the correct safety measures.

1. Business Name:

The goal of all existing firms it to supply unsuspecting services to their shoppers. In return, customers trust your company with sensitive info with each purchase. Whilst, no business intends to hurt their shoppers, associate

degree unintentional or accidental knowledge leak might probably impact your business name. When a security breach happens, there's loads over cash at stake. Purloined knowledge may place your shoppers in danger and, as a consequence, the longer term of your business. Brand name takes years to achieve and solely minutes to destroy. It is very important to have business name for attracting customers in our company. The works in the business have to behave very politely for maintain the customers in the market and it will also help to promote good reviews of our business for public. The services are good for all and has to maintain with knowledge in crowd for marketing business products.

2. Machine-controlled larva attacks:

In recent years, the cyber intrusion method has been machine-controlled. And these machine-controlled cyber-attacks square measure perpetually being initiated while not the involvement of hacker. These machine-controlled larva attacks divert the eye of the protection team so as to achieve access to your systems.

3. Excess expenditures:


Businesses square measure de jure to blame for the thievery of data like worker information, money details and confidential consumer files. However, some businesses




STUDY OF DIFFERENT TYPES OF CUSTOMER EXPERIENCE COMPETENCIES TO DRIVE GROWTH OF BUSINESS ORGANIZATION

I. Kartini, M. Huda, +2 authors K. Shankar • Published 1 January 2020 • Business • Journal of critical reviews

As a major aspect of an activity to make the experience of customer stick, into the organization for customer experience integration it need a phased and organized methodology. Around the globe with scores of customers on the basis of working, the REAL world methodology is used. At "customer experience" when the operation and company become proficient the structure will "demystify" the end state and activities that should be able to recognize. Keywords customer experience; integration; REAL... Expand

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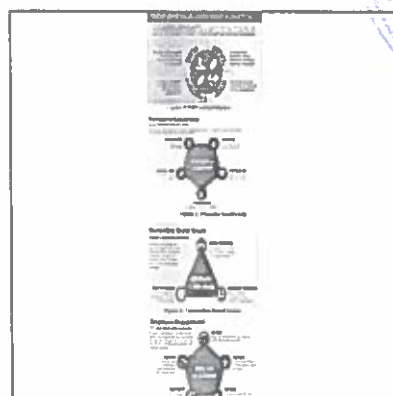
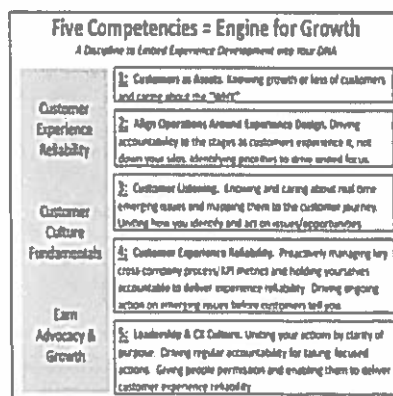
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Concrete with ceramic and granite waste as coarse aggregate

Karri Srinivas^{*}, Sathi Kranthi Vijaya, Kalla Jagadeeswari

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Compressive strength

Coarse aggregate

Fine aggregate

ABSTRACT

Foundation improvement over the world makes interest for development material. The issue emerging from consistent mechanical modern improvement is the transfer of waste material, the crude material of solid comprises of concrete, sand and pulverized total. Incomplete substitution or full substitution of this crude material by squander items may diminish the cost decreased the vitality utilization and furthermore lessen the natural contamination. The primary goal of the examinations is to empower the utilization of waste item as development material in practical way. A referral M-25 solid blend was utilized in the present examination. Absolutely 42 solid shapes have been threw, and tried their compressive quality. The physical and mechanical properties of the material utilized in concrete were explored. In this investigation the halfway swap has been completed for the coarse total by artistic and stone waste. An endeavor was made to halfway supplant the coarse total by clay and stone waste (6%, 12%, 18%, 24%, 30%, 36%), for every substitution. 6 referral solid blocks were threw for estimating 7 and 28 days compressive quality. The after effect of supplanted concrete is contrasted and the referral concrete.

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Selection and peer-review under responsibility of the scientific committee of the International Conference on Newer Trends and Innovation in Mechanical Engineering: Materials Science.

1. Introduction

Concrete is the most mainstream building material on the planet. In view of the worldwide use, concrete is set at second position after water. It is a generally utilized development material comprising of establishing material, fine total, coarse total and required amount of water. Where in the regular total is a basic part of cement. Regular total is getting to be costly because of shortage. Stone has assumed a critical job in human undertakings since most punctual written history and its utilization has developed since old time. The overall utilization of common total as coarse total in solid creation is high and a few creating nations have energized some interest in the supply of characteristic total keeping in mind the end goal to meet the expanding needs of infrastructural advancement lately. Specifically, the interest of common total is very high in creating nations attributable to fast infrastructural development. In the ongoing years, the development in modern creation and the subsequent increment in utilization have prompt quick decrease in accessible regular assets then again, a high volume of generation

has produced a lot obviously material which have unfriendly effect on the earth. The Civil Engineering development industry is to be a standout amongst the most potential customers of mineral recourses, accordingly creating a lot of strong waste as a bye item stones. Stones have maybe the noblest material from nature utilized by men for his masterful articulation. There are numerous regular stone ponders the earth offers us which we should spoil as extraordinary fortunes. India offers an assortment of a characteristic stone viz: Granite, Sandstone, Slates, Marbles, Quartzite, Black lime and Quarry dust marble stones in multi hues, shapes and size. Rock is amazing ground surface stone have been exceptional geo mechanical properties required for deck stones.

Marcio probed compacted pressure, water assimilation and modulus of flexibility of cement made with clay total. Smashed fired squares were utilized as coarse total in solid creation. Particular thickness of total was 2630 to 2310 kg/m³ for 0 to 100% substitution. Up to the substitution of 20%. Compression opposition and modulus of flexibility was proportional with traditional cement considered the conduct of quality and strength of earthenware squander based cement. Water ingestion of fired coarse total was higher than the characteristic total.

It very well may be expected that the additional water content prompts preferred inward relieving over the controlled cement.

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View article



Dr. S Ravi Kumar
M Sc (Physics)

A tentative crustal model of the central Indian Ocean South of Srilanka as inferred from gravity and magnetic data

Authors **S.Ravi Kumar M.Subrahmanyam**

Publication date 2020/1

Journal J.Ind.Geophys.Union

Volume 24

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Characteristic compressive strength of a geo polymer concrete

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Geo-polymer concrete
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NaOH & Na₂SiO₃

ABSTRACT

The principle issue the world confronting today is natural contamination. Because of industrialization, there is tremendous discharge of ozone harming substances (for example CO₂) into condition. We can diminish the impact of contamination on the earth by expanding the use of modern results. There comes the idea "GEO POLYMERS CONCERTE". In this entire cement content is swapped with engineering by products. We are replacing with Ground Granulated Blast-furnace Slag (GGBS), silica fumes & gypsum. Alkaline liquid like NaOH & Na₂SiO₃ are used for binding of materials. On an experimental basis we selected the proportions 1:1.5:3 and 1:1:2 and we are considering 9 M and 13 M of NaOH and 20% and 40% concentration of Na₂SiO₃.

This examination researches the trademark compressive quality of geopolymer concrete by throwing solid shapes and chambers and discovering the trademark compressive qualities at 28 days utilizing encompassing relieving. We are replacing entire cement content with GGBS (70%) and silica fumes (30%). From the outcomes we see that trademark compressive superiority of Geopolymer dense additions with the development in sodium silicate fixation and most extreme happened at 40% of Na₂SiO₃ and the announcement "compressive strength of cylinder is 0.8 times the compressive strength of cube" is not valid for geopolymer concrete. We also found that geo-polymerization process is sensitive with temperature.

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Selection and peer-review under responsibility of the scientific committee of the International Conference on Newer Trends and Innovation in Mechanical Engineering: Materials Science.

1. Introduction

The term geopolymer concrete is first begat by Davidovits in 1978 to speak to an expansive scope of materials described by chains or system of inorganic atoms. These are chains or system of mineral atoms connected with covalent bonds. These are delivered by polymeric response of basic arrangements with source materials of land birthplace or modern results. The polymerization technique includes a bigheartedly quick blend response under soluble complaint (i.e. NaOH, Na₂SiO₃) on Si-Al raw materials that carry about a three dimensional polymeric hawser and circle construction encompassing of Si-O-Al-O promises. Geopolymers likewise show comparative or fairly better designing properties thought about than customary Portland concrete Tables 1-9.

This paper compares the compressive asset of Geo polymer material having definite proportions of GGBS and silica fume under selected proportions 1:1.5:3 and 1:1:2 and considering 9 M and

13 M of NaOH and 20% and 40% concentration of Na₂SiO₃ Figs. 1-4.

2. Review of studies

In the wake of doing writing review we come to realize that, Water retention property of a geopolymer concrete is lesser than the ostensible cement, the compressive excellence and split springiness, flexural superiority of geopolymer material higher than the typical cement [1]. Slag as a piece of glide debris folio is viable to quicken situation period of geopolymer material in encompassing ailment [2]. In the event that mass proportion of sodium silicate to sodium hydroxide is 2.50, ideal compressive superiority of geo polymer material is watched [3]. Increment of GGBS in the glide debris based geopolymer blend decreases the usefulness and setting period [4]. Blends having antacid activator arrangement with sodium silicate to sodium hydroxide proportion of 2.5 demonstrated less droop and setting period than those with 1.5 and 2.0 [4]. Higher extent of sand, lower solid thickness and

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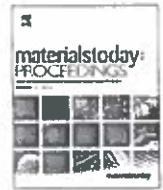
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Identification of landslide/Man-made structures along transboundary rivers

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Brahmaputra river

Sun koshi river

Remote sensing

ABSTRACT

Roughly 40 percent of the total populace lives in waterway and lake bowls that contain at least two nations, and maybe considerably more essentially, more than 90 percent lives in nations that share basins. It is important for a downstream country to have sufficient information on the changes in the upstream river basin to understand the water availability in future and to plan necessary measures. Natural disasters like landslides, man-made structures like construction of Dams, etc. will directly influence the water availability for the downstream countries. This study focuses on the obstructions to flow of water in the upstream areas/countries, with reference to landslides and man-made structures, based on remote sensing data. Brahmaputra river in Tibet area is chosen to identify man-made structure. The objective is to identify Landslide/Man-made structures and check for the temporal consistencies across the trans-boundary rivers using multi-temporal satellite data. Two methods, Spatial profiling and Buffering were employed to understand the changes along the river. Spatial profiling provides the changes along the river in a linear manner, whereas buffering method provides the river stretch-wise details of the area. The methods have been validated using IRS-AWiFS for Brahmaputra river and MODIS, Landsat-8 data of the Sun koshi river. It is concluded that satellite remote sensing is quite useful in detecting these changes in the upstream river areas, which are inaccessible for the down-stream countries.

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Selection and peer-review under responsibility of the scientific committee of the Emerging Trends in Materials Science, Technology and Engineering.

1. Introduction

The world's 263 trans-limit water basins spread about one portion of its territory surface, represent an expected 60% of world-wide freshwater stream and bolster around two billion individuals all inclusive. They connect populaces both inside and among nations, and make hydrological and financial interdependencies (United Nations-Water, 2008). Sharing water assets 'makes mind boggling strategic difficulties... [Often linking] states in lop-sided upstream/downstream connections, when pressures on the world's water supplies are expanding significantly' (Conca et al., 2006). The contending jobs in universal water basins—motors of provincial financial turn of events and basic destinations of biodiversity preservation make administration especially challenging. When bowls incorporate numerous sovereign expresses, a principal concern is the manner by which to plan and support establish-

ments to impartially share and secure water assets (Sneddon and Fox, 2006; Stinnett and Tir, 2009). Institutions additionally 'assume a significant job in relieving struggle and advancing participation by permitting asset clients to deal with quickly changing physical or political conditions' (Berardo and Gerlak, 2012). Since trans-limit waters display a wide scope of existing water asset issues, there is nobody size-fits-all way to deal with trans-limit bowl the executives (Schreiner et al., 2011; EauxPartagees, 2002). Halfway, these distinctions are reliant on different political, social, financial and biological drivers. These drivers give the setting against which the universal design can be evaluated and the earth inside which it should work. At the end of the day, the nature and qualities of the common water asset will drive its institutional structure (Pegram et al., 2009). As Dombrowsky (2007) unmistakably clarifies, this is actually what the upstream versus downstream relationship underlines, as it presents regular asymmetry in confronting the water asset. On account of this geological imbalance, taking different things equivalent, upstream nations have significantly less motivations to help out their downstream partner. Along these lines downstream nations must set to abuse their alluring

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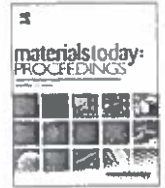
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Establishing the need for rural road development using QGIS and its estimation

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ABSTRACT

Advancement of provincial streets brings various financial advantages to the rustic regions which structure a solid base of the National economy and it is a ground-breaking instrument for the financial change of the towns. Attention to these advantages and their assessment assumes a significant job in giving every single climate street. The rapidly obvious advantages increment portability, builds efficiency, spares the expense of transportation of men and material and speed stream of products also, changes in the way of life. A portion of the noteworthy advantages and factors for their assessment are introduced in this paper using QGIS and Google Earth.

In this study, three connectivity's (Elluppi-Marripalem, Elluppi-Gullepalle, and Kollivanipalem-Cheepurupalli) are selected based on population, traffic flow, additional features such as industries, agricultural fields, artworks etc. Shortest routes for proposed connectivity's were found by collecting data through Google Earth, georeferencing and digitization are carried in QGIS. Estimation for the bituminous road is performed for the proposed route.

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Selection and peer-review under responsibility of the scientific committee of the International Conference on Newer Trends and Innovation in Mechanical Engineering: Materials Science.

1. Introduction

As the development of India lies mainly in the development of villages, the provision and connectivity of rustic streets brings different financial advantages to the provincial territories and everywhere to the nation overall which brings about shaping a solid spine for the Agro based economy. It has been intended to give all climate street association with all towns with a populace of 500 or above and streets are essential piece of the transportation framework. Street transport is snappier, increasingly advantageous and progressively adaptable it is especially useful for short separation travel for development of merchandise from anywhere and takes them to wherever they want to be dropped. India is a country of villages and it is only roads which can connect villages and towns. In this present GOOGLE EARTH and QGIS have been used to digitize the existing road scenario and analysis has been done corresponding to each of the alternative rural roads and estimation for the road networks is being carried out and a proposal for the

establishment of a new road network has been recommended Fig. 3.1.

2. Literature review

K. Ilayaraja et al [1] study is done with a plan to interface the accessible street arrange in Neyveli Township to distinguish most brief way. The most limited way between two focuses inside the street organize is resolved utilizing the apparatus briefest way in quantum GIS. This information base can be utilized numerous answers for grow new help zone nearest office and traffic control Table 4.1.

Kurre et al [2] Developed a Geographical Information System based road network connectivity in the present scenario of fastest growing urbanization. In Kukatpally area they conducted that the GIS Integration for road network analysis and connectivity helps in making proper decision and they focused on road network and connectivity analysis. Road network connectivity analysis have been performed by using network analyst tool on GIS platform (Fig. 3.2).

U.N. Report on Rural Development [3] Encircled in 2006 had seen that endeavors of the individuals was stressed to improve

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A REVIEW PAPER ON STABILIZATION OF SANDY SOIL BY USING CEMENT GROUTING TECHNIQUE


G. Kumar, M.K.Sumanth, Madimi samuel • Published 2020 • Geology

The grouting is one of most important Ground improvement technique which is used to improve strength of soil especially sandy soils by introducing Cohesion in the soil. Sandy soils have weak Bearing strength due to absence of Cohesion in the soil. In this technique, the grout is introduced in the Voids of the soil. In this paper, we will try to compare the Bearing strength of the soil by adding 2%, 4%, 6% cement content. The Bearing strength of the soil is generally assessed with the Plate Load... Expand

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D. Christodoulou, P. Lokkas, A. Droudakis, X. Spiliotis, D. Kaslteropoulou, N. Alamanis • Geology • Asian Journal of Engineering and Technology • 2021

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D. Christodoulou, P. Lokkas, I. Markou, A. Droudakis, I. Chouliarás, N. Alamanis •

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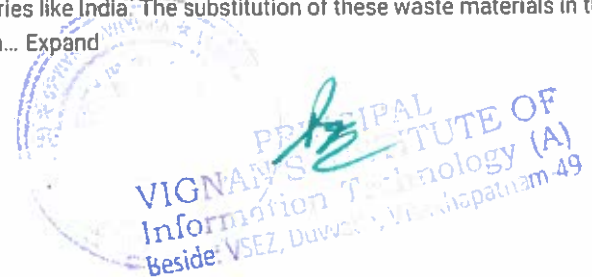
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Comparative Study on Soil Stabilization using Industrial by Products and Coconut Coir

S. Nitish, D. Sangita, A. Ramya, G. Sudheer kumar • Physics • Journal of Physics: Conference Series • 2021

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Geophysical Investigation Of Groundwater Potential In VIIT, Visakhapatnam, Andhra Pradesh- A Case Study

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Dr. G. Venkata Rao, S. S. S. Nitish, P. Shiva Kumar: Geophysical Investigation Of
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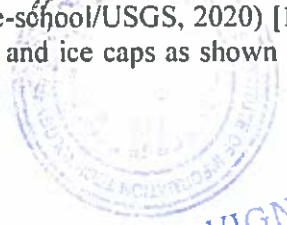
Keywords: Aquifer, Vertical Electrical soundings, Resistivity, Slope map, Well location,
Groundwater.

ABSTRACT

Knowing the ground's water potential is essential in the recent scenario of excessive usage of water resources due to rapid population increase. In this work a geophysical survey involving electrical resistivity methods has been carried out at Vignan's Institute Of Information Technology, Visakhapatnam to determine the soil profile and groundwater levels considering four points in the study area. The Schlumberger configuration method was used for data acquisition. The half currents electrode (2) used range from 1 to 100m. The depth sounding interpretation results were used to generate geo-electric sections from which the aquifer was delineated. The geo-electric section drawn from the results of the interpretation shows four subsurface layers which comprise topsoil, clayey soil, fractured rock, and hard rock. The fractured layers are constituted in all the locations referring aquifer availability in the area. Hence, from this investigation, it is recommended that boreholes can be sited in high conductivity zones in Vertical Electrical Sounding (VES) 1, 2, 3 and 4 as they contain probable aquifers. The depth of any borehole should be located between 19.9m and 33.7m to take advantage of the basement fractures.

1. Introduction

Water being the most abundant available liquid on Earth's surface, only about 2.5% (of 1.386 Billion km³) is Fresh water which is to be used by 759.43 cr people (water-science-school/USGS, 2020) [1]. Still 68.7 % of the Fresh water is trapped in glaciers and ice caps as shown in Fig. 1, as a result of which the



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Experimental analysis on modulus of elasticity of slag based concrete

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ABSTRACT

Based on present scenario construction industries adopt so many problems directly, the problem is mainly due to release of carbon dioxide in atmosphere, how to rectify this problem, researchers are doing research regarding this particular issue only, so many researchers are found that replacement of OPC as industrial waste gives the more eco-friendly. Industrial wastes like GGBS, Fly ash, etc. based on the laboratory work industrial waste like GGBS in concrete without any cement is getting the required strength after adding 3% lime in place of cement and that too with stone dust not with sand due to high silica content. This concrete is getting the target mean strength after 90 days of curing. At 50% replacement of sand with stone dust shows better results than other proportions. This concrete is not that much workable when compared with conventional concrete as silica content more in this. This concrete absorbs more water as it is full of waste material; this is the main reason for not getting required workability. Elastic behavior is also good for this concrete and that too more at 50% stone dust. Elastic behavior of this slag based concrete depends upon proportion of stone dust as FA in this concrete. Modulus of elasticity of this concrete decrease with decrease of stone dust content in the concrete.

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1. Introduction:

Generally we replace the concrete with industrial waste to reduce the cost of the construction and also to make proper use of the wastes obtained from different industries. Different industrial wastes such as GGBS, pulverized fly Ash, Silica fume, Stone dust obtained from coarse aggregate industry, crushed gravel fine, building material waste etc. [1].

Replacing of cement in concrete can be done by industrial waste supplies such as GGBS, pulverized fly ash, Silica fume etc. [1]. Out of these materials, GGBS be able to use as most common cement replace material because it resembles the strength when compared with cement. In marine areas, Portland slag cement (50% GGBS + 50% cement) because it can provide Corrosion resistance to the steel and attains required strength finally. If GGBS percentage is 70–80% then that cement is called as high slag cement. When compared with the cement, GGBS sets slowly because it has more silica content and less calcium oxide content than cement [2–5]. GGBS based concrete gets the target mean strength slowly than conventional concrete and it gets peak strength after 28 days unlike

conventional concrete [4]. GGBS is more corrosive resistant than cement due to aluminum chloride bonding is formed around the steel. This is because aluminum oxide is more in GGBS and this aluminum oxide readily reacts with chlorine and provides aluminum chloride protection around the steel which can resist the steel from corrosion. GGBS can also be used as partial replacement of sand in cement mortar [11].

Replacing materials for sand in concrete are mentioned as stone dust/rock fine obtained from aggregate crushing industry, crushed gravel fine, crushed building material waste etc. [8–10]. We can replace this sand/fine aggregate with these materials in the specified field. Stone dust/rock fine is the waste generated during crushing of coarse aggregates. Nearly 20% of waste is generated while crushing the aggregates. Sand can be replaced up to 50% with this rock flour/stone dust/quarry dust in cement concrete [6]. If we increase the percentage of stone dust, it changes the workability of concrete, but it cannot made any impact on strength of the concrete [6,7]. So, we cannot replace it completely because it changes the workability of concrete. Increasing of stone dust percentage can decrease the workability of concrete which is not favorable because this can raise the problem during placing the concrete. For GGBS concrete there is no codal provision for mix design, we have to design the mix proportions based on IS: 10262-2009 which

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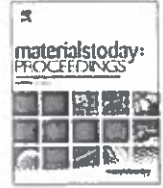
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Seismic behaviour of RCC buildings with and without floating columns

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ABSTRACT

The behaviour of concrete structures is more vulnerable with the effects of floating columns and seismic intensity. Past earthquake history of areas/regions shown that the presence of floating columns resulted in failure of structures and severe damaged. The present project work is to find the severity and effect of floating columns on the parameters of support reactions, axial forces, displacement, shear forces and twisting moments. In this study a six storey reinforced cement concrete structure is considered with and without floating piers and also the comparisons are made by considering the internal and external floating columns the behaviour of structures is analysed in the zones where earthquakes are prone to occur i.e., zone II, III, IV, and V as per [1], principles for earthquake resistant strategy of structures.
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1. Introduction

1.1. Types of irregularities

RCC structures are more helpless against the horizontal powers, for example, wind and seismic powers or quake powers, the impact of wind powers and seismic or tremor powers is heavy with the expansion in the stature of the constructions. According to seems to be: 1893–2002 earthquake or seismic harmless proposal standards, whole country is isolated to 4 seismic or earthquake zones II, III, IV, and V though region II is the most reduced power seismic zone and zone V is the most elevated seismic force region. Wind densities on a structure or structure relies upon the breeze speed in an area according to May be: 875-section 3 whole India is separated into various breeze regions dependent on speed of the wind varying from 33 m/s to 55 m/s and furthermore speed of breeze increments with tallness of the building.

Urban infrastructure had resulted in many irregular structures such as:

1. Load path irregularity.
2. Plan irregularity.
3. Vertical irregularity.
4. Mass irregularity.
5. Stiffness irregularity.

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1.2. Seismic behaviour of the irregular structures

Seismic conduct of the sporadic assemblies had demonstrated disappointment methods in previous tremor influenced locales/areas. Burden way abnormality is in circumstances where huge section free territory is essential for parking's, carports, business and engineering significance. The Load way inconsistency is regular in structures, for example, multi-useful structures were a few stories are utilized for business and private resolutions. The segments which are initiated from the establishment are named as non-skimming segments and the sections jump from the raised level and are upheld on radiates named as drifting segments.

1.3. Loads to be considered in analysis and design

1. Dead loads.
2. Live loads.
3. Breeze loads.
4. Seismic loads.

Review of literature:

Vijaya et al. [2] studied the behavior of concrete by partially replacing the cement with flyash, rice husk ash and silica fume. The concrete behaviour when replaced with ceramic and granite waste as coarse aggregate was investigated by Srinivas et al. [3]. Priyanka et al. [4] estimated and established the need for rural road development using QGIS. Padmakar et al. [5] studied about the individual compressive strength of a geo-polymer material. George

PalArch's Journal of Archaeology of Egypt / Egyptology

A Study On Land Use Changes In Southern Part Of Visakhapatnam City Due To Urbanization-A Case Study

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Keywords: Urbanization, Forest, GIS, Land use, Land cover, Runoff

ABSTRACT

With the increasing population the need of employment for few people and desire of few others to live in urban areas is increasing day by day. With this drastic increase in urbanization the use of land for various purposes is also changing since the last few years. Few parameters like vegetation cover, quantity of surface water body, forest area, the remaining barren land are major things affected by Urbanization. In this paper a study is made on changes occurred in these parameters in the southern part of Visakhapatnam city covering an area of 54.41sq.km using RS & GIS software by analyzing the satellite images of the years 2005, 2010 and 2015. Vegetative cover & Forest cover are found to be varying hugely from 2005 to 2015 due to rapid Urbanization in the city. The study is also focused on to estimation of the runoff depth by using the runoff coefficient method. The runoff depths are estimated for top three highest peak rainfall depths of the rain fall years from 1997 to 2019. It is found that the Surface run off in 2030 will be increased to 25 % of the discharge in 2015 indirectly affecting the ground water recharge.

1. Introduction

Out of $1.383 \times 10^9 \text{ km}^3$ water on earth, only 3 % is available as fresh water & out of which only 30.1% is present in the soil stratum as ground water as shown in Fig:1. But with the increasing demand, extraction of ground water is increasing day by day and infiltration rate is depleting by effecting ground water table's balance.

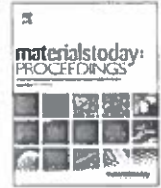


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Stiffness determination of alkali activated ground granulated blast furnace slag based geo-polymer concrete

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ABSTRACT

The mix of Geopolymer concrete (GPC) requires alkali solutions (AS) like Sodium hydroxide (SH), sodium silicate (SS). Manage the AS, by taking into reflection of unlike molarities of SH (NaOH) resembling 9 M, 14 M, and 19 M and unlike concentrations of SS (Na₂SiO₃) similar to 20%, 35%, and 50%. The alkali-solution of NaOH & Na₂SiO₃ kept separately for 1 h before to the combination of GPC. The result shows the mechanical properties (MP) such as compressive strength (CS), young modulus (E) and density of GPC. The specimens were toughened following 28 days of ambient curing (AC). The trial result shown that mix proportion of 1:1.5:3 mixes produces CS and E values.

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1. Introduction

1.1. General

Every day all are facing atmosphere contamination is high due to structure industries, in these mainly uses cement as a key manufactured good, due to cement, CO₂ heavily circulate in air, in order to prevent CO₂, industrial dissipate like Ground granulated blast furnace slag (GGBS), Flyash (FA) etc., were used as structural industry. In GPC, alkalis were used for the geo-polymerization. It is a combination of SH & SS or KOH, K₂SiO₃. These two combinations of alkalis were having equal properties. "Si" and "Al" reserves were more soluble in SH solution and therefore these were adopted in this study cubes and cylinders were cast with combining ratios of GGBS 80% & Silica fume (SF) 20% / fine aggregate/ Coarse aggregate 1:1.5:3 respectively. Mortar cubes of dissimilar molarities like 2 M, 4 M, 7 M, 9 M, 12 M, 14 M, 16 M, 19 M were tested in lab, based on watching, evaluate to all molarities 9 M, 14 M, & 19 M molarities were worn the whole time of this research Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5 Fig. 6 Fig. 7 Fig. 8 Fig. 9 Fig. 10 Fig. 11 Fig. 12 Fig. 13 Fig. 14 Fig. 15 Fig. 16 Fig. 17 Fig. 18 Fig. 19 Fig. 20 Fig. 21.

Throughout casting moment So many literature reviews advise to SH is self-control the heat for 24 h, but based on the trails,

strength does not varies for dissolves NaOH in one hour and 24 h. But throughout the mix time it transmits some heat, but minor safety measures were enough to manage the heat.

1.2. Geopolymer concrete

GPC is an ingenious and environmental association material affected by the exchange of common PC. GP information was first invented by J DEVIDOVITS in the 1978 and dissimilar it considering that alkali activated material. Suitable in the direction of this GP is micro porous, alumino-silicate mineral in the major use as cost-effective adsorbent and reagent. GP substance symphony is comparable to zeolite. Due to micro porous structure, concert of GP is temperature dependent Table 1 Table 2 Table 3 Table 4 Table 5 Table 6 Table 7 Table 8 Table 9 Table 10 Table 11.

Vijaya et al. [1] studied the behavior of concrete by partially replacing the cement with flyash, rice husk ash and silica fume. Srinivas et al. [2] investigated the behavior of concrete with ceramic and granite waste as coarse aggregate. Priyanka et al. [3] established the need for rural road development using QGIS and its estimation. Padmakar et al. [4] studied about the characteristic compressive strength of a geo-polymer concrete. George et al. [5] investigated the growth and photoluminescence study of nickel sulfate doped zinc tris-thiourea sulfate (ZTS) crystal. Padmakar et al. [6] designed a novel mix for rigid pavement by using recycled aggregate with the addition of admixture. Srinivas et al. [7] studied the effect of alkaline activators on strength properties of metakao-

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Behaviour of M60 grade concrete by partial replacement of cement with fly ash, rice husk ash and silica fume

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ABSTRACT

Presently a-days with a quick populace development and a more appeal for lodging and foundation, joined by late advancements in structural designing, for example, elevated structures and long-range spans, higher compressive quality cement was required. As the foremost crude material in concrete is concrete which radiates CO₂ during its creation some customary materials are utilized to decrease the utilization of concrete. In this examination, impacts of mineral admixtures on flexural quality and compressive quality of cements containing silica smolder (SF), fly debris (FA) and rice husk ash (RHA) were tentatively explored. The current work centers around M60 grade concrete with halfway substitution of concrete utilizing fly debris, rice husk debris and silica seethe (FA + RHA + SF = 30%) for three unique proportions i.e., FA:RHA:SF = 20:05:05, FA:RHA:SF = 18:06:06, FA:RHA:SF = 16:07:07. The real water concrete proportion utilized in blend structure for M60 grade concrete is 0.29 for 50 mm to 75 mm droop. The solid shapes and shafts are casted and tried for compressive quality and flexural quality separately at 7 years old days and 28 days.

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1. Introduction

With people improvement and an extension in housing need, which is joined by headway of basic planning, for instance, raised structures and long-length ranges, developed compressive quality material is required. Exactly once the compressive nature of material is advanced than 50 MPa, it is typically portrayed as top notch material (HSC). ACI describes HPC as "Strong social affair novel mixes of execution and consistency essentials that can't by and large be cultivated routinely using standard constituents and common mixing, putting and reestablishing practices". Regularly, concrete is made out of individual 4 sorts of constituents, which are solid, aquatic, fine sums and abrasive aggregates. At without a doubt the beginning stage, decreasing the water solid extent was the least requesting way to deal with show up at high compressive quality. Thusly, in HSC, the fifth fixative, an aquatic dipping expert or super plasticizer, is unavoidable. Regardless, a portion of the time the compressive quality isn't careful as noteworthy and

indispensable as certain various possessions, for instance, little penetrability, fine sturdiness and radiant convenience. Thusly, prevalent concrete (HPC) was proposed and for the most part learned at the completion of the main outstanding period. HPC is used in gigantic dimensions in view of its specific and budgetary good conditions. The principal objective of this examination is to take a gander at the Compressive quality and Flexural nature of M60 grade concrete by deficient additional of paste by using fly-ash (FA), silica seethe (SF) and rice husk trash (RHA) with different extents. Fig. 1, Fig. 2.

2. Basic properties of materials and its uses

Rice husk ash: Husk is gotten as a side-effect of sifting paddy. Indeed, about 20% of the dry mass of reaped paddy is husk. The debris is about 95% unadulterated silica and if appropriately arranged, it is in a functioning structure which carries on exceptionally like concrete. Silica seethe: Silica or consolidated silica smolder is a result of silicon metal and ferrosilicon combination creation. The material is an exceptionally fine powder with circular particles around multiple times littler in size than those of Portland

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COMPARATIVE EVALUATION OF ANSWERING HOLISTIC QUERIES IN WSN

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Abstract— Wireless sensor Systems or Networks(WSNs) are prominent for various monitoring applications. Users Request queries to sensors and obtain sensing data. The user may get noisy results due to crashes, or noise in the sensors. So as to build the unwavering quality of the inquiry results, ceaseless queries are normally utilized. Toward this effort, we merge on holistic queries continuously. Existing methods are essentially meant for non-encompassing queries. Non-holistic queries generally provide Single result; it is not so mean to analyze sensing data based on the single result. We recommend couple plans toward elucidating queries under different information evolving conditions. While sensor data information delicately, we offer one algorithm for getting the specific solutions to queries. When the information changing precipitation is raised, we recommend another way to deal with get the approximate outcomes. The responses illustrate that our proposal significantly decreases the traffic cost compared with earlier performances while keeping the proportionate accuracy. If sensors are stopped accidentally, then we offer Concept evolution idea to readdress them.

Keywords: Wireless, Sensor Networks, Concept evolution, holistic, Queries

I. INTRODUCTION

Sensor Networks are used in the vast variety of applications. To establish the stage of an expansive scope of uses identified with national security, observation, military, medicinal services, and Weather monitoring. Developing applications in sensor frameworks and system-wide IP traffic investigations present numerous technical difficulties. They have to distribute monitoring and continuous and consistent tracking of events. In order to collect and analyze sensing data, users issue various queries, such as selection query, aggregate queries (Max, Count, and Sum) and etc. All in all, total queries can be grouped into two distinct classes one is holistic another one is Non-holistic queries. SUM queries are crucial for many applications that need to deal with uncertain data. SUM queries are example of aggregate queries. Aggregate queries give more holistic view of the information by further processing the retrieved information. Aggregate queries deal with integers. In general, there is no efficient solution for the problem of assessing SUM queries [1]. R. Akbarinia [1] provides efficient solution for SUM queries.

Existing methodologies are mostly intended for non-holistic like Average. Based on this Average concept the sensing result deviates from the ground truth and may contain few anomalies. This issue readdressed by combining sensor readings from different hubs with the Median Concept. The Median query is impervious to noisy readings and subsequently can give vigorous and precise results.



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DECENTRALIZED RELOCATION AND TRANSMISSION RANGE ADJUSTMENT FOR COVERAGE HOLE RECOVERY IN WSN USING GAME THEORY

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Abstract—Coverage holes may occur if sensors are deployed without any conscious decision or at any time due to unpredicted event. The inception and occurrence in wireless sensor network will drastically diminish the network coverage performance and quality of service. The recovery of coverage hole is complex in remote areas and in distributed applications where sensors have limited information about other sensors activities. A numerous methods had been recommended to recover coverage hole in WSN. In this paper we propose a new approach to restore coverage hole in a decentralized method. The decision factor is that we designed a potential game between the sensors, where each mobile sensor in the network depends on only its neighboring nodes and takes coverage hole recovery action recursively with global focus.

Keywords—coverage hole; decentralized; potential game ;recovery.

Introduction

WSNs are constituted of multiple tiny sensor nodes provided with limited computational and communication capabilities. The sensor nodes are deployed either strategically by deciding the exact location of the sensor, by randomly or due to energy deficiency which may leads to coverage hole

Coverage in WSN is defined as a measure of how well the sensors are able to inspect region of concern. The occurrence of coverage hole could disturb the performance of network thereby decreasing the quality of service. The capability of a network to recover itself is important in many isolated or hostile, or fatal environments such as bush fire, earthquakes and inaccessible areas. In these areas it is difficult for the human to get through the area of the network.

Several techniques have been proposed with the aim of healing coverage holes in WSN. Most techniques had tried to heal only coverage holes without considering the high degree of coverage. A variety of network recovery and/or topology control schemes such as node replacement, power adjustment and clustering have been developed to reduce the undesirable effects of node failure.

In general, hybrid topology control requires centralized coordination to keep track of topology changes. However, precise temporal and geographical knowledge of the coverage holes are not are not always available due to the nature of CHs' random occurrences. Repeatedly adjusting the topology and measuring the coverage would be necessary, even in centralized approaches. Obtaining the optimal solution by any centralized algorithm would increase computational complexity and delay due to large numbers of inactive nodes.

OPINION MINING ON TWEETS BY USING MACHINE LEARNING CLASSIFICATION MODEL

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Abstract

Technology has paved its path rapidly in every field and it made our work easy. Getting the opinion from the textual data is one of the hot topics today. Opinion mining is nothing but recognizing the decisions from users whether it may be positive opinion, negative opinion or neutral about an entity in a user-generated text. This paper mainly focuses on opinion mining of twitter data which is useful to recognize the information in the tweets. Where tweets are extracted in the form of unstructured data using twitter API. Tweets are pre-processed using word n-gram and letter n-gram natural language processing techniques and required features are extracted. The support vector machine classifier is applied on the extracted features to categorization of the opinions. To increase the performance of opinion classification by including semantics in feature vectors. After applying the SVM classifier better performance metrics such as accuracy, sensitivity and specificity are achieved.

Keywords: Twitter data, opinion mining, natural language processing techniques, support vector machine, feature vector.

1. INTRODUCTION

Opinion mining is also known as sentiment analysis; people's sentiments are studied towards certain entities[1]. Internet is a very important resourceful place for sentiment information. Many researchers are working on the computerized techniques of analysis and extraction of a huge amount of user-generated text[2], which is available on social networking websites. Now a day there is a need for effective and efficient text mining tools and techniques is increasing due to the staggering amount of textual data. Sentiment analysis allows the people to know the product results in the market and analyze the advantages and disadvantages of that product[3]. Twitter is a part of social networking site every day millions of tweets are generated by the users and provide an interface to people to post their opinions and discuss their views across the world in the form of a tweet. Twitter is bringing about a large volume of opinion rich data in the form of tweets like status, updates, blog posts, comments and reviews[4, 5].



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DAN EFFICIENT DSDV ROUTING IN MOBILE NETWORKS THROUGH SYMMETRIC CRYPTOGRAPHIC METHOD

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ABSTRACT: Present day's security is a major challenging problem in wireless ad-hoc networks because in ad-hoc networks components (nodes) transforming from one location to another due to this the infrastructure of the network changes frequently. The changes in infrastructure may cause "routing modification attack" the attack on routing leads to disturbance the network functioning by communicating incorrect updates. On other side, dropping of data packets or data modification can be occur by data communication attacks, which will not affect the routing protocol. To avoid the problems some extensions are add to the basic DSDV (destination sequenced distance vector routing protocol) routing protocol for safe routing. The extensions include authentication means the validation (identification) of node is done and integrity means the message modification is not allowed. These features are provide by using HMAC (hashed message authentication code) function, which gives the information about the sender, receiver and intermediate nodes authentication and fast data validation and this protection. Obtained acceptable results by using network simulator tool (NS2) on considered performance parameters such as delay analysis, throughput, and packet deliver ratio, and packet drop. An average of packet drop and delay is decreases after applying the secured DSDV protocol and it increases the throughput and packet delivery ratio.

KEY WORDS: wireless ad-hoc networks, routing attacks, integrity, authentication, network simulator tool.

I. INTRODUCTION

Present day's increasing of mobility is important for users of computing. Therefore, users can exchange messages and maintain connectivity while roaming through a wide area. In some areas, the necessary support for the mobile computing is being provide by installing access points and base stations [1, 2]. Users can access this type of mobile connectivity from home, office or while on the road. The wireless mobile networks are collection of mobile devices or nodes that are using wireless communication with infrastructure less or without centralized authority such as base station in wireless LAN. In this type of networks the nodes are moving from one location to another in randomly, thus the infrastructure of the network change frequently [3]. That's why in mobile networks each and every node act as both router as well as host hence the networks are referred as multi-hop networks. Figure 1 shows an example of wireless ad hoc network and its communication technology.



A Prophet Model to Forecast Spread of Covid-19 Pandemic

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Abstract—Covid-19 pandemic shook the entire world with its brutality, and the spread has been still increasing every day, causing many nations to suffer severely. This paper presents a medical stance on research studies of COVID-19, wherein we estimated a time-series data-based statistical model using prophet to comprehend the trend of the recent pandemic in the coming future after June 24, 2020 by using data at a global level. The data refer to the number of daily confirmed cases officially for the period January 22, 2020, to June 30, 2020. The forecast generated by the models can then be used by Governments and healthcare departments of various countries to regulate the current scenario, thus trying to flatten the curve in various nations as we believe that there is limited time to do this. The Prophet model is easy to work on and can be fitted with ease. The inferences made using the model can be clearly understood without much effort. Furthermore, it tries to give an understanding of the past, present, and future trends by showing graphical forecasts and stats.

Keywords—COVID-19, Fbprophet, time series analysis, machine learning

I. INTRODUCTION

Coronaviruses are, in general, a family of viruses [1] that end up triggering sickness in both animals as well as humans. There are specific severe diseases that were brought on by coronaviruses earlier. A couple of them are Middle East Respiratory Syndrome (MERS)[2] and Severe Acute Respiratory Syndrome (SARS)[3]. COVID-19 is again a brutal illness disease triggered by the most lately identified coronavirus. The outbreak of this illness took Place in Wuhan, a city in China, in December 2019[4]. COVID-19 has now turned into a pandemic, thus affecting countless individuals around the globe. The signs of COVID-19 are body temperature, coughing, and fatigue.

According to the sources, the majority of people (about 80%) tend to recuperate from the disease without needing to take hospital treatment. Sources even claim that 1 out of every five individuals who meet the virus becomes seriously ill and develops issues like difficulty in breathing. Currently, governments are taking preventive measures such as social distancing, sanitization, carrying out lockdowns, etc. In India, there was no exponential growth observed in the initial state as compared to other countries due to stringent implementations of lockdown. However, now the cases have been increasing at a high rate, and the government is trying to carry out various approaches of safety while opening the lockdown in certain areas as things ultimately need to be like before to handle the Indian economic situation in this pandemic. While the government is doing its job, forecasts like this will be extremely beneficial to comprehend the future. Thus the government can make even more rigorous regulations to handle the issue.

For achieving the forecasts, we chose to work with time-series data-based statistical models, and the "Prophet" model[5] has shown us good results in predicting both short term and long term forecasts. The primary objective of the paper is to present one week(7days) ahead to two months (60 days) ahead forecasts for confirmed cases, recovered cases, and death cases. This paper presents the trends of 5 countries, including India, that are the US, Brazil, Italy, and the UK.

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Distance measures for colour similarity, Human perception methods for Image Matching, analysis and Retrieval

Mrs. **Cheekatla SwapnaPriya**, Dr. G Jose Moses ,Dr. K. Venkata Ramana

Abstract

Image processing is needed for major applications like improving pictorial information for better human perception and autonomous machine applications. In this regard the information is first converted into discrete and several actions are performed and different algorithms are applied to perform digital image processing. Color speaks more information regarding a picture than an black and white picture. the proposed methodology defined here is the color theory. Colour descriptors play a major role in image processing, analysis and retrieval systems. Colour descriptors are preferred due to their low complexity and compact representations. Here we compare colours with histogram comparison. Even though it is having so many disadvantages like sensitivity to quantization boundaries and need of colour codebook design with high dependence. It is also having drawback of representing image with few dominant colour. Here we represent an efficient algorithm for colour matching that models the features and working of human visual perception for capturing colour representation in an image. Here we present optimal methods for mapping sets of colour components representing images. Our approach leads to better match of similarity judgment on perceptual dimensions (human perception) has to be modeled along and simulations in the image colour composition.

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“BLOOD”: A DIGITAL EVIDENCE FINDING TIME OF DEATH WITH THE EVIDENCE OF BLOOD THROUGH DIGITAL IMAGE PROCESSING . JCR. 2020; 7(3): 1310-1321. doi:10.31838/jcr.07.03.208

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Region Based Image Retrieval using Watershed Segmentation with Discrete Wavelet Transform

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Abstract

Early image retrieval techniques were based on textual annotation of images. Annotating images manually is a cumbersome and expensive task for large image data sensitive and incomplete. Content based image retrieval, uses the visual contents of an image such as color, shape, texture, and spatial layout to represent and index the image. The (RBIR) system uses the Discrete Wavelet Transform (DWT) and a Watershed Segmentation algorithm to segment an image into regions. Though k-means clustering algorithm it provides only coarse image segmentation. Better retrieval results can be expected by employing a more sophisticated segmentation technique. For this purpose, a new Segmentation technique is developed. The Watershed Transform is a well established tool for the segmentation of images. However, it is often not effective for texture homogeneous. In order to properly segment such regions the concept of the Texture Gradient is introduced and is implemented using a Non Decimated Wavelet Packet Transform subsequently used to locate significant homogeneous textured or non textured regions. A marker driven Watershed Transform is then used to properly segment the image demonstrate the superiority of this technique over k-means clustering.

Keywords

Content Based Image Retrieval, K-Means Algorithm, Discrete Wavelet Transform, Region Based Image Retrieval.

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References

- [1]. Arthur, D., & Vassilvitskii, S. (2006). k-means++: The advantages of careful seeding. In Proceedings of the eighteenth annual ACM-SIAM symposium on Discrete algorithm
- [2]. Bartolini, I., Claccia, P., & Patella, M. (2000). Windsurf: A region-based image retrieval system. In Proceedings of the 10th International Workshop on Database & Expert S
- [3]. Eakins, J., & Graham, M. (1999). Content-based image retrieval (Report No. 39). JISC Technology Applications Programme.
- [4]. Gonzalez, R. C., & Woods, R. E. (2001). Digital image processing (2nd ed.). Upper Saddle River, New Jersey: Prentice Hall.
- [5]. Hill, P. R. (2002). Wavelet based texture analysis and segmentation for image retrieval and fusion (Doctoral Dissertation). University of Bristol, U.K.
- [6]. Jacobs, C. E., Finkelstein, A., & Salesin, D. H. (1995, September). Fast multi-resolution image querying. In Proceedings of the 22nd Annual Conference on Computer Graph 286). <https://doi.org/10.1145/218380.218454>
- [7]. Jain, A. K. (2010). Data clustering: 50 years beyond Kmeans. *Pattern Recognition Letters*, 31(8), 651-666. <https://doi.org/10.1016/j.patrec.2009.09.011>
- [8]. Zhang, Y. J. (1996). A survey on evaluation methods for image segmentation. *Pattern Recognition*, 29(8), 1335- 1346. [https://doi.org/10.1016/0031-3203\(95\)00169-7](https://doi.org/10.1016/0031-3203(95)00169-7)
- [9]. Zhao, W., Ma, H., & He, Q. (2009, December). Parallel kmeans clustering based on mapreduce. In IEEE International Conference on Cloud Computing (pp. 1-7). https://doi.org/10.1007/978-3-642-10665-1_71

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Multi Attack Intrusion Detection Tool in Mobile Adhoc Networks with Specialized Techniques

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Abstract

New methods are introduced within a single and multi-attack in MANET system to identify the different types of attacks such as DOS attacks and Sybil attacks which are also called as U2R attacks. It attempts to overcome the current IDS vulnerabilities and weaknesses. The proposed IDS combines a collection of rules engine technique which is used in intrusion detection system in the defined architecture, as well as a specification-based multilayer detection system. Attacks are identified using a single attack profile (behavioral) analysis and a distributed multi-attack trust, using a dynamic routing protocol called as AODV. The proposed technique does not belong to any of the current techniques of intrusion detection, since this technique with the group users and contains self-contained Rule based Detection system (RBDs), which can move freely from end to other end in node linking randomly in a network for analyzing and detecting malicious activity at each visiting node. In addition, the multi user activity can be specified based on engine rules which handles the protocol stack's network, and data link layers, here we implement an automated solution that can detect most security attacks that occur in MANETs.

Keywords: AODV, IDS, Rule Engine, RDB

Contribution from Author side

This paper aims to detect the intrusion detection system for single system and multi system in the proposed method we implement a rule engine called as RDB at the server side which evaluates the detection parameters of the data injection by the malicious nodes with the trusted values. The contribution can be summarized as follows:

- Dynamic routing protocol called as AODV is implemented for route discovery dynamically.



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Machine Learning Algorithms for Parkinson's Disease Detection

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Abstract

Machine learning now days plays a crucial role in real-time problem analysis and providing solutions with its popular algorithms. Nowadays, in the health care sector, machine learning algorithms are involved in detecting the health issues of patients. This paper elaborated detailed information about how the ML algorithms are detecting Parkinson's disease. Parkinson's sickness is caused by the interruption of the brain cells that generate an essence to permit synapses to speak with one another, called dopamine. The cells with the purpose of produce dopamine in the cerebrum are answerable for the control, adjustment and familiarity of developments. At the point when 60-80%of, these cells are missing, at that point adequate dopamine isn't delivered, and Parkinson's engine indications show up Here we used random forest and XGBoost algorithms to detect the disease XGBoost giving the best performance than the Random forest.

Keywords: Parkinson's disease, Random forest, XGBoost, Machine learning, Neural networks

1. Introduction

Parkinson's illness is brought about by the interruption of the synapses that bring into being a substance to permit synapses to speak through one another, named as dopamine. The cells with the purpose of produce dopamine in the cerebrum are liable for the control, adjustment and familiarity of developments. At the point when 60-80%of these cells are lost, at that point, enough dopamine isn't created, and Parkinson's engine side effects show up. It is felt that the malady starts numerous years before the engine (development related) indications and in this manner. Scientists are searching for approaches to perceive the non-engine side effects that show up from the get-go in the ailment as right on time as could reasonably be expected, subsequently stopping the movement of the ailment. Right now, learning-based conclusion of Parkinson's infection is displayed. The proposed finding technique comprises of highlight determination and characterization forms. Highlight significance and Recursive Feature eradication strategies were considered for include choice undertaking regression analysis and classifying techniques [1].

Parkinson's illness is a dynamic neurodegenerative issue that causes both engine and non-engine side effects. The engine indications of PD, which incorporate tremor, unbending nature, postural unsteadiness, and extreme slowness, are an immediate consequence of inadequate dopamine motioning because of the particular degeneration of dopamine creating neurons in the substantia nigra district of the midbrain. What's more. the more differing and

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Four-component rapid protocol with nickel oxide loaded on fluorapatite as a sustainable catalyst for the synthesis of novel imidazole analogs

Nagaraju Kerru, Lalitha Gummidi, Surya Narayana Maddila, **Kranthi Kumar Gangur**, Sreekantha B. Jonnalagadda

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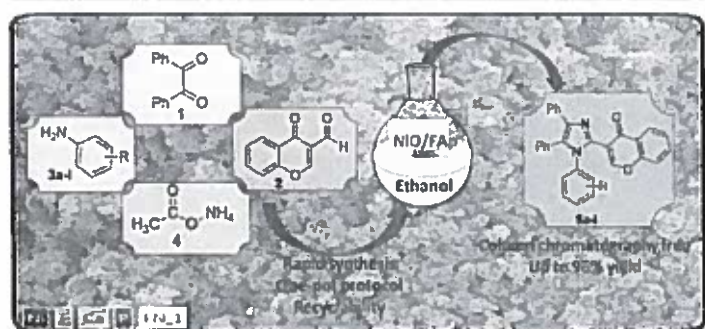
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Abstract

We report a facile one-pot protocol for the synthesis of twelve new tetrasubstituted imidazole-chromenone analogs by using NiO/FAp, as a reusable heterogeneous catalyst. The four-component one-pot condensation between the benzil, 4-oxo-4H-chromene-3-carbaldehyde, ammonium acetate and chosen aniline in ethanol at 50 °C, furnished the high yields (92–96%) of desired products within 35–40min. BET, SEM, TEM, EDX, FT-IR and XRD analysis were employed to characterize the synthesized catalyst materials. The spent catalyst was easily separated from reaction and reused six times without apparent loss of its catalytic efficacy. Rapid synthesis, recyclability of catalyst, swift reaction, green solvent, excellent yields and no need for column chromatography are the merits of the method.

Graphical abstract



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Machine Learning Algorithms for Parkinson's }

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ABSTRACT

Machine learning now days plays a crucial role in real-time problem analysis and providing solutions with its popular algorithms. Nowadays, in the health care sector, machine learning algorithms are involved in detecting the health issues of patients. This paper elaborated detailed information about how the ML algorithms are detecting Parkinson's disease. Parkinson's sickness is caused by the interruption of the brain cells that generate an essence to permit synapses to speak with one another, called dopamine. The cells with the purpose of produce dopamine in the cerebrum are answerable for the control, adjustment and familiarity of developments. At the point when 60-80%of, these cells are missing, at that point adequate dopamine isn't delivered, and Parkinson's engine indications show up Here we used random forest and XGBoost algorithms to detect the disease XGBoost giving the best performance than the Random forest.

KEYWORDS

Parkinson's disease, Random forest, XGBoost, Machine learning, Neural networks

REFERENCES

- [1] D. Ahmadi Rastegar, N. Ho, G.M. Halliday, and N. Dzamko, "Parkinson's progression prediction using machine learning and serum cytokines," NPJ Parkinsons Dis', (2019) DOI: 10.1038/s41531-019-0086-4([CrossRef](#))([Google Scholar](#))
- [2] W. Dong Yue and W. Taeg Keun, "An automatic diagnostic algorithm for parkinson's disease based on deep learning," Asia-Pacific Journal of Neural Networks and Its Applications, vol.2, no.2, pp.13-18, (2018) DOI: 10.21742/AJNNIA.2018.2.2.03([CrossRef](#))([Google Scholar](#))
- [3] P. Spyros, M. Georgia, and E. Albert, "Digital health revolution: Is it time for affordable remote monitoring for Parkinson's disease?" Frontiers in Neurology, vol.6, pp.34, (2015) DOI: 10.3389/fneur.2015.00034 ([CrossRef](#))([Google Scholar](#))
- [4] Types of classification algorithms in Machine Learning, <https://medium.com/@Mandysidana/machine-learning-types-of-classification-9497bd4f2e14>
- [5] S. Zehra, "Early diagnosis of Parkinson's disease using machine learning algorithms," Medical Hypotheses, vol.138, (2020)

A Study on Backpropagation in Artificial Neural Networks

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Abstract

Innovation assumes essential job nowadays in human life to limit the manual work. Execution and exactness with innovation will be high. The Backpropagation neural framework is multilayered, feedforward neural framework and is by a full edge the most extensively utilized. It is moreover seen as one of the least demanding and most wide systems used for managed planning of multilayered neural systems. Backpropagation works by approximating the non-direct association between the data and the yield by changing the weight regards inside. It can furthermore be summarized for the data that is rejected from the planning structures (perceptive limits).

Keywords: Backpropagation, ANN, Neuron, Nervous system, MLP, Feedforward networks

1. Introduction

A neural system is a gathering of associated I/O units where every association has a weight-related with its PC programs. It encourages you to develop prescient models from enormous databases. This model expands upon the human sensory system. It encourages you to lead picture understanding, human learning, speech recognition, and so on.

Backpropagation is the embodiment of neural net preparing. It is the technique for tweaking loads of a neural net dependent on the error value got in the past epoch (i.e., emphasis). Legitimate tuning of the loads permits you to lessen error value and to make the model dependable by expanding its speculation. Backpropagation is a compact structure for "backward propagation of errors." It is a standard technique for preparing artificial neural systems [1]. This technique assists with computing the inclination of a misfortune work regarding all the loads in the system. Backpropagation recipes from essential standards and genuine qualities. The neural system uses three information neurons, one shrouded layer with two neurons, and a yield layer with two neurons.

2. The literature on back propagation

During the feed forward computation neural networks, the result output value is not near to target or teacher output value. There is a difference between target, and actual feed forward values lead error value. The neural network model tries to give the best prediction output will good tolerance for that we have to minimize the error rate. This can be done with Backpropagation

Milestone of Backpropagation:

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Role of Machine Learning Concepts in Disease Prediction using Patient's Health History

Ch Sekhar, M Srinivasa Rao, K Venkata Rao, A S Keethi Nayani

Abstract

Medical service industry has aimed out to be a large market. The human services industry creates a lot of medicinal services knowledge from time to time that can utilize to retrieve data for predicting illness that can happen to a patient. In the future old disease history, data of a particular patient may be useful for the immediate cause of disease. Additionally, this territory needs improvement by using the enlightening information in medicinal services. To handle the enormous patient information to get hidden symptoms of diseases with regular programming not support well. Machine learning techniques are well suited to extract, analyze, predict and visualization of unknown data. In this paper, we consider the patient's data from the New York-Presbyterian Hospital. We trained the machine learning models, decision Tree, Naïve Bayes, Support Vector Machines to predict the kind of disease caused based on the symptoms. The approach used here implemented with the accuracy of 95.12% on the dataset of 150 diseases.

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Comparison Performance of Machine Learning Techniques for Intrusion Detection System: A Review

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Abstract

With the advancement of networking applications, the need for security to resolve malicious activity in the network has increased. Network intrusion detection has evolved networks, enabling it to detect unauthorized access to any network traffic. Through network intrusion systems, a warning message was attained to take necessary action to it is still the need for improvement in network intrusion system since the advancement in technology has created complexity over the detection system, making the current Intrusion Detection System (IDS) usually operates based on a trained network traffic pattern. It is defined in such a way that if there exist any variant on the traffic pattern solution to avoid network attacks, which can be achieved with IDS. Machine Learning (ML) algorithms play a key role in all sectors and domains. In this paper, we investigate learning algorithms such as Naive Bayes, Random Forest, SVM and XGBoost, and the performance of each algorithm concerning accuracy. This study helps in finding a solution with more accuracy. We used the standard intrusion dataset, i.e. NSL-KDD from Canadian Institute for Cyber Security.

Keywords

IDS, Intrusion, Machine Learning, SVM, Random Forest, XGBoost.

How To Cite This Article?

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References

- [1] Almseidin, M., Alzubi, M., Kovacs, S., & Alkasasbeh, M. (2017, September). Evaluation of machine learning algorithms for intrusion detection system. In 2017 IEEE 15th Systems and Informatics (SISY) (pp. 000277-000282). IEEE. <https://doi.org/10.1109/SISY.2017.8080566>
- [2] Anwar, S., Mohamad Zain, J., Zolkipli, M. F., Inayat, Z., Khan, S., Anthony, B., & Chang, V. (2017). From intrusion detection to an intrusion response system: Fundamental Algorithms, 10(2), 1-24.
- [3] Haq, N. F., Onik, A. R., Hriday, M. A. K., Rafni, M., Shah, F. M., & Farid, D. M. (2015). Application of machine learning approaches in intrusion detection system: A survey. *Research in Artificial Intelligence*, 4(3), 9-18.
- [4] He, H. (2018). AutoGluon vs. XGBoost – Will AutoML Replace Data Scientists? Towards Data Science. Retrieved from <https://towardsdatascience.com/autogluon-scientists-dc-1220010102>
- [5] Hindy, H., Brosset, D., Bayne, E., Seem, A., Tachtatzis, C., Atkinson, R., & Bellekens, X. (2018). A taxonomy and survey of intrusion detection system design techniques. *Access*, 4, 1-28. Retrieved from <https://arxiv.org/pdf/1806.03517.pdf>
- [6] Inayat, Z., Gani, A., Anuar, N. B., Khan, M. K., & Anwar, S. (2016). Intrusion response systems: Foundations, design, and challenges. *Journal of Network and Computer Applications*, 71, 1-13. <https://doi.org/10.1016/j.jnca.2015.12.006>
- [7] Lee, B., Amaresh, S., Green, C., & Engels, D. (2018). Comparative study of deep learning models for network intrusion detection. *SMU Data Science Review*, 1(1), 1-3.
- [8] NSL-KDD Data Set. (n.d.). University of New Brunswick. Retrieved from <https://www.unb.ca/ctc/datasets/nsf.html>
- [9] Patel, K. K., & Buddhadev, B. V. (2014). Machine learning based research for network intrusion detection: A state-of-the-art. *International Journal of Information and Network Security*, 3(1), 1-10.
- [10] Ren, J., Guo, J., Qian, W., Yuan, H., Hao, X., & Jingjing, H. (2019). Building an effective intrusion detection system by using hybrid data optimization based on machine learning. *Communication Networks*, 2019. <https://doi.org/10.1155/2019/7130868>

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Apache Hadoop for processing image files using Sequence file

Dr. E. Laxmi Lydia

Hima Bindu Gogineni

Ravva Ravi

G Sandhya

G. Jose Moses

Abstract

MapReduce as an advanced approach to process data in a distributed manner by taking advantage of the Hadoop framework which is an open-source for employing a tremendous volume of data. Data available in multimedia at excessive quantity in the progressive world allows new demand for processing and storage. Hadoop working as a distributed computational framework as open-source to all available data considers the processing of different forms of data (such as images) on a thriving organization of calculating nodes by providing essential associations. This will accept loads and plenty of images files and used to abolish replicate files from the feasible appropriate data. Compressed binary format data or encrypted binary format data, in particular, cannot be partitioned but can only be read as the distinguished consecutive flow of data. Practicing such files as input to a MapReduce task (Job), such that the process of single mapper allowing performing till the entire file gets processed, provoking a conceivable large performance potency accomplishment. The paper intends to present a suitable splittable format of data using SequenceFile and MD5 algorithm results to enhance the effectiveness of image processing.


Keywords: Sequence File, MapReduce, Distributed Processing, Image files, Hadoop

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Applicational Achievement of K-Means Algorithm among Apache Spark and Map Reduce

E. Laxmi Lydia

G Sandhya

Hima Bindu Gogineni

Guvvu Pavani Latha

N. Sharmili

Abstract

Tremendous data all around the globe have been an enthusiastic subject in computer science to explore and analyze that has raised the prominence of information. Blast incoming data through online networking, exploration in big organizations to get more access to intelligent research has become a great demand. MapReduce and its discrepancy have been very worthwhile in accomplishing enormous calibrated reports with robust applications on specialty groups. Therefore, a substantial quantity of the particular schemes is assembled over a non-cyclic intelligence flow and is not suitable to demonstrate for some other influential applications. An unbending architecture design was exclusively introduced using MapReduce that evaluates each job in a straightforward approach. Major steps in MapReduce such as a map, shuffle and reduce are allowed to change, synchronize and combine the outputs that are collected from every node cluster. Subsequently, to overwhelm the system to manual and recede, this paper proposes Apache Spark a manipulating form to split the tremendous information. The prime adversary for "successor to MapReduce" is Apache Spark. Similar to a broadly significant engine MapReduce, Spark has been designed to run distinct additional workloads and to perform in that space with a greatly accelerated speed adapted framework. In this paper conflict between these two systems altogether utilized with execution exploration by considering its information computation in a specified machine. Clustering process (K-Means) and asserting different criteria essentially, speed up the system, energy consumption of the system, scheduling delay of the job than the current systems.

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A REVIEW ON PREDICTED ROUTE SEARCH ON TRAFFIC TOPOLOGY

CH.SRINIVASA REDDY, VIIT

Abstract

Much research effort has been conducted to introduce intelligence into communication networks in order to enhance network performance. Communication networks, both wired and wireless, are ever-expanding as more devices are increasingly connected to the Internet. This survey introduces machine learning and the motivations behind it for creating cognitive networks. We then discuss machine learning and statistical techniques to predict future traffic and classify each into short-term or long-term applications. Furthermore, techniques are sub-categorized into their usability in Local or Wide Area Networks. This paper aims to consolidate and present an overview of existing techniques to stimulate further applications in real-world networks.

Keywords:

machine learning; optical networks; traffic prediction

1. Introduction

Machine learning can be generally described as computational methods using experience to improve performance or to make accurate predictions [1]. More specifically, machine learning techniques use data-driven methods to improve the performance of a system. One major area of application for machine learning can be found in optical networks. Optical networks, based on the emergence of fiber in transport networks, provide higher capacity and reduced costs for new applications such as Video on Demand, Content Delivery Networks, Internet of Things, and Cloud Computing. They have been developed continuously to offer more flexible technology, complex algorithms, and new technologies, such as Elastic Optical Networks (EONs) [2,3] or Space Division Multiplexing (SDM) [4]. However, recent trends, such as big data, Internet of Things (IoT), and 5G networks, demand not only high-capacity optical links but effective and programmable control over the network [5].

To support efficient networking with the rapidly evolving data transfers, big data features such as Velocity, Volume, Value, Variety, and Veracity should be accommodated by networks [6]. Large-scale backbone networks require great capacity and this capacity can be increased by adding additional resources, such as adding more spectrum (either by changing the technology or simply providing more fiber links). On the other hand, such an approach is not efficient either in terms of planning or cost-efficiency. Instead, one should ask the question of how we can use data analytics to make more efficient decisions. This leads us to the concept of cognitive networks [7]. A cognitive optical network can be defined as a transport network that uses a cognitive process to perceive current network conditions. It plans, decides, and acts on these conditions, learns from the historical data, and forecasts future events. The cognitive processes, which learn or make use of history to improve performance, apply various data analytics solutions typically utilizing machine learning techniques. In particular, data analytics (DA), machine learning (ML) and deep learning (DL), or, in general, Artificial Intelligence (AI) concepts are regarded as promising methodological areas to enable cognitive network data analysis, thus enabling, e.g., automatized network self-configuration and fault management.

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SURVEY ON ANOMALY DETECTION OF BIG DATA USING MACHINE LEARNING TECHNIQUES (2020)

ASWADHATI SIRISHA, B. PREMAMAYUDU
JCR. 2020: 2775-2784

Abstract

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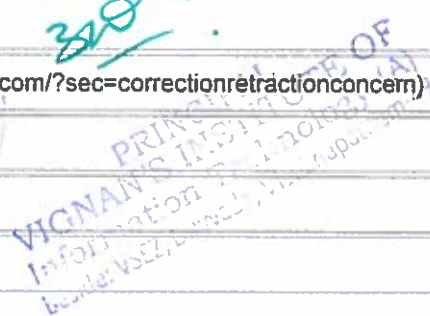
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Analysis of various security methods of virtual machines in cloud computing

Authors **G Jyothi**, Ch V Bhargavi, G Mani, Ch Kumari, E Laxmi Lydia

Publication date 2020/12/1

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Description Cloud computing can carry both software and hardware applications over the internet, based on the requirement of supplies and services. Hence it acts as the next generation network and computing easy of operations. Security is the at most significant also it influence the cloud computing. Virtualization is the imperative factor through cloud computing related to speed and accuracy. This research work concentrates on the safety of simulated system in virtualized situation. The security problems in virtual machines are summarized first, as well as the safety issues which are present in a virtual network. These are discussed and evaluated depend on the platform. At last, compare the simulation results with novel virtual network model and past methods. Virtualization is planned to monitor the interactions between human computations and computer design through physical machines for increasing the security measures ...

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Mani golakoti

A Real and Accurate Fake Product Detection System and Generate Original Reviews Using Data Mining Mechanism

Authors Ch V Bhargavi, G Mani, G Jyothi, K Venkat Rao, E Laxmi Lydia

Publication date 2020/12/1

Journal Journal of Computational and Theoretical Nanoscience

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Description Most of the people requires genuine information about the online product. Before spending their economy on particular product can analyze the various reviews in the website. In this scenario, they did not identify whether the product may be fake or genuine. In general, some reports in the websites are good, company technical people itself add these for making the product famous. These people belong to media and social organization teams, they give reviews with a good rating by their own firm. Online purchasers did not identify the fake product because of this falsification in the reviews of the website. In this research, the SVM classification mechanism has been used for detect the fake reviews by using IP address. This implementation helpful for users find out the correct review of online product. In this accuracy is improved by 98.79%. F1-Score increases by 10%.

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Comparitive Analysis between Two Security Models of NoSQL Database

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Abstract

Nowadays, organizations collect volumes of data for future analysis. Motivated by this amount of data and requirements of Web 2.0, a plethora of non-relational databases. However, several security features in relational databases (e.g., access control) have been left in non-relational management systems to be developed by the application, paper proposes two distinctive security model, based on the use of metadata, to provide access control for NoSQL graph-oriented database management system and on support the development of applications that use graph-oriented database in preserving the integrity of stored data and protect them from non-authorized access. A case concept, where the model has been instantiated and implemented for Neo4j database. A network management data security technique for executives based on NoSQL Organization based security systems. These are the two distinctive security models presented in this study.

Keywords

Database, Database Security, NoSQL, Security, Graph-Oriented Database Management System.

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References

- [1]. Albalawi, U. (2018, December). Countermeasure of statistical inference in database security. In 2018 IEEE International Conference on Big Data <https://doi.org/10.1109/BigData.2018.8622241>
- [2]. Ali, R., Liu, R., Awan, S. A., Qayoom, A., Mahmood, S., ur Rehman, S., & Umer, M. (2020, February). Improvisation the security and privacy in real time database system. *Information Science and Communication Technology (ICISCT)* (pp. 1-6). IEEE. <https://doi.org/10.1109/ICISCT49550.2020.9080027>
- [3]. Al-Maawali, Z. A., Noronha, H., & Kumar, P. U. (2019, January). Big data acquisition, preprocessing and analysis to develop and implement effective database system. *MEC International Conference on Big Data and Smart City (ICBDSC)* (pp. 1-4). IEEE. <https://doi.org/10.1109/ICBDSC.2019.8645583>
- [4]. Almutairi, A. H., & Alruwaili, A. H. (2012). Security in database systems, *Global Journal of Computer Science and Technology Network, Web & Security*, 12(17), 9-14.
- [5]. Bao, H., He, H., Liu, Z., & Liu, Z. (2019, September). Research on network privacy information security management method based on NoSQL database. In 2019, International Intelligent Systems (ICVRIS) (pp. 415-419). IEEE. <https://doi.org/10.1109/ICVRIS.2019.00107>
- [6]. Bertino, E., & Sandhu, R. (2005). Database security concepts, approaches, and challenges. *IEEE Transactions on Dependable and Secure Computing*, 2(1), 2-19. <https://doi.org/10.1109/TCDS.2005.10>
- [7]. Cinar, O., Guncer, R. H., & Yazici, A. (2016, December). Database security in private database clouds. In 2016, International Conference on Information Science and Security (ICISSEC) (pp. 1-4). IEEE. <https://doi.org/10.1109/ICISSEC.2016.7885847>
- [8]. Huijie, W. (2017, December). A security framework for the database auditing system. In 2017, 10th International Symposium on Computational Intelligence and Design (ISCID) (pp. 1-4). IEEE. <https://doi.org/10.1109/ISCID.2017.64>
- [9]. Kumar, B., & Al Hasani, M. H. S. (2016, October). Database security—Risks and control methods. In 2016, First IEEE International Conference on Computer Communication and Information Security (ICCCIS) (pp. 338-340). IEEE. <https://doi.org/10.1109/CCI.2016.7778937>
- [10]. Malik, M., & Patel, T. (2016). Database security attacks and control methods. *International Journal of Information Technology*, 6(1/2), 175-183.

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Review Molecules. 2020 Apr 20;25(8):1909. doi: 10.3390/molecules25081909

A Review on Recent Advances in Nitrogen-Containing Molecules and Their Biological Applications

Nagaraju Kerru ¹, Lalitha Gummidi ¹, Suresh Maddila ¹, **Kranthi Kumar Sangu** ¹,
Sreekantha B Jonnalagadda ¹

Affiliations

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Abstract

The analogs of nitrogen-based heterocycles occupy an exclusive position as a valuable source of therapeutic agents in medicinal chemistry. More than 75% of drugs approved by the FDA and currently available in the market are nitrogen-containing heterocyclic moieties. In the forthcoming decade, a much greater share of new nitrogen-based pharmaceuticals is anticipated. Many new nitrogen-based heterocycles have been designed. The number of novel *N*-heterocyclic moieties with significant physiological properties and promising applications in medicinal chemistry is ever-growing. In this review, we consolidate the recent advances on novel nitrogen-containing heterocycles and their distinct biological activities, reported over the past one year (2019 to early 2020). This review highlights the trends in the use of nitrogen-based moieties in drug design and the development of different potent and competent candidates against various diseases.

Keywords: biological activities; current trends; nitrogen-based heterocycles; structure-activity relationship.

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Analysis of Various Security Methods of Virtual Machines in Cloud Computing

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Authors: Jyothi, G. ¹; Bhargavi, Ch. V. ¹; Mani, G. ¹; Kumari, Ch. Usha ²; Lydia, E. Laxmi ¹;

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Abstract

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Cloud computing can carry both software and hardware applications over the internet, based on the requirement of supplies and services. Hence it acts as the next generation network and computing easy of operations. Security is the at most significant also it influence the cloud computing. Virtualization is the imperative factor through cloud computing related to speed and accuracy. This research work concentrates on the safety of simulated system in virtualized situation. The security problems in virtual machines are summarized first, as well as the safety issues which are present in a virtual network. These are discussed and evaluated depend on the platform. At last, compare the simulation results with novel virtual network model and past methods. Virtualization is planned to monitor the interactions between human computations and computer design through physical machines for increasing the security measures. The performance measures sensitivity 97.89%, efficiency 95.89%, F1 score 98.85% and accuracy 99.89% has been attained. These simulation results are outperforms the present technology compared to existed methods.

Keywords: Attack-Pattern Discovery; IoT; Mobile Ad-Hoc Networks; Packets; Routing; Sensitivity

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Detection of Tomato Plant Diseases using Convolution Neural Networks Approach

M Somasundar Rao, K Venkata Rao, B Aparna, Ch Sekhar, M Srinivasa Rao

Abstract

One of the severe issues in the horticulture division is plant illnesses. These plant maladies can be brought about by different factors, for example, infections, microscopic organisms, growth. The location of different sicknesses of plants is fundamental to forestall the harms that it makes plants in the end to the ranchers and horticulture biological system. This task intended to characterize and distinguish the plant maladies naturally. Picture handling is the primary procedure of the venture, which contains picture procurement, altering picture ROI. Here, python programming language, open cv library is utilized to control crude info picture. To prepare on CNN design and making an AI model that can foresee the sort of ailments, picture information is gathered from the validated online source. This venture is centred around gathering the information of sicknesses in tomato plants and train a model for ailments identification. YOLO object identification calculation is utilized to prepare a model and anticipate illnesses in the tomato plant



Review

A review on multi-component green synthesis of N-containing heterocycles using mixed oxides as heterogeneous catalysts

Sandeep V.H.S. Bhaskaruni, Suresh Maddila, Kranthi Kumar Gangu, Sreekantha B. Jonnalagadda  Show more  Outline |  Share  Cite<https://doi.org/10.1016/j.arabjc.2017.09.016> [Get rights and content](#) [Under a Creative Commons license](#) [open access](#)

Abstract

The use of mixed oxides is a well-appreciated approach in the fields of material science and synthesis, due to remarkable tunable surface properties such as acidic and basic characteristics, oxidation/reduction capabilities, and high agility of lattice oxygen, which makes them ideal choices as heterogeneous catalysts. The activity of the mixed oxides broadly relies on the nature of support and active material used and on the preparation method, calcination temperatures. Wide range of techniques for preparation of mixed oxide materials are adoptable, viz. sol-gel, co-precipitation, wet impregnation, microwave irradiation and hydrothermal methods. Use of mixed oxides as solid catalysts have gained popularity in many valued organic transformations, via alkylation, oxidation, condensation, dehydration, dehydrogenation, cycloaddition and isomerization. Application of mixed oxides in the area of green organic synthesis is a valuable strategy, which contributed significantly to the design of many novel heterocyclic scaffolds. The chemistry of N-heterocycle scaffolds, which generally possess five and six membered rings, is an interesting area for both synthetic and medicinal chemistry research constituting over 60% organics used in various arenas. The position and number of nitrogen atoms in the rings, distinguish them as pyrroles, pyrazoles, imidazoles, triazoles, pyridines and pyrimidines classes. In this review, we focus on the scope, importance and versatile applications of mixed metal oxides and their synergetic effects as heterogeneous catalysts in the synthesis of variety of N-heterocyclic derivatives. The scientific aspects of the mixed oxides as catalytic active materials to design efficient synthetic protocols for the organic transformations is also discussed.

Graphical abstract



COVID-19 Lockdown Devastated Livelihood - Safe Back to Normality with Smart Jacket Prototype

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Abstract

We see a worrying rise of COVID-19 cases globally, every day. Many countries imposed nationwide lockdown, ordering their people to stay home with nearly all services suspended. On other hand, due to this strict lockdown, COVID-19 poses severe economic challenges in securing the necessities of life, for the majority of the population. Many countries are now facing the threat of high inflation and increasing unemployment. Not only employees are suffering, but it is also very important to note that, more than 150 crore students, globally, are seriously affected by the sudden shutdown of educational institutions. UNESCO said, Undoubtedly Lockdown is one of the best weapons to stand against this pandemic by it costs an economic downturn. Presenting various thought-provoking facts that explain the dire need for human beings to get out of the home for survival, in this work, we proposed a smart wearable jacket (prototype), which is a technological combination of hardware and software that can be used to sense and respond, ensuring a safe physical distancing to restart the normal life, by safely being a part of unavoidable crowded situations like, during the utilization of public transportation facilities while commuting to workplace, educational institutes and various essential needs.

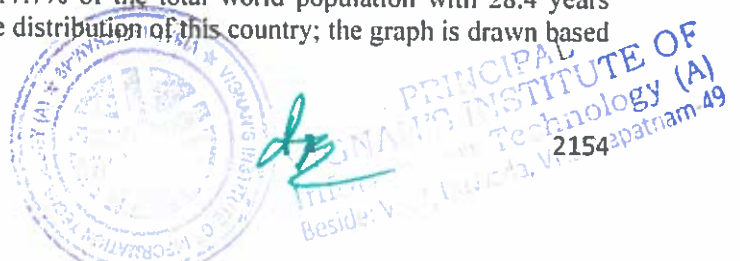
Keywords - COVID-19, Livelihood, Financial Disaster, Physical Distancing, Raspberry-Pi, Smart Jacket

1. Introduction

A total of 8,993,659 confirmed cases of COVID-19, including 469,587 deaths, reported to WHO globally, as of 23 June 2020 (as of 3:58 pm CEST); Americas - 4,437,946, Europe - 2,562,642, Eastern Mediterranean - 933,052, South-East Asia - 620,115, Africa - 232,215, Western Pacific - 206,948. This alarming situation changed the work-life of most of us, creating the impact being felt at multiple levels resulting in financial slowdown, personally and globally. Every part of the world is currently in some degree of lockdown. How far our basic livelihood survives lockdown? For this question, undoubtedly we can say that livelihood cannot survive the lockdown anymore. The situation arises, where we have to unlock ourselves and continue our normal life, more safely. Along with various measures we have already cooperated into our daily life, Social Distancing is the best tool to slow down the virus spread locally and globally.

1.1 Understanding the Global Problem with Case Study: INDIA

Elaborating most recent United Nations information as of Tuesday, June 23, 2020, the current population of India is 1,379,743,435, sharing 17.7% of the total world population with 28.4 years median age [1]. Figure 1 indicates the workforce distribution of this country; the graph is drawn based on the data from trusted sources [2].



Efficient and Short-Range Forecasting Model for COVID-19 Time Series Parameters - Daily Confirmed Cases, Deaths, Recoveries

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Abstract

Coronavirus cases maintain to sore up to 16.2 Million worldwide. Human beings globally had been pronounced to be intensified by the virus as almost 6.5 Lakh human beings have misplaced their lives. Researchers throughout the arena are making attempts to forecast the movement of this pandemic, using Artificial Intelligence (AI). In this paper, we are using Prophet Model to forecast the daily number of new cases, new deaths, and new recoveries that would be brought about by COVID-19 in India. A dataset of 179 (30 January 2020 to 24 July 2020) days is used for training the proposed model, and we forecasted values for the next 15 days, i.e. till 08 August 2020. The forecasted data obtained by the proposed method is accurate within a certain range and will be very beneficial in promoting the understanding of the spreading pattern of COVID-19 across the nation.

Keywords

COVID-19, India, Prophet, Machine Learning, Forecasting

I. Introduction

COVID-19 is highly infectious and it shows the impact on the respiratory system of the body, and it is caused due to a virus named coronavirus-2. The primary medium is droplets from our mouths, which use air to travel. Fever, tiredness, and dry cough are the most common symptoms identified in a COVID-19 infected person. Alongside these side effects, a patient additionally encounters breathing issues, general aches, and sore throat. Not many individuals have encountered diarrhea, queasiness, or a runny nose. People having high fever, consistent cough, or inconvenience in breathing should search for clinical help immediately. Human to human transmission is exponentially expanding the tallies of the contaminated individuals. The incubation period of COVID-19 is 1-14 days or considerably more [1]. At the point when the COVID-19 began to spread at a remarkable rate: preventive measures were worked out. These measures incorporated a total lockdown of the vigorously contaminated zones, prohibition on global travels, suspending schools, and other unimportant everyday exercises. The primary points of these measures were to confine relational contact, thinking about the infectious idea of the disease. As the incubation time of the infection is longer than different infections it is hard to break down the ideal time required watching a time limit. On the off chance that the time limit is lifted too early, the circumstance can get more dangerous. The individuals who get attacked by COVID-19 fall under three classifications. First in the class are the older, who are exceptionally susceptible to the infection. Measurements show that due to the feeble insusceptible framework the older surrender to the infection without any problem. The subsequent class is that of the youngsters. As the invulnerable frameworks of little youngsters are as yet being worked on, the kids are at higher hazard. The third order is that of the people who already have

Simple Forecasting Model for COVID-19 Cases in India - Multilevel Model Evaluation with R^2 , MSE, and MAE

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Abstract

All-inclusive. more than 20 million individuals have been infected with the COVID-19, with the most number of cases from the United States, trailed by Brazil and India. In perspective on this developing extent of the number of cases, forecasting models are exceptionally useful to be prepared to confront the pandemic circumstance. In this work, we have used an efficient time series based Machine Learning (ML) algorithm to forecast the COVID-19 cases in India. We have trained the system with data from 3 March 2020 to 7 August 2020 and we have forecasted the values from 8 August 2020 to 9 September 2020. We have seen that the total no. of cases will get doubled, i.e. reaches 40 Lakhs by the end of the forecasted period. Along with this forecast we have done the multi-level validation of our work using metrics, r-squared error (R^2), mean squared error (MSE), mean absolute error (MAE).

Keywords

COVID-19, Machine Learning (ML), Time Series, Forecasting, Model Evaluation

1. Introduction

Coronavirus disease (COVID-19) is an irresistible sickness brought about by a newfound coronavirus. A great many people who fall sick with COVID-19 will encounter symptoms ranging from gentle to moderate and may come out of this infection without special clinical attention. [1]. With a record single-day increment of 66,999 cases, India's COVID-19 count mounted to 23,96,637 today, i.e. August 13, 2020, while the number of patients who have recouped from the illness flooded to 16,95,982, pushing the recuperation rate to 70.77 percent in the nation, as per the Union health ministry [2]. The loss of life due to COVID-19 moved to 47,033 with 942 individuals surrendering to the infection over the most recent 24 hours, as per health ministry information refreshed at 13 August 8 am [3,4]. India crossed the 20-lakh mark as far as COVID-19 cases on August 7 [4].

WHO has recognized that the hard work and caring assistance gave by India's health laborers, including medical caretakers, have contributed a lot to the nation's noteworthy recovery rate [5]. In a progression of profiles, medical attendants depicted their difficulties in protecting their charges and themselves on a COVID-19 repatriation flight, in clinics and ICUs, giving antenatal consideration, older consideration and psychosocial support with regards to COVID-19, and, for one medical attendant, of being isolated for about fourteen days in the wake of thinking about patients who tried positive for the infection. Medical caretakers are being prepared to manage COVID-19 patients, guarantee that conventions are followed, use PPE appropriately, and practice hand cleanliness, in addition to other things. On other hand Trained Nurses Association of India, the biggest nursing



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Authors: Kiran, Pasam Prudvi ¹; Lydia, E. Laxmi ²;

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DOI: <https://doi.org/10.1166/jctn.2020.9416>

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- Suggestions

The way the COVID-19 circumstance has been advancing is very disturbing over the globe and apparently this battle will be a prolonged one. At least, till the mission for vaccination succeeds, we should figure out how to live safely alongside the infection. Along with all the safety measures we have recently incorporated into our daily lives, the provision of continuous availability of water in a water tank at households, schools, marketplaces, health care facilities, and all other public gathering places is essential for right time self-sanitization and for maintaining hygienic surroundings, which ensures protection from this pandemic. In this work, at first, we explore the important role of continuous water availability in this pandemic lifestyle. Secondly, we provide a brief survey of existing works which are closely related to proposed problem and thirdly, we have prepared an improved model overcoming the maximum limitations of surveyed models and also adding new feature of thought provoking GUI and applied it to a practical case study to demonstrate its need and effectiveness. Proposed model can be adopted immediately in a cost-effective manner, with applicability ranging from 1000 Litre plastic water tank serving a normal house hold to 1000000 Litre overhead water tank serving a small village or a big industry, promoting the continuous availability of water.

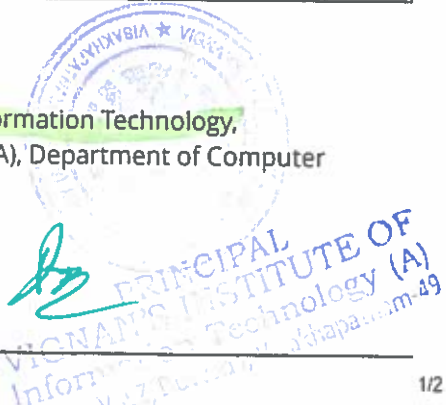
Keywords: COVID-19; GUI; IoT; Sanitation; Water Storage

Document Type: Research Article

Affiliations: 1: Department of Information Technology, Vignan's Institute of Information Technology, Visakhapatnam 530046, India 2: Vignan's Institute of Information Technology (A), Department of Computer Science and Engineering, Visakhapatnam 530046, Andhra Pradesh, India

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Abstract

References

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Supplementary Data

Suggestions

Most of the people requires genuine information about the online product. Before spending their economy on particular product can analyze the various reviews in the website. In this scenario, they did not identify whether the product may be fake or genuine. In general, some reports in the websites are good, company technical people itself add these for making the product famous. These people belong to media and social organization teams, they give reviews with a good rating by their own firm. Online purchasers did not identify the fake product because of this falsification in the reviews of the website. In this research, the SVM classification mechanism has been used for detect the fake reviews by using IP address. This implementation helpful for users find out the correct review of online product. In this accuracy is improved by 98.79%, F1-Score increases by 10%.

Keywords: Data Mining; Fake Reviews; Online Product; Real Time Marketing

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Affiliations: Vignan's Institute of Information Technology (A), Department of Information Technology, Visakhapatnam 530049, Andhra Pradesh, India

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Chatikam Raj Kumar , Uppe Nanaji, S. K. Sharma & M. Ramakrishna Murthy

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MANET represents its gadgets behavior in its network structure to relocate any movement of time without drawing near any topological approval in multilateral guidelines, which ensuing the runtime link status quo with different gadgets that belongs to the identical zone. The important problem with building the MANET is to keep runtime place facts of the participated gadgets for managing the routing facts to examine traffic.

MANET has the possibility to preserve one or more



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Distributed Authentication Security for IOT Using DASS and LOKI91

S. Sharma, B. Khuntia • Published 2019 • Computer Science

With the massive expansion of computing technology, the distributed architecture has received wide acceptance for their services. Moreover, IOT technology is used to develop smart applications such as smart security system, health care, smart medicals and smart houses. Due to the vibrant character of access and connectivity in IOT environment, there is mounting of risks and genesis of enormous threat to IOT environment. In proposed system, we have study the fundamental concept behind DASS... Expand

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Internet of Things (IoT): A verification framework



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Cloud Services for Remote Healthcare Monitoring System using the Internet of Things (IoT)

B. Prasad, Barzan Abdulazeez Idrees, E.Laxmi Lydia, T. Pavani, Victoria V. Efimova

Abstract

One of the most helpful ways to support society is to provide them better health care services using technology devices. There were tremendous growth and existence of various diseases in our society. Researchers and Scientists for the medical field are developing quick prevention as well as curing technological relief equipment using deep learning machines through Artificial Intelligence. Technological devices have become much more advanced in society by connecting various medical resources throughout the world using internet-connected devices (Internet of things). Currently used PHRs as electronic applications maintaining interoperable hospital information system. Patients are also provided with Context-based Security and Privacy for Healthcare IoT as Patient-centric information. This paper has identified some various intelligent processing techniques and wireless technologies of smart IoT applications in health care. Identified some specific areas like Web technologies for smart healthcare using Data Collector, IoT Gateway, Backend Facilitator, and Access Applications, Smart system Sleep Monitoring 3-level architecture by integrating IoT with Big Data tools on Cloud Computing which supports smart monitoring system, Healthcare in Monitoring Environments using LAN, WLAN and highly technological equipment over Cloud Computing for distributed processing over smart phones and Personal computers, Wearable IoT sensor network Devices known as WISE (Wearable IoT- cloud-based health monitoring system), Alarm System for health monitoring using IoT is an automatic appliance for alert system by maintaining health parameters like temperature, respiration, sugar levels, heart rate. It includes deep learning, machine-learning algorithms to extract higher information from the patient and analyze the information. By this patient medical data is recorded and analyzed on cloud services.

Kantowski - Sachs universe with dark energy fluid and massive scalar field

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Abstract: The present study is mainly concerned with a spatially homogeneous and anisotropic Kantowski-Sachs (KS) cosmological model with anisotropic dark energy (DE) fluid and massive scalar fluid. We solve the field equations using (i) the shear scalar is proportional to expansion scalar and (ii) a mathematical condition which is a consequence of power law between the scalar field and the average scale factor of the universe and corresponding DE model is presented. The cosmological parameters of the model are computed and discussed their dynamical aspects relevant to recent scenario of accelerated expansion of the universe.

Keywords: Kantowski-Sachs model, Dark energy fluid, Massive scalar field. Anisotropic model, Dark energy model

1. Introduction

A major breakthrough of the modern observational cosmology is the discovery of the accelerated expansion of the universe [1-2] and it is believed that this expansion is driven by a large negative pressure and positive density which violates the strong energy conditions. This is dubbed as 'dark energy' which remains a cosmological mystery even today. Due to this the universe gets a jerk and a transition occurs from decelerated phase to the present accelerated scenario[3]. Usually, the equation of state parameter (EoS) ω , the ratio of pressure to energy density describes the DE phenomena. It may be noted that ω lies in the range $\left(-1, -\frac{1}{3}\right)$. If $\omega = -1$, we have DE due to cosmological constant (Davis et al. [4]) while $\omega < -1$ represents the phantom DE case. Several DE models such as cosmological constant, quintessence, phantom, and quintom have been proposed to explain the late time acceleration of the universe.

IMPLEMENTED MODIFIED DIJKSTRA'S ALGORITHM TO FIND PROJECT
COMPLETION TIMES. ADILAKSHMI¹ AND N. RAVI SHANKAR

ABSTRACT. Longest path problems in network analysis provide an important functional method for planning and managing broad projects in the architecture, medical and different sectors. We may use PERT / CPM approaches to calculate the project completion time or the longest path in the diagram in question. Calculation of traditional Dijkstra's algorithm has been commonly used in the shortest path problems. Indeed, it's one of the most referenced. In this paper, traditional PERT compared to Modified Dijkstra's algorithm and calculate earliest and latest times.

1. INTRODUCTION

Lewis [2] describes project management as "the planning, scheduling and controlling of project activities to achieve project objectives-performances, cost and time for a given scope of work". A Project completion on time relies upon a right schedule strategy. There is a breakdown mechanism of the work technique in project management, which divides a project into smaller challenges. Every task has its own span of time; it needs necessary conditions and gives the outcome. Additionally, tasks are utilized in the project management approach, which is determined by the project scale, difficulty, and project duration. The approach must be an efficient and easy procedure. There are a few techniques that follow these

¹corresponding author

2020 Mathematics Subject Classification. 05C90, 68R10.

Key words and phrases. PERT, Dijkstra's algorithm, Modified Dijkstra's algorithm, Longest path, Earliest time, Latest time.



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Criticality Degree and Project Characteristics in a Fuzzy Project Network

S. Adilakshmi, K. Srinivasa Rao, N. Ravi Shankar

Abstract

The Critical Path Method (CPM) is an essential implement for design, organization, and set up large-scale projects in project networks. In this paper, a systematic method calculating Criticality and Project Characteristics in a Fuzzy project network with Triangular Fuzzy numbers as activity durations developed. Measuring Critical Degree (CD) and Project Characteristics of a Fuzzy project network is calculated using tabular representation with the help of Triangular Fuzzy numbers as activity times. An example application gives to illustration of the steps involved in solving the process presented. This implies that the proposed methodology is accurate and efficient in project network with Fuzzy activity times to find Criticality Degree and characteristics of the project such as the most recent times, latest times, total float, etc.

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A Novel Approach to Find Optimum Solution of a Fuzzy TP using Type-2 IFS

Indira Singuluri, N. Ravi Shankar

Abstract

The transportation limitations are not always accurate due to lack of particulars, background conditions, ambiguity in taking decisions etc. So, it is especially motivating to deal with TP's namely mathematical programming problems under unreliability. The most excellent mechanism to represent unreliability is fuzzy number. There are some methods to find optimum solution TP using type-2 IFN's i.e., capacity and demand are considered as real numbers and the transportation cost from origin to destination is considered as IFS as product cost per unit. A new approach to find optimum solution of a fuzzy TP of type-2 make use of ranking function is proposed. The same existing method is applied to proposed ranking function is relatively give the same result. This method directly provides optimum solution without finding IBFS of a IFTP of type-2. Finally, for the new ranking function illustrated Numerical example.

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A New Perspective for Solving Generalized Trapezoidal Intuitionistic Fuzzy Transportation Problems using Centroid of Centroids

Indira Singuluri, N. Ravi Shankar

 PDF

ABSTRACT

In today's daily life situations TP we frequently face the situation of unreliability in addition to unwillingness due to various unmanageable components. To handle with unreliability and unwillingness multiple researchers have recommended the intuitionistic fuzzy (IF) delineation for material. This paper proposes the approach used by generalized triangular intuitionistic fuzzy number to solve these transport problem, i.e. capacity and demand are considered as real numbers and charge of transport from origin to destination is considered as generalized triangular intuitionistic fuzzy numbers as charge of product per unit. The generalized triangular intuitionistic fuzzy numbers ranking function is used on the basis of IFN'S centroid of centroids. Through the traditional optimization process, we generate primary basic feasible solution and foremost solution. The numerical illustration shows efficacy of technique being suggested. A fresh technique is implemented to seek foremost solution using ranking function of a fuzzy TP of generalized triangular intuitionistic fuzzy number. Without finding a IBFS, this approach explicitly provides optimal solution for GTriFTP. Finally, for ranking function we apply a proposed GTriFTP method illustrated Numerical example.

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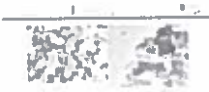


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Synthesis of Novel Furo[3,2-c]coumarin Derivatives through Multicomponent [4+1] Cycloaddition Reaction Using ZnO/FAP as a Sustainable Catalyst

Naga Lakshmi, K. C. Chaitanya Kumar, Suresh Kumar Ganga, Suresh Madala, and Sambasiva S. Jammalagadda*

Abstract: A novel and sustainable synthesis of a variety of novel furo[3,2-c]coumarin derivatives is reported. The synthesis involves multicomponent [4+1] cycloaddition reaction of furfural, malononitrile, and malononitrile with high yields. The reaction is carried out in a green solvent, water, at room temperature, and the catalyst is recycled and reused. The reaction is carried out in a green solvent, water, at room temperature, and the catalyst is recycled and reused. The reaction is carried out in a green solvent, water, at room temperature, and the catalyst is recycled and reused.

1. Introduction

The synthesis of novel furo[3,2-c]coumarin derivatives is a highly important reaction in the field of organic synthesis. The synthesis of novel furo[3,2-c]coumarin derivatives is a highly important reaction in the field of organic synthesis. The synthesis of novel furo[3,2-c]coumarin derivatives is a highly important reaction in the field of organic synthesis.

2. Results and Discussion

The synthesis of novel furo[3,2-c]coumarin derivatives is a highly important reaction in the field of organic synthesis. The synthesis of novel furo[3,2-c]coumarin derivatives is a highly important reaction in the field of organic synthesis. The synthesis of novel furo[3,2-c]coumarin derivatives is a highly important reaction in the field of organic synthesis.

2.1. Synthesis of novel furo[3,2-c]coumarin derivatives

The synthesis of novel furo[3,2-c]coumarin derivatives is a highly important reaction in the field of organic synthesis. The synthesis of novel furo[3,2-c]coumarin derivatives is a highly important reaction in the field of organic synthesis. The synthesis of novel furo[3,2-c]coumarin derivatives is a highly important reaction in the field of organic synthesis.

2.2. Synthesis of novel furo[3,2-c]coumarin derivatives

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3. Conclusion

The synthesis of novel furo[3,2-c]coumarin derivatives is a highly important reaction in the field of organic synthesis. The synthesis of novel furo[3,2-c]coumarin derivatives is a highly important reaction in the field of organic synthesis. The synthesis of novel furo[3,2-c]coumarin derivatives is a highly important reaction in the field of organic synthesis.

4. Experimental Section

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Single Server Queueing Model with Load Dependent Service Rate Having Compound Poisson Truncated Geometric Bulk Arrivals

K. Srinivasa Rao, Ramya Nemani

Abstract

This This paper addresses modeling of a single server queue administration in which the arrivals follows a compound Poisson geometric process with load dependent service. Here it is assumed that the arrivals are in bulk and can be characterized by truncated geometric distribution for the number of consumers in each arriving module. It is further presumed aforementioned assistance process accompany poisson distribution and the service rate is dependent on the content of the buffer connected to it. Using the difference differential equations, the probability generating function of the queue size distribution is derived. The system characteristics such as mean number of consumers in the queue, the utilization of the server, productive capacity service, middle stand by measure of consumer in queue, variance of consumers are derived explicitly. With sensitive analysis it is observed that bulk size distribution parameters have significant influence on system parameters. It is also observed that load dependent service rate has influence on system performance measures and this strategy can reduce congestion in queues. This model also includes a number of sooner models as particular cases.

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STATISTICAL APPLICATIONS OF CONFOUNDING TECHNIQUES IN FACTORIAL DESIGNS FOR BASIC SCIENCE AND ENGINEERING

Dr. N. Ramya¹, Dr. Daruri Venugopal²

1) Asso. Professor, Dept. of Mathematics, Vignan's Institute of Information Technology (Autonomous)
Visakhapatnam, India

2) Professor, Dept. of Mathematics, OPJS University, Churu, Rajasthan, India.

Abstract

In Statistical Confounding models Research Analysis we can able to understand the concept, importance and technique of confound of factorial experiments. Evaluation of 2^2 , 2^3 , 3^2 Frequency Distributions are more authentic in test Statistics. Determination of different confounding models through Testing of Hypothesis, Partial confounding, Total Confounding. Balanced partial confound will provided the importance of factorial designs in Basic Science and Engineering Curriculum. We can understand the confounding effects of factorial experiment. Partially obtained partial information regarding the effects confounded from the replicates in which the effects are confounded. Balanced partial confounding of an effect will influence the Test Statics in Confounding Designs. In Statistical Analysis of Confound ANOVA provides the technique to simplify the computation for Design of experiments. One way Classification, Design of Experiments, and Testing of Hypothesis where it involves confounding effective ness and Treatments are plays a vital role in its application process.

Key words: confounding, determination, factorial experiment, hypothesis, partial confounding, replicates.

I. INTRODUCTION

Confounding is a method for forming factorial experiment in blocks. The number of treatment combination increases rapidly as the number of factors or as the number of levels of each factor is increased. In a Design, if different effects are confounded in different replicates the design is known as partially confounded design.

Partial information may be desired on all effects in a factorial experiment with a large number of treatments, and at the same time a small block size may be desirable at the particular stage. A certain approach is followed where some effects are confounded one of the replicate, similarly second replicate and continues for further remaining replicates. The

Treatments means are always adjusted in partially confounded arrangements. The reason for adjustment is that estimates of effects are obtainable and hence the effect of the incomplete block is estimable, resulting in a more reliable estimate of the total treatments. The technique consists in splitting up of each replicate into a number of incomplete blocks containing an equal number of plots and allocating the treatment combinations to these block in a way that ensures the orthogonality of the contrast due to these block effects with the unconfounded treatment effects.

II. BASIC APPROACHES IN CONFOUNDING

It is Design of approach for arranging a factorial experiment in blocks. It consists small number of treatment combinations in one replicate. In general we can consider the two types of confounded models.

i) Partially confounded Design

ii) Totally confounded Design

If an effect is zero interest or very small interest this effect may be confounded with the incomplete block differences in all the replicates. This system of confounding is termed as total confounding (T.C.) If one effect is confounded with incomplete block differences in one or more replicates, another effect is confounded in one or more replicates and so on, then these effects are partially confounded with incomplete block defenses. In this Process some information is available on all treatment comparisons though some comparisons are more accurately determined, since the information on these are available from all the replicates. This system of confounding is termed as Partial confounding (P.C). if there exists 2 factors with some differences in same number of replicates in a certain model then the model is termed as Partially confounded design.

RESEARCH ARTICLE | JULY 28 2020

Structure of ordered semimodules

K. Suresh ; G. Shobalatha; K. Mrudula Devi Check for updates

+ Author & Article Information

AIP Conference Proceedings 2246, 020071 (2020)

<https://doi.org/10.1063/5.0014666>

In this paper the authors studied ordered algebraic structures (semimodules) which generalize rings, fields, modules and vector spaces as known from the theory of Algebra. Additionally these structures will be ordered and will satisfy monotonicity conditions similar to the case of ordered semigroups. In this paper we discuss the following results. (1) A linearly ordered integral domain R can be embedded in a linearly ordered field. (2) Let H be an ordered semimodule over R . (a) If H is a group then $x \leq y \Rightarrow x \square c \leq y \square c$ for all $x, y \in R$ and $c \in H$, implies $x \square d \geq y \square d$ for $d \in H$ and $d \leq e$ ($d \in H$). (b) If R is a ring then $a \leq b \Rightarrow r \square a \leq r \square b$ for all a, b and $r \in R$ implies $s \square a \geq s \square b$ for all $a, b \in H$ and $s \in R$. (c) If R is the positive cone of a linearly ordered ring R and H is the positive cone of a linearly ordered group H then the external composition can be continued (extended) in a unique way on $R \times H$ such that H is a linearly ordered module over R . In fact result (1) is useful in the study of Algebraic path problems [2].

Topics

Algebraic structures

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Structure Of Π -Regular Γ -Semigroups

Dr K.Mrudula Devi, Viit, Visakhapatnam, Andhra Pradesh

Abstract

Π -Regular semigroups were introduced by J.A.Green[3] in his paper "On the structures of semigroups". The concepts of Γ -Semigroups was introduced by Sen M.K. and N.K.Saha[4]. In this paper, some structure theorems of special class of regular Γ -Semigroups i.e Π -Regular Γ -Semigroups are presented. It is observed that every right regular Γ -Semigroup is right Π -Regular and every left (right) Π -Regular Γ -Semigroup is Π -Regular. It is also verified that the necessary and sufficient condition for a Γ -Semigroup is to be regular (g-regular), completely regular, completely Π -Regular, left and right Π -Regular.

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Dr. S Ravi Kumar
M.Sc (Physics)

Deformation studies in Central Indian Ocean, south of Srilanka from tentative crustal models inferred from Gravity and Magnetic data

Authors **S. Ravi Kumar*** M.Subrahmanyam

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ENHANCING ENGLISH SPEAKING SKILLS AMONG MBA RURAL AREA STUDENT FOR BETTER EMPLOYABILITY DURING THE COURSE (2020)

Ganesh Dandu, Gomatam Mohana Charyulu, V. Chandra Sekhara Rao, Syed Sadiq Hussain, M Latha
 JCR. 2020: 485-490

Abstract

Description

» PDF

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Evaluate English Language and Communication Skills (ELCS) of Engineering Students through Cell Phone Assisted: An empirical study

 Ganesh Dandu, Dr. Gomatam Mohana Charyulu, Dr. M Latha

Abstract

In current academic scenario engineering students are completely addicted by the android cell phones. These cell phones in the hands of each graduate have turned into an essential piece of their life, without these smart phones can't imagine their life. Teachers and parents restrict them conveying cell phone into the classrooms for the reason that such device cause interruptions and also are the way for deviation from focusing on the lecture. Here are some of possible outcomes to transform this interest of utilizing the cell phones into an enthusiasm for learning language and test their language abilities. One such probability is presenting them to various devices accessible for learning English through application based on tests. The present study is focused on evaluate the ELCS of engineering graduates using Cell phone Assisted Language Learning (CALL) tests which are online devices. These tests asses English language proficiency of engineering graduates and give them confidence to enhance their language. This paper revealed the advantages of assist cell phones for acquire the skill benefitted, firstly in developing the engineering graduate students' English Language and Communication Skills. Outcomes of online tests are explored in this article. The article ends with result of the assessments and with some suggestions for progress. Students must be exposed to available online tools and the most important one is to improve their ELCS.


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Influence of Surface Charge on the Functional Properties of Silica Nanoparticles and Cellular Toxicity

L.A. Avinash Chunduri¹, K. Madhusudhana Rao², Vijaya Sai K.^{3*} , Aditya D. Kurdekar³,
C. Prathibha³, Venkataramaniah Kamiseti^{1,3,*}

¹ Grey Scientific Laboratories, Visakhapatnam, A.P., India

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Abstract: The effect of silica nanoparticles with a different surface charge on the cell viability of Caco-2 and RAW 264.7 cell lines was studied. Silica nanoparticles with narrow size distribution were prepared by Stober's method. These silica nanoparticles surface charge was varied from highly positive to highly negative, were single functionalized by APTES and multi functionalized by cysteine for amine and carboxyl groups. All other properties of the nanoparticles were kept constant. The unfunctionalized nanoparticles were used as control. Fourier Transform Infrared spectroscopy (FTIR) confirmed the presence of amine and carboxyl groups present on the surface of silica nanoparticles. The zeta potential measurements confirmed the successful modification of surface charge of silica nanoparticles in water. SEM images showed that the negatively charged, positively charged, and unfunctionalized nanoparticles with similar size and shape. MTT assay results indicated that the toxicity of SiO₂ was cell type-dependent. CaCo-2 cells were highly resistant to nanoparticle treatment whereas RAW 264.7 (macrophages) predominantly charge dependent. The difference in toxicity could be attributed to the difference in the physiological function of each cell line. Among the three kinds of nanoparticles (negative, positive, and untreated), positively charged nanoparticles showed higher toxicity, which might be due to the attractive interaction between the negatively charged cell membrane and positively charged SiO₂ nanoparticles.

Keywords: SiO₂ nanoparticles; Surface charge; Cytotoxicity; Caco-2 cells; RAW cells; MTT assay.

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1. Introduction

Nanotechnology involves the creation and manipulation of materials at nanoscale levels to create products that exhibit novel properties. There are important applications of nanoscience in biology and biotechnology, and nanotechnology offers new tools to biologists [1-6]. Nevertheless, despite the increased interest in the development of nanoparticles, few studies address their potential toxicity. The rapidly developing field of nanotechnology is likely to become yet another source of human exposure to nanoparticles by different routes: inhalation, ingestion, dermal, and injection. Regulatory agencies, researchers, and health and environmental watchdogs are assessing how nanoscale materials affect human health and environment [7]. Similarly, the characteristic biokinetic behavior of nanoparticles is an attractive quality for promising applications in medicine. Such applications include diagnostic

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Research Article

Cytotoxicity Studies on Naproxen and Piroxicam Nanoformulations

Sandeep Patnaik¹, Madhusudhana Rao Kari², Vijay Sai Kollipara³, L.A. Avinash Chunduri⁴, Prathibha Chinnkoti³, Venkataramaniah Kamiseti^{3,4*}¹HCL Technologies, Chennai, T.N., India²Vignans Institute of Information Technology, Viskhapatnam, A.P., India³Laboratories for Nanoscience and Nanotechnology Research, Department of Physics, Sri Sathya Sai Institute of Higher Learning, Prasanthinilayam, A.P, India⁴Grey Scientific Laboratories, Vishakhapatnam, A.P., India

ABSTRACT

Caco-2 cells were used as *in vitro* models to assess the cell viability characteristics of the carriers Soluplus®, Gelucire 50/13 and PVP K25 and the nanoformulations of Naproxen and Piroxicam. The assessment of cell viability was done using the tetrazolium salt based MTT assay. Gelucire 50/13 and its NFs were observed to have slightly higher cytotoxicity than PVP and Soluplus® and their respective NFs. All the NFs were observed to follow the cytotoxicity trend of the polymers. Our results show that no significant decrease in cell viability was seen until 0.01% concentration of Gelucire 50/13 for 12-h exposure. The NFs as well as the polymers alone had no significant effect on the viability of Caco-2 cells below 0.01% concentrations. The intestine has a protective mucous layer, whereas the cell culture monolayers do not. The intestinal tissues also have more capacity to recover from trauma than the cultured cells. Hence the present NFs can be expected to show lesser cytotoxicity when subjected to *in vivo* studies.

Key words: Caco-2 cells, Cytotoxicity, Nanoformulations, Polymers, MTT assay

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1. INTRODUCTION

Nanotechnology involves the creation and manipulation of materials at nanoscale levels to create products that exhibit novel properties. There are important applications of nanoscience in biology and biotechnology, and nanotechnology offers new tools to biologists¹. Nevertheless, despite the increased interest in the development of nanoparticles, few studies address their potential toxicity. The rapidly developing field of nanotechnology is likely to become yet another source of human exposure to nanoparticles by different routes: inhalation, ingestion, dermal, and injection. Regulatory agencies, researchers, and health and environmental watchdogs are assessing how nanoscale materials affect human health and the environment². Similarly, the characteristic biokinetic behavior of nanoparticles is an attractive quality for promising applications in medicine. Such applications include diagnostic and therapeutic

devices and tools to investigate and understand molecular processes and structures in living cells. However, in stark contrast to the many efforts aimed at exploiting the desirable properties of nanoparticles for improving human health, attempts to evaluate potential undesirable effects when administered for medical purposes or after exposure during manufacture or processing for industrial applications are limited.

Nanotoxicology, an emerging discipline, is gaining increased attention. Nanotoxicology research will not only provide data for safety evaluation of engineered nanostructures and devices, but will also help to advance the field of nanomedicine by providing information about their undesirable properties and means to avoid them². The safety and toxicity of nanoparticles are of growing concern despite their significant scientific interest and promising potential in many applications. Their biological activity and biokinetics are dependent on many parameters: size, shape,

REVIEW ON ENANTIOSELECTIVE SYNTHESIS OF SPIROCOMPOUNDS BY VARIOUS ORGANOMETALLIC COMPOUNDS (2020)

Akella. Ramya Ssambhana, Yogeswara Rao, Bylapudi Varalakshmi
JCR. 2020: 1295-1302

Abstract

Description

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ASSESSMENT OF WASTE WATER CHARACTERIZATION IN FEW DOMESTIC SOURCES OF URBAN SETTLEMENTS IN GUNTUR (2020)

K.Maria Das, S Yogeswararao, T.Ch. Anil Kumar, D.Satyanarayana, M.V.Raju
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Abstract

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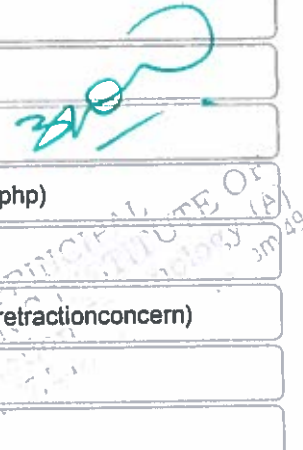
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Impact of symmetric and asymmetric fading channels on dual-hop AF relay system with SSK modulation

Hemanta Kumar Sahu¹ · P. R. Sahu¹

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Abstract

Performance of dual-hop amplify-and-forward relaying system is analyzed over asymmetrical Nakagami- m /Rician and symmetrical Nakagami- m /Nakagami- m fading channel with space shift keying (SSK) modulation. Expressions for average bit error probability (ABEP) of SSK modulation scheme over the line-of-sight and non-line of sight fading channels have been obtained. Analytical expressions for cumulative distribution function of the end-to-end signal-to-noise ratio are derived and a mathematical expression for the ABEP of SSK modulation is obtained for both in presence of the direct link between source to destination and in absence of the direct link. The derived expressions are given in terms of the Whittaker functions and Gamma functions. ABEP expressions are also derived which provide useful insights into the factors governing the performance of the considered system. The numerical results have been verified with Monte-Carlo simulation results.

Keywords SSK modulation · Mixed fading · MIMO communication · Nakagami- m fading · Rician fading

1 Introduction

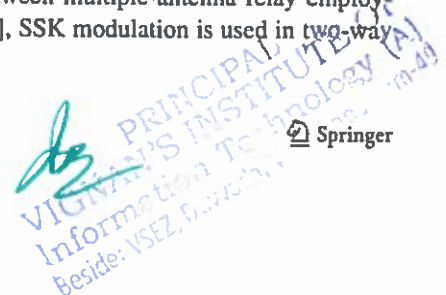
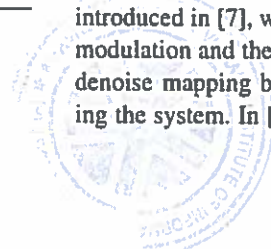
Cooperative communication is a promising technology that can deliver significant coverage, capacity and user experience benefits for the next generation wireless communication networks [1]. Contribution of multi-input-multi-output (MIMO) technique to enhance performance is also significant in terms of diversity gain and multiplexing. However, the use of multiple numbers of antennas at the transmitter and receiver in MIMO system may not be feasible due to cost, size, and hardware consideration in all the applications [2]. Thus, cooperative communication combined with MIMO, that is cooperative MIMO has been proposed for future wireless communication to overcome these limitations besides enhancing spectral efficiency and network coverage. Although cooperative communication has utilized the advantages of MIMO, the diversity gains and multiplexing from the MIMO communication are limited by inter-channel interference (ICI), inter-antenna

synchronization (IAS) and the more number of radio frequency (RF) chains. Recently proposed MIMO transmission schemes such as, spatial modulation (SM) [3] and space shift keying (SSK) [4] having low-complexity and spectral-efficient implementation that overcomes the drawbacks of MIMO including ICI and IAS.

SSK modulation with cooperative communication has the various benefit over direct-link transmission as far as connectivity, power saving, and channel capacity. Recently [5–10] analyzed cooperative communication with SSK modulation with a different configuration of cooperative arrangements. In [5], SSK modulation was first introduced with Dual-hop amplify-and-forward (AF) relaying, where a single relay communicates between the transmitter and receiver and the performance analysis describes about the bit error rate vs total signal to noise ratio (SNR). The same work in [6] was extended for multiple-relay system with an extra direct link from the source to the destination for achieving diversity where better performance is obtained. Two-way de noise-and-forward (DNF) relay system is introduced in [7], where all nodes are implemented by SSK modulation and the sources communicate by the process of denoise mapping between multiple-antenna relay employing the system. In [8], SSK modulation is used in two-way

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**Waves in Random and Complex Media** >
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Articles

Metamaterial-embedded dual wideband microstrip antenna for 2.4 GHz WLAN and 8.2 GHz ITU band applications

Sourav Roy   & Ujjal Chakraborty

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Sourav Roy^{a*}  & **Ujjal Chakraborty^a**^a Department of ECE, N.I.T. Silchar, Assam, IndiaCONTACT Sourav Roy sourav31roy@gmail.com

A compact dual-band antenna designed for operating in IEEE 802.11b/g WLAN (2.4–2.484 GHz) and ITU frequency bands (8.01–8.5 GHz) is presented in this communication. The antenna has two distinct resonant modes generated with the help of three U-shaped transmission lines and a modified ground plane. A periodic repeating pattern of metamaterial unit cells integrated on the same plane of the substrate has enhanced the antenna performances using improved loading method. The measured bandwidth of the metamaterial-embedded antenna is

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Clustering And Classification Of High Speed Dimensional Data Stream In Dynamic Feature Selection

G.Senthil Velan , K. Somasundaram , V. Cyril Raj

Abstract

Change can arise at the feature level and concept level within a data stream. At the changes in feature level may arise as fresh which emerge in the stream based on additional features, or when a feature's value and significance shifts as the stream developments. This change has not earned the same coverage as reform at concept-level. In addition, many of the proposed approaches for clustering streams depend on some type of distance and troublesome in high-dimensional data which

are similarity metric where the burden of dimensionality makes expanse capacities and any model of

"density" hard. In order to address the two problems we suggest as feature selection problem by merging them and presenting the issue and precisely a problem of dynamic selection of features. In this paper suggested a new approach to the clustering and classification of raw materials with high dimensional (or close to raw) data streams which can be implement through stream clustering algorithm and k-Nearest Neighbor (kNN) classifier. The proposed solution based on non-standard distances, which are determined by hashing and compression approaches which increases clustering

efficiency and decreases the processing time based on proposed dynamic function mask needed by the

underlying algorithm. Hence, the evaluation of proposed method with various exist method to

DETECTION OF AGRO BASED PRODUCTS QUALITY USING CONVOLUTIONAL NEURAL NETWORKS

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ABSTRACT: With the advancement in computer technology, image processing techniques are widely applied to food safety and quality. Images are the main source of data and information in agricultural science. The undertaking of organic product reviewing is in dispensable in the horticultural business in light of the fact that there is an incredible interest for great natural products in the market. Be that as it may, natural product reviewing by people is wasteful, work serious and inclined to mistake the mechanized reviewing framework speeds up the hour of preparing as well as limits blunders. In this paper we mainly focused to detect the quality of fruits through computer aided technologies like convolution neural networks. This was implemented to get the accurate and direct results where the user have no intention to waste the time and money. The system should be able to accurately detect and identify different kinds of fruits. Thus the developed system will help detect the fruit size and grade the fruits automatically. Grading is done based on the fruit size, shape and color by applying keras methods and algorithms to achieve better accuracy

KEYWORDS: cnn, keras ,ctta

I. INTRODUCTION:

In prior occasions natural products were arranged physically and it was a very tedious and relentless assignment. People arranged the natural products based on shape, size and shading. The time that had been taken by people to sort the organic products are exceptionally huge along these lines to lessen the time and to expand the exactness, of a programmed characterization of the natural products comes into a presence. This was implemented to get the accurate and direct results where the user has no intention to waste the time and money. To improve this human investigation and diminish time required for organic product arranging a propelled strategy. With this kind of strategy, it is simpler to examine the picture of the foods grown from the ground get some data as the outcome which will assist the client with classifying them in like manner. The computer visual system is better implementation for checking the quality of agri products[1].he highlights that can be separated from the picture of some natural product are its size, shape, shading and surface.

We have prepared the profound neural system that is fit for recognizing the natural products from the various pictures. That is a piece of progressive mind boggling venture that have been the objective of getting a classifier that can distinguish an a lot more cluster of items from the pictures. This fits the current pattern of organizations working in the expanded reality field. Picture handling is the strategy to play out some sort of actions on the picture, so as to get an improved picture or to extract some valuable information from it.

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A Content Management System for Online Shopping Carts Mardiana Andarwati, Petrus Loo, Dedy Lazuardi, E. Laxmi Lydia and Robbi Rahim**Abstract**

A content management system is an application that allows user to produce and modify digital content. A content management system provides a superb many add on inside the design of widgets and plugging to vary and extend its usefulness. Widgets square measure very little applications that user simply just can increase their Internet site to extend its usefulness whereas not having to travel into the code files to form changes. An example of An appliance may be an image carousel that allows user to feature sloppy footage with links to the front page of their Internet site. User may put together install a Google Analytics appliance on content management system dashboard to place their chase code, or terminology widgets to feature text or footage to areas on their page.Plugging or add-ons, add a specific feature to their Internet site. There are literally several gettable internet site plugging. Their content management system will go together with some pre-installed ones, e.g. promotional feeds; payment ways, shipping rate computation packages, Face book Connect authentication, and tax suppliers, etc.

Paper Details**Volume:** Volume 24**Issues:** Issue 1**Keywords:** Content Management System, Online Shopping Carts, Secure Transactions, E-Mail Order Confirmation**Year:** 2020**Month:** January**DOI:** 10.37200/IJPR/V24I1/PR200202 (<https://doi.org/10.37200/IJPR/V24I1/PR200202>)**Pages:** 976-985**Login / Register** (/register-login)

Article

BRAIN CONTROLLED ASSISTIVE APPLIANCES FOR PHYSICALLY CHALLENGED INDIVIDUALS USING BRAIN-COMPUTER INTERFACES

July 2020 · [Journal of Critical Reviews](#) 7(10):1798-1804

DOI: [10.31838/jcr.07.10.320](#)

Authors:



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Abstract

Brain-Computer Interface is an emerging automation field in terms of resource and application. Mind Machine Interface (MMI) also referred to as Brain-Computer Interfaces were device able to acquiring brain signals activity for Brain-Computer Application Interface. We have listed various application of BCI based mind assistive application for physically challenged people. This technology helps at medical areas of preventing minor issues and treatment of severe damage to human body parts. At the same, the main objectives of this study are further increased by including non-medical applications also. Hence many recent research has Targeting normal people can also explore the application usage of BCIs for input device and such investigation analysis for upcoming hands-free applications. Further exploration works in this discipline have empowered physically challenged individuals to control various activities which we are taking an activity get it done with help of BCI and would be helpful in numerous fields including the Artificial Intelligence and Computational Intelligence. In this article, we have studied the use of EEG computing signals to move any electronic or electrical mind assistive device which we utilize day by day activities. A physically challenged person can able to use controlled assistive any appliances with the help of Brain-Computer Interfaces technology with the assistance of EEG control usage.

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Definition and features of rural marketing strategies for encourage development in rural areas

Samad, A and Salima, R and Lydia, EL and Shankar, K
Vignans Institute of Information Technology

Abstract

Marketing services and goods to village generally referred as rural marketing. By adding the term agricultural marketing its scope can be extended, that focus the production flow from rural to urban areas. Leading to exchange between urban and rural market the rural marketing include distributing rural specific product, price, rural specific service, developing process and promotion. Rural marketing focus on achieving the goals of organization and satisfying the demand of customers. Due to recent increase in the rural incomes for a concentrated marketing the rural marketing offer a great scope. The rural marketing is a great part of any economy and it has a huge potential, this is why marketers recently realized a great opportunity in this developing concept.

Keywords:

machine learning; optical networks; traffic prediction

1. Introduction

To support efficient networking with the rapidly evolving data transfers, big data features such as Velocity, Volume, Value, Variety, and Veracity should be accommodated by networks [6]. Large-scale backbone networks require great capacity and this capacity can be increased by adding additional resources, such as adding more spectrum (either by changing the technology or simply providing more fiber links). On the other hand, such an approach is not efficient either in terms of planning or cost-efficiency. Instead, one should ask the question of how we can use data analytics to make more efficient decisions. This leads us to the concept of cognitive networks [7]. A cognitive optical network can be defined as a transport network that uses a cognitive process to perceive current network conditions. It plans, decides, and acts on these conditions, learns from the historical data, and forecasts future events. The cognitive processes, which learn or make use of history to improve performance, apply various data analytics solutions typically utilizing machine learning techniques. In particular, data analytics (DA), machine learning (ML) and deep learning (DL), or, in general, Artificial Intelligence (AI) concepts are regarded as promising methodological areas to enable cognitive network data analysis, thus enabling, e.g., automatized network self-configuration and fault management.

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Impact of Digital Marketing on the Growth of E-Service Sales

J. Junaidi, Agung Budiarmo, Febrianty, Ihdina Agustina and
E. Laxmi Lydia

Abstract--- Virtual advertising and promoting include a large impact on ecommerce business enterprises' ease. The speedy increase of clever phones and web deliver additional access in promoting and searching merchandise with comfort. Social e-trade: the utilization of social media, e-commerce generates immense revenue as a result of it facilitates to make your target market and the whole value. Modern-day advertising has been going through a radical modification. Speedy moving advertising tendencies supported the boom and innovation of the latest technologies additionally to movable conversation devices influencing the patron conduct significantly. Well-designed advertising arranges with distinctive virtual advertising and promoting gear is the demand in the incorporated advertising communication arrange for this school-friendly setting. high-speed web property brings about a variety of younger crowd in social media indicating vender got to be a lot of targeted and focused in virtual advertising tools for effective and inexperienced targeting of the marketplace as nicely to attain different structure

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A Study on Managing Customer Taking Advantages of Strict Customer Friendly Policies Using Fake Orders of Products

👤 Sri Rezeki, Victor Novianto, Juharsah, Nurhayati Haris and E. Laxmi Lydia

Abstract

In a particularly competitive distribution sector, a way to attain competitive advantage is to substantiate that the consumers unit of measurement happy. It is together an indisputable fact that having a good transport system could also be a pleasant issue to substantiate long haul services and growth the company. The study is to look out the role transportation play in achieving consumer satisfaction inside the non-public distribution sector a case study. Eventually, the results unit of measurement meant to boost this levels of consumer satisfaction with the form of transportation. Specifically it seeks to uncover the factors accounting for consumer satisfaction in transportation of merchandise. The study reviewed major theoretical area to develop a framework that implies that consumer satisfaction in Distribution Company would be Associate in nursing operator of service quality and consumer orientation of service staff. The info from the study planted staff and customers of xxxv people and was analyze through a descriptive statistics. The study reveals that the mode of transportation doesn't constantly reach swish delivery and satisfaction desired but adds value to the mode of transport. It together shows that delivery times to customers don't seem to be constantly meet. Most shoppers together agree that increase in client satisfaction together depends on transportation. Moreover, it's counsel on the premise of the proof that to understand consumer Satisfaction higher, the company ought to survey customers regarding every perceived service quality and therefore the perception regarding satisfaction. As further and extra enterprises notice the importance of adjusting into customer-centric in these days silos competitive economy they embrace client relationship management as a core business strategy. Consumer relationship management associate integration of information technology and relationship commerce, provides the infrastructure that facilitates long relationship building with customers at associate enterprise-wide level. However, not all firms square measure prosperous in their client relationship management implementations. Many embody an

AN EFFICIENT DSDV ROUTING IN MOBILE NETWORKS THROUGH SYMMETRIC CRYPTOGRAPHIC METHOD

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ABSTRACT: Present day's security is a major challenging problem in wireless ad-hoc networks because in ad-hoc networks components (nodes) transforming from one location to another due to this the infrastructure of the network changes frequently. The changes in infrastructure may cause "routing modification attack" the attack on routing leads to disturbance the network functioning by communicating incorrect updates. On other side, dropping of data packets or data modification can be occur by data communication attacks, which will not affect the routing protocol. To avoid the problems some extensions are add to the basic DSDV (destination sequenced distance vector routing protocol) routing protocol for safe routing. The extensions include authentication means the validation (identification) of node is done and integrity means the message modification is not allowed. These features are provide by using HMAC (hashed message authentication code) function, which gives the information about the sender, receiver and intermediate nodes authentication and fast data validation and this protection. Obtained acceptable results by using network simulator tool (NS2) on considered performance parameters such as delay analysis, throughput, and packet deliver ratio, and packet drop. An average of packet drop and delay is decreases after applying the secured DSDV protocol and it increases the throughput and packet delivery ratio.

KEY WORDS: wireless ad-hoc networks, routing attacks, integrity, authentication, network simulator tool.

I. INTRODUCTION

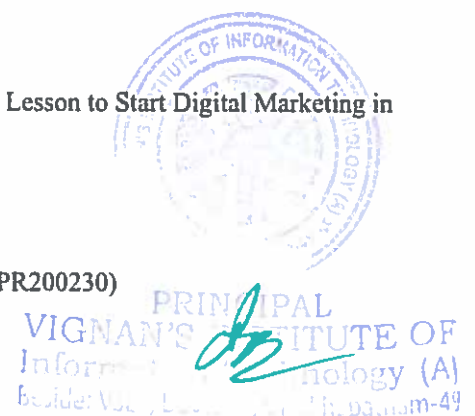
Present day's increasing of mobility is important for users of computing. Therefore, users can exchange messages and maintain connectivity while roaming through a wide area. In some areas, the necessary support for the mobile computing is being provide by installing access points and base stations [1, 2]. Users can access this type of mobile connectivity from home, office or while on the road. The wireless mobile networks are collection of mobile devices or nodes that are using wireless communication with infrastructure less or without centralized authority such as base station in wireless LAN. In this type of networks the nodes are moving from one location to another in randomly, thus the infrastructure of the network change frequently [3]. That's why in mobile networks each and every node act as both router as well as host hence the networks are referred as multi-hop networks. Figure 1 shows an example of wireless ad hoc network and its communication technology.

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Volume 24 - Issue 1

Use of Digital Marketing in Marketing of Data and Information Services in Asia Anwar Sanusi, Muhammad Roy Purwanto, Ismail Suardi Wekke, La Utu and E. Laxmi Lydia**Abstract**

Over the past three decades, merchandising has had to remain up and subsume leaps in technology and our reference to it ever since. Whereas the Sales Era witnessed the invention of the phone, swiftly followed by the rise of TV and also the merchandising Department Era. The trade evolution of the merchandising Company Era saw the most important modification among the history of marketing: the first commerce. However, what do these developments mean for the long term of merchandising? Our new Digital Skills report found that loads of selling professionals unit unsure of their future and believe that digital promoting area unit planning to be necessary to their organization over sequent two years. Despite this once marketers were asked relating to their roles in thirty years' time, sixty eight among the USA and sixty one among of the nice kingdom and European country believe that their current digital role can while not a ball, it's inconceivable to ascertain what the long term holds, but to seem forward, we wish to seem back. Here, we tend to look at the 3 major technological developments that have changed the strategy we tend to look at marketing: the net, large data and Smartphone and predict but, they will set the scene for the long term.

Paper Details**Volume:** Volume 24**Issues:** Issue 1**Keywords:** Starting with the Basics of Digital Marketing Analytics, Important Lesson to Start Digital Marketing in Asia, Role of Brand Communication in Digital Marketing**Year:** 2020**Month:** January**DOI:** 10.37200/IJPR/V24I1/PR200230 (<https://doi.org/10.37200/IJPR/V24I1/PR200230>)**Pages:** 1307-1316

A Classification Model using improved Hybrid Genetic Particle Swarm Optimization Algorithm based on Separability-Correlation Measure

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Article Info

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Abstract

The unpredictable growth in information and data samples has engendered a crucial requirement for novel methodologies and mechanisms which can intellectually and spontaneously transform the processed information into valuable data and knowledge. Thus, it is very essential to carefully obtain the relevant information from the huge databases. Numerous techniques are already available in literature for mining of data. However, the Evolutionary Algorithm and Swarm Intelligent Approaches are playing a vital role in the form of extracting the relevant features from the database and supporting in constructing the classification Models. So as to further highlight the importance of both the approaches, in this paper, a methodology is presented that hybridized the Genetic Algorithm and Particle Swarm optimization for feature Selection by means of Separability-Correlation Measure. The experiment results shows that the proposed novel Feature Selection approach has a high global convergence possibility and a scarce average convergence iterations

Article History

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Keywords: Classification, Genetic Algorithm, Particle Swarm Optimization, Hybrid approach, Separability-Correlation Measure, Feature Selection

I. INTRODUCTION

The growth in database applications and storage capabilities have enabled large amount of data to be accumulated over years. With the expansion of multimedia devices, Internet technologies, Storage capacities of computers, application of computers and day-to-day problems, the size of databases has increased voluminously. With large amount of available data it becomes a common and essential requirement to analyse databases frequently. Data mining is the procedure of determining expressive novel associations, designs and tendencies by moving through enormous amounts of information stored in data warehouses, employing pattern recognition procedures along with statistical and scientific approaches. It is an interdisciplinary area fetching together the

methodologies from machine learning, pattern recognition, statistics, data samples and visualization, to state the subject of data mining tasks from enormous sized databases[4].

Classification is an important stage of data mining which is possibly the most general data mining approach. Classification has become the emphasis of extensive investigation in the domain of application for which data samples with hundreds or thousands of attributes are accessible. The classification is required for an extensive variety of human action. At the widest, the time period can shield any perspective where certain judgment or prediction are performed on the source of presently accessible data and a classification procedure for recurrently constructing such decisions in novel circumstances [2]. Classification is an important process

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An Experimental Analysis on Impact of Digital Marketing on Business-To-Business Ecommerce

✎ Mokhamad Natsir, Yusaq Tomo Ardianto, Sutrisno K Djawa, E. Laxmi Lydia and Andino Maseleno

Abstract

The term e-commerce is worker to elucidate businesses that unit meted out over internet. E-commerce describes but, businesses unit conducted exploitation web applications like looking out carts, e-mails, web services, electronic data interchange, and instant messaging. The success and efficiency of e-commerce typically depends on digital commercialism, that uses program improvement as a result of the most tool to promote the merchandise and services inside the e-market. the only manner through that, Associate in Nursing e-business can prosper is building a competitive advantage through relevant people's-commerce has LED to a replacement arrange inside the sphere of business Associate in Nursing this idea is growing in no time and is type of delivery the quality business techniques to a end. E-commerce has provided not exclusively a quick because of exchange merchandise and services, but in addition provided the foremost economical and convenient manner of accomplishing the transactions involved throughout this trade's-commerce has today developed into AN large trade with companies making sums of money. as AN example, on-line retail inside the USA, that contains of business-to-consumer e-commerce, sports and fitness, on-line travel services, and media distribution, managed to come back up with over. In the USA alone, it's countable that quite of the whole population uses web daily for private and business functions.

Paper Details

Volume: Volume 24

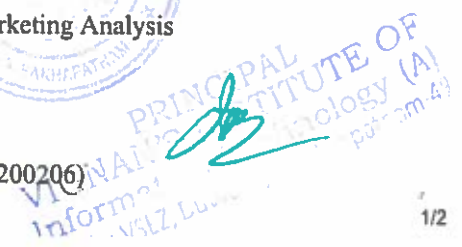
Issues: Issue 1

Keywords: Methodology, Business to Business Ecommerce Services, Digital Marketing Analysis

Year: 2020

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Retail Sector Impact an FDI

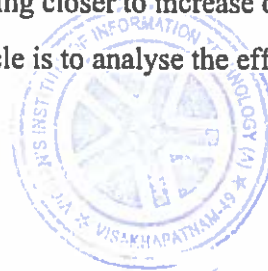
👤 Nina Oktarina, Hamsinah Baharuddin, E. Laxmi Lydia, Wahidah Hashim and Andino Maseleno

Abstract

Currently in republic of India we have a tendency to tend to unit accretive investment from foreign nations in a pair of ways one most of the type of foreign institutional traders and completely extraordinary a number of the form of foreign direct investment. Where we have a tendency to all hold close that there may be no physical investment in foreign direct investment is completely definitely distinctive. Foreign direct investment can withdraw their funding at any time depending upon the marketplace conditions. So here the Indian authorities approved a proposal of permitting 51 % foreign direct investment a few of the multi-brand selling in republic of republic of India and one hundred percentage foreign direct investment a few of the unmarried-logo selling, situation to Sure conditions. foreign direct investment in retail can offers large get entry to of foreign manufacturers to client but at that point various political events and folk started out a discussion whether or now not or no longer it have to be allowed in retail or not. A few human beings aforesaid that foreign direct investment many of the Retail area in republic of republic of India might also turn out to be in financial Boom and creation of latest employment opportunities Along with rural infrastructure improvement and a number of humans aforesaid that mass scale task loss will appear significantly. In manufacturing area with the entry of the big MNC like Wal-Mart, railroad % and like and many others. Among the gift scenario Indian retail zone is developing at a faster price with new employment possibilities. Despite the fact that, Indian marketplace is one of the biggest market most of the globe with high acquiring electricity and it's impractical for Indian authorities to shifting closer to increase of the financial system totally with domestic Investments. The goal of this article is to analyse the effect of this foreign direct investment coverage on Indian retail.

Paper Details

Volume: Volume 24



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Review Article

RESOURCE MANAGEMENT AND SUSTAINABLE DEVELOPMENT: GREAT "MACRO" THEMES OF THE CENTURY

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ABSTRACT

In the recent year, the high level production is done in the production companies, the resource development like food and fuel have lot many crises for some countries. It is necessary to manage all such typical crises of resource make some changes in the vulnerable countries. Due to this crises a money issue is occurred in the countries, the need a climate modification. These term is conjointly make a reason for implementation of economic and social council in World. These may result to a primary corporation system for a mention and promising commitment they have given for effective and quality based production, also highlight the problems regarding themselves. In this paper a proper discussion and counseling is done on the view of resource management and sustainable development in the years. It is really a typical theory for a countries development and survival in the World.

Keywords: Resource management, sustainable development, Socio-economic development.

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INTRODUCTION

As the year pass, the trade establishment and fund making properties development is a high level policy in for setup of productive and interactive discussion. These session conjointly make international money in the contest of temperature change for the threats in the world economy of Development Corporation. Among all of the institutions, participants emphasized the necessity for bigger coordination. The first corporation development sector was successful because of such changes. The international development cooperation has a most important term for effectiveness of policy review and a principle forum to ascertain Economic and Social Council towards international dialogue delivery. The all countries authorized persons in high level position are participated in the delegation to confirm the commitments of forum, they have mention as a complete resources management and there use in the economic development of countries. The discussion is carried out among all stage of persons as between directors of well-known sectors and the ministers for solution for issues. In this the combine discussion is done on the various topics like economy and social development with the complete positional persons along with trade stakeholders. These discussion of governments is useful for native place for their individual growth. This produces a best result international funds making schemes among them and others together for solving crises.

The main concept of a forum is to make effective agenda for creating a large effective agreement. This main message is for promoting advance as an aid in the areas

which are not doing aid and reducing state with certainty. Another message is for the property development results which is carried out by the implementation of the national capital Action Agenda, who says and give an example to a donor behavior by initiating real change towards property. These process is observe and carried out by secretary general towards the progress in international corporation development and a report is prepared for changes. In that report as they have mention that development of social things is not sufficient with the progress on international partnership for complete development.

The international goals of devilment can be achieve when corporation is supporting and provide a speedy progress towards an international development of conclusion development goals. These introduction is only useful when the discussion is done on the both side of sectors for convinced solution and progress in the development. The millions of goals achieve with this small sustainable change. The target completion is important for any success, some of donors are seem that they do not provide attention towards designing of achieving goals. It is observe that the non-development area increases a flow of conjointly sectors for a better survival in the market place to meet the targets with a source measures as a service of funds and financing to help committee, for adding a quality development in in International Corporation. The report of progress says that the government is decline all services of working in production and infrastructure, if they are not conjointly follow the flow of growing aid to the improvement. As there are many food crises in a countries



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Synergic deep learning model–based automated detection and classification of brain intracranial hemorrhage images in wearable networks

C. S. S. Anupama¹ · M. Sivaram² · E. Laxmi Lydia³ · Deepak Gupta⁴ · K. Shankar⁵

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Abstract

With an intention of improving healthcare performance, wearable technology products utilize several digital health sensors which are classically linked into sensor networks, including body-worn and ambient sensors. On the other hand, intracerebral hemorrhage (ICH) defines the injury of blood vessels in the brain regions, which is accountable for 10–15% of strokes. X-ray computed tomography (CT) scans are commonly employed to determine the position and size of the hemorrhages. Manual segmentation of the CT scans by planimetry using a radiologist is effective; however, it consumes more time. Therefore, this paper develops deep learning (DL)–based ICH diagnosis using GrabCut-based segmentation with synergic deep learning (SDL), named GC-SDL model. The proposed method make use of Gabor filtering for noise removal, thereby the image quality can be raised. In addition, GrabCut-based segmentation technique is applied to identify the diseased portions effectively in the image. To perform the feature extraction process, SDL model is utilized and finally, softmax (SM) layer is employed as a classifier. In order to investigate the performance of the GC-SDL model, an extensive set of experimentation takes place using a benchmark ICH dataset, and the results are examined under different evaluation metrics. The experimental outcome stated that the GC-SDL model has reached a higher sensitivity of 94.01%, specificity of 97.78%, precision of 95.79%, and accuracy of 95.73%.

Keywords Wearable sensors · Medical imaging · Deep learning · Segmentation · ICH · Classification

1 Introduction

With the introduction of wearable network technologies, smart healthcare is progressively increased. The real-time healthcare monitoring system needs to be safe, efficient, and patient-centered [1]. Wearable devices, like smartwatch and fitness band, become an important part of human lives. Generally, the wearables are worn incessantly through the day and thus offer a chance of gathering details related to the clients with the unprecedented stages. Additionally, several wearables are directly worn over the skin, and they may include sensors not available on common smartphones, which are useful for medical diagnosis [2]. In general, intracerebral hemorrhage (ICH) is defined as a neurological disease that results in blood vessel damage and infected tissue, and it is gradually extended to the brain ventricles. The application of X-ray and computed tomography (CT) scanning models are highly beneficial for physicians to define the features of the disease, and it helps to provide the treatment accordingly. When compared to X-ray, the CT scan method is applied extensively and prominently in order to diagnose the patients

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Investigations On Split Ring Resonator For GPR Antenna

T. Pavani, Ch. Padma vani, E. Laxmi Lidiya, A. Sampath Dakshina Murthy, Y. Rajasree Rao

Abstract

A new Microwave frequency range resonator for Ground Penetrating Radar (GPR) antenna is proposed in this paper. An approach based on the effects of the properties of meta material in Split Ring Resonators (SRRs) is used to design a SRR for GPR. The variation of effective permeability and permittivity of Split Ring Resonator (SRR) by change of configuration is reported in this research. Each left handed metamaterial (LHM) unit cell was constructed by modifying a square Split Ring Resonator (SRR), resulting in negative permeability and permittivity with a stable negative refractive index. Investigations are made on shift in resonant frequency due to change in dimensions of the ring, material of the ring.

 PDF

How to Cite

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Issue

Intelligent Resource Allocation and Capacity Computation through RaI Representation in the Cloud using Deep Learning Techniques

¹*Santhoshini Banda, ²A.Sampath Dakshina Murthy, ³Bommideni Revathi, ⁴Narasimham Challa

ABSTRACT—There are some situations where cloud computing is used to enhance the ability to the business goals, when and where to offload the resources like hardware, software, networks to cloud. So that one can offload the resources for processing as image based computation includes segmentation, deep learning for object recognition. Intelligent Agent algorithm also uses to collect performance metric in continuous period of time. Dynamic cloud allocation mechanism is implemented in processing of images parallelly. By adopting suitable mechanism one can automatically add images to cloud in real-time to know the number of available cloud instances. Queue length can be known with this. The proposed intelligent cloud resource procedure through RaI (Resources as Images) in the cloud improves overall response time, optimal utilization of cloud in order to access, allot and to determine the capacity of the resources.

Key words—RaI, Intelligent Agent algorithm, Machine learning, Cloud computing.

I. INTRODUCTION

Hardware and software both can be referred by cloud in overall internet. As day by day cloud service providers(CSP) is going to increase then the storage of data in cloud will also increase. So, consumers or customers face many difficulties like price to get cloud instance, migration between CSP's and dynamically changing resource offerings. To assist customers, Intelligent cloud resource allocation(ICRA) through Resources as Images (RaI) and AI agent is introduced for effective sharing of the resources. It discloses total information regarding present status of CSP resources, its offerings and evaluates it to get the best and suitable configuration based on customer need.. It is based on raw computer resources like storage , processing power, databases and other applications. CSP resources can be used by customers at a particular amount of time based on agreement than purchasing those resources completely. Customers can either increase or remove the information in the cloud according to their requirements [1-3]. Many researches are going on, to make use of effecient cloud when there is increasing of CSP. Techniques like Load Balancing aimed to reduce energy cost, dynamic pricing model to maximize revenue. User has to balance less cost with more appropriate quality services. As day by day number of CSP's are increasing, customers choosing CSP based on less cost, Proving the quality in services and position of the model in the market. Furthermore setting prices to the customer at a time, CSP's extend their service by

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AN EFFECTIVE CROSS BREED DATA SECURITY METHOD FOR INCURSION PERCEPTION SYSTEM USING MACHINE LEARNING TECHNIQUES AGAINST ADVANCED PERSISTENT THREATS

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Abstract: In the digital world Advanced Persistent Threat is one of the information security threat facing in the cloud computing and is the unique attack patterns targeted towards the cloud. Attackers adopt latest methods, technologies and mechanisms to escape from the regular security monitoring systems and keep all efforts to develop high level sophisticated malware. This paper proposes to design a specific procedure to survive for a long time and continue until the goal is reached by describing about the implementation of Cross-breed model for IDS using Machine Learning Techniques.

Key words: CRM, IP, CBIPS, NOIPS, IPS, Cloud computing

1. INTRODUCTION

Cloud is facing major security threats from different attacks, mostly the attacks are targeted at the profitable areas such as financial organizations, bank accounts, credit cards and online transactions [1-3]. To gain financially the intruder primary motive is to theft of bank account details or credit card information. The most important consideration is how speed and ease attacks are carried out to be based on cloud network security architecture and vulnerabilities. Cloud Auditor audits for the effective security measures to the data. Intruders are coming up with different attacking methods and tools to hack the information. Advanced Persistent Attack on system can be identified by the forensic analysis; the changes in cloud server are observed and identified [4-6]. As cloud computing had features of a distributed computing system, data may be in transit or stored. It makes itself as a stealth that kills itself to regenerate or hides to avoid detection. It executes malware to fulfill the objective and takes additional programs/tools/malware support in case of requirement and creates a backdoor for future intrusions. APT attacker aims to gain access, sustains to foothold for a long period of time and retrieves or modifies data from target systems. APTs can be stealth by itself to protect from traditional security monitoring system, they are designed to escape from traditional Intrusion detection methods and security event-identity and monitoring systems. It uses social engineering methods, to gather the intellectual data, using spear-phishing mechanisms targets users, by downloading initial-stage malware. Later, it generates a grip on cloud environment, initiates and executes the malware [7]. Then APT involves remote commands to be implemented as per attacker's aims and create a remote access, it even creates a backdoor, so that it can hide from regular monitoring system, it can destroy itself and regenerate whenever it finds requirement, these are highly organized and well-resourced attacks, a very high quality of skill sets used in designing, deploying and maintaining such

Implementation of Real and Accurate Watermarking System For Security Using Logistic Regression Machine Learning Techniques

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Abstract.

Technology overgrowing from the 20th century, nations like developing countries needs the authorization of multimedia applications for defence, navy and military applications. The defence academics, satellite, radar organizations like DRDO, ISRO, and HAL requires confidential data sharing applications. The multimedia applications using image and videos are communicating through different types of channels like wired, internet and broadcasting. Such organizations and academics share this data to all authorized persons, unauthorized users unable to hack this data. The authorized users have utilize this data with the help of encryption and decryption keys. The secrete key is shared to authorized persons (clients) only if any hackers or fraudsters try to hack this information unable to retrieve original data. At this scenario, unauthorized clients did not get confidential files, from the past two decades, the key generation for image and video watermark investigation has been moved rapidly. Different algorithms like genetic algorithm, differential evaluation, conventional methods had been designed for secure transmission and receiving purpose. But, modern technologies overcome this key generation and easily hacking the information. The significant objective is secreted multimedia digital image and confidential video transmission, high hidden capacity data. Accuracy is 97.81%, efficiency is 95.6% and true positive rate 0.96 improved.

Keywords. Watermarking, Logistic Regression, Security, Video and Image.

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HEART DISEASE DIAGNOSIS PROCESS USING MRI SEGMENTATION AND LASSO NET CLASSIFICATION ML

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Abstract

In this work, heart disease prediction and classification mechanism is proposed based on MRI local segmentation and Lasso net classification (LSLN) machine learning technique. In the brain MRI scan model, segmentation is generally utilized measuring technique. The heart visualization of the anatomical segment can give the tumour or disease information. After the pre-processing stage image has been processed for classification state, in this lasso net regression model is used for regression and classifier. The leading important of this investigation work remains to find out the heart disease diagnosis and classify the disease. The performance metrics have calculated at final such as PSNR, efficiency, throughput, F1-score as 96.12%, 98.74%, 97.25%, and 97.48% respectively. The outcomes which are obtained have more improvement, and these are competing with current technology.

Keywords: heart MRI Image, local segmentation, Lasso classification, Machine learning algorithm.

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INTRODUCTION

Heart valve segmentation seeks to separate healthy tissue from tumorous regions. This is an essential step in diagnosis and treatment planning in order to maximize the likelihood of successful treatment. Due to the slow and tedious nature of manual segmentation, computer algorithms that do it faster and accurately are required [1]. Because of the erratic arrival plus figure of a heart, segmenting Heart valve from imaging data remains one of the maximum stimulating tasks in medical image analysis. Segmentation of the Heart valve and classify it as either Heart valves shown in fig.1

BACKGROUND

The heart is a complex organ since it consists of more than 10 billion running heart Cells. The primary Heart valve may be both malignant (include cancer cells) or heart (do not comprise most cancers cells). A number one Heart valve is a disease which hearts inside the coronary heart tissue. If a cancerous valve begins some other place in the body, it may spread cancer cells, which grow inside the coronary heart [2]. These sorts of the disease are called secondary or metastatic Heart valves. The malignant sickness tends to Grow and spread in a speedy and uncontrolled way which could reason dying, and the disease is graded in keeping with how competitive

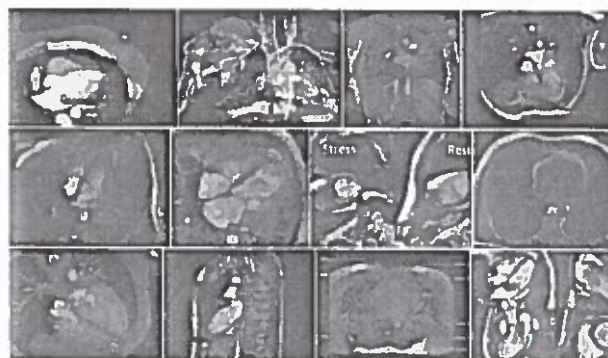


Figure 1: Heart MRI Images

. They are as

- LGG: Low-Grade diesis (Benign stage)
- HGG: High-Grade diesis (Malignant stage)

RELATED WORK

A research paper talks about using a Genetic Algorithm to segment the MRI Heart valve images. Pre-processing was done

using Wiener Filter (a 2D adaptive soundexclusion filter and the situation usages pixel-wise adaptive wiener system) [1]. LSLN features are extracted from segmented images and given to the LSLN Classifier which gets trained and ready for classifying test images [3-5]. Another research paper by way of Alan Jose [2] did Heart valve Segmentation us/ing K-Means Clustering and Fuzzy C-Means Algorithms and Its Area Calculation. After the segmentation, (which is completed via



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Gait diagnosis using fuzzy logic with wearable tech for prolonged disorders of diabetic cardiomyopathy

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ABSTRACT

Gait patterns and coordination are altered in diabetic cardiomyopathy patients with Parkinson's disease. There is little information with possible explanations. Fall identification and simulation in all age groups, including the use of Fuzzy logic and sensor data for evaluating gait error. The current proposal emphasizes about fall prediction and estimation of diabetic cardiomyopathy disorders for aged, adults and infants. The inputs for the fluctuating inference system are the patient's height, gyroscope, age and weight. RMS error, Estimation and identification are the output variables where inputs are from the MIMO-used sensor data. Input and output variables and rules are supplemented with the membership functions. The extracted features are equivalent to ordinary random mean square error values. The application of a fuzzy Mamdani technique uses a triangular-trapezoidal logic to obtain a random mean square error, classification and recognition requirements for the elderly, adults and children. IoT monitors the collected outputs and store in cloud. The accuracy of a study through triangular trapezoidal approaches of 20 patients with Parkinson's diabetes cardiopathy in the fuzzy logic is 95%. A wide range of fields such as digital control, data detection, decision interpretation, expert systems and computer vision have been employed successfully.

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1. Introduction

Human fall sensing is an area of recent research and development concern due to scientific advances in artificial intelligence and machine learning. In the last century, the total life span has grown dramatically, directly leading to tremendous growth in the elderly persons. Subsequently, wellbeing and elderly safety becomes a topic of concern. Decline identification systems allow quicker finding and interfering with persons who suffered from a drop. The opportunity to minimize the physical and mental trauma is incurred not only by the crash but also after the injury. In the future, these tools will make it obvious to physiotherapists and other clinicians not just that they have fallen, but even in the con-

ditions that lead to their fall. The population of the elderly is rising every year. The public health sector still has a responsibility about the health risks faced by older persons. Mobility is decreased in the ageing stage, and incidents are more likely to lead to injury and even fatalities can be stopped and the financial costs are decreased. This makes a low-cost inertial sensor-friendly system a method of detecting dropping in the elderly important. Therefore, the need to expend hospitalization could decrease if there were cost-effective responses to falls in surveillance. Therefore, this research is aimed at inexpensive falls in detectors to help the scheme in public health to cut expenses and improve the quality of life of the elderly. Studies related to gait were acknowledged in numerous fields, including medical diagnostics and forensics. There is an increasing need to find the patient from a distance in a crowd and dropping from heart attack, Parkinson's disease, hypertension, brain stroke, breakage of nerves or every other disorder. This research analyzes the situation of older people, adult patients and infants with Parkin-

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ENFORCED ENCRYPTION AND REVOKING DYNAMIC ACCESS

[30 Sept 2020 | vol. 14 | no. 3 | pp. 29-42]

About Authors:

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Abstract:

Even though the data is encrypted, an attacker can try to decrypt the message/data by attaining the key through the brute force attack. If a same key is used for encryption of different files, an attacker can guess the key by using brute force attack. Another way is admin can use a static list of keys for encryption of data. But if the attacker gets access to the file of keys then accessing data gets quite easy. So, to solve these problems, we generate keys dynamically, by using a pseudo random number generator function. And these dynamic keys are generated, whenever a file is uploaded, updated and deleted to encrypt the file in cloud. And if the requested user is authenticated and authorized then he/she will receive a mail, which consists of a key, for decryption. Not only that, it is not necessary that the attacker is always an outsider, sometimes the attacker can be an employee within the organization. In such cases, an authorized user can try to get access to data that he/she has no privilege. In this paper, we are going to propose a solution to the problems mentioned above. To avoid/prevent the attacker from cracking the key, we need to re-encrypt the text by using a new key. Moreover, re-encryption has to be done whenever a malicious activity is recorded. Whenever an authenticated user tries to get access to data that he/she has no privilege, the administrator can block that user.

Keywords:

Dynamic Access, Data owner, Data User, revoking, Cloud

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of Egypt/ Egyptology

Geophysical Investigation Of Groundwater Potential In VIIT, Visakhapatnam,
Andhra Pradesh- A Case Study

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Dr. G. Venkata Rao, S. S. S. Nitish, P. Shiva Kumar: Geophysical Investigation Of
Groundwater Potential In VIIT, Visakhapatnam, Andhra Pradesh- A Case Study –
PalArch's Journal Of Archaeology Of Egypt/Egyptology 17(7). ISSN 1567-214x

Keywords: Aquifer, Vertical Electrical soundings, Resistivity, Slope map, Well location,
Groundwater.

ABSTRACT

Knowing the ground's water potential is essential in the recent scenario of excessive usage of water resources due to rapid population increase. In this work a geophysical survey involving electrical resistivity methods has been carried out at Vignan's Institute Of Information Technology, Visakhapatnam to determine the soil profile and groundwater levels considering four points in the study area. The Schlumberger configuration method was used for data acquisition. The half currents electrode (2) used range from 1 to 100m. The depth sounding interpretation results were used to generate geo-electric sections from which the aquifer was delineated. The geo-electric section drawn from the results of the interpretation shows four subsurface layers which comprise topsoil, clayey soil, fractured rock, and hard rock. The fractured layers are constituted in all the locations referring aquifer availability in the area. Hence, from this investigation, it is recommended that boreholes can be sited in high conductivity zones in Vertical Electrical Sounding (VES) 1, 2, 3 and 4 as they contain probable aquifers. The depth of any borehole should be located between 19.9m and 33.7m to take advantage of the basement fractures.

1. Introduction

Water being the most abundant available liquid on Earth's surface, only about 2.5% (of 1.386 Billion km³) is Fresh water which is to be used by 759.43 cr people (water-science-school/USGS, 2020) [1]. Still 68.7 % of the Fresh water is trapped in glaciers and ice caps as shown in Fig. 1, as a result of which the

Adaptive Control Of Permanent Magnet Linear Synchronous Motor Using Non Linear

Arundhati, B and Madisa, VG and Shankar, RS Ravi

Vignans Institute of Information Technology

Abstract

In this paper, a adaptive non-linear controller is presented for permanent magnet synchronous motor (PMSM) sensorless drives. The adaptive non-linear controller is designed based on an input-output feedback linearization control technique. The unscented Kalman filter is used to estimate the speed, position and load torque. The PMSM is fed by an indirect power electronics converter. This indirect converter is controlled by a sliding mode technique that enables minimization of harmonics introduced by the line converter, as well as the control of the power factor and DC-link voltage. We study the robustness of the overall system using simulation for different operating modes and varied parameters..

Keywords:

machine learning; optical networks; traffic prediction

1. Introduction

Because of low power losses and high efficiency, PMSM is widely used in industrial automation, numerical control machines, robots, and the aerospace industry. However, PMSM is a multivariable, strongly coupled, non-linear system; so, it is difficult to achieve the desired effect against load and parameter disturbances with conventional control strategies. In order to solve the problems in motor control, advanced control theories have been developed; Non-Linear Control (NLC) is one of the most widely used advanced methods. It is well known that NLC inherently demonstrates robustness in the presence of the uncertainty boundary, and strong adaptability to parameter and load disturbances. In addition, NLC also performs well with regards to the variable coefficients [1, 2]. This work presents a vector control and input-output feedback linearization control applied to the speed regulation of a PMSM and to ensure a maximal torque operation. Variou (7) (PDF) Adaptive nonlinear control combined with unscented Kalman filter for permanent magnet synchronous motor fed by AC/DC/AC converter. Available from: <https://www.researchgate.net/publication/261486900> Adaptive nonlinear control combined with unscented Kalman filter for permanent magnet synchronous motor fed by ACDCAC converter [accessed Jun 08 2023].



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Mutual Coupling Reduction in a Multi-band MIMO Antenna Using Meta-Inspired Decoupling Network

Sourav Roy  & Ujjal Chakraborty

Wireless Personal Communications **114**, 3231–3246 (2020)

502 Accesses | 23 Citations | [Metrics](#)

Abstract

This article presents a unique meta-inspired decoupling method to reduce the isolation in a multi-band MIMO antenna. The proposed textile-based antenna is designed to cover the frequency spectra of IEEE 802.11a and b/g/n (2.4–2.484 GHz and 5.15–5.85 GHz) WLAN applications. The isolation improvement in multiple WLAN frequencies are achieved by a modified SRR meta-inspired structure without upsetting the parameters of the MIMO antenna. The maximum isolation improvement of around 10 dB is obtained at 2.4 GHz ($S_{21} < -18$ dB), 20 dB at 5.2 GHz ($S_{21} < -38$ dB) and 10 dB at 5.8 GHz ($S_{21} < -34$ dB). The antenna fulfills the dual wideband frequency spectra from 1.34 to 3.92 GHz (56%) and 4.34–6.34 GHz (37.4%). The proposed prototype is fabricated on a jean's substrate with the dimension of $100 \times 60 \times 1$ mm³ while a single element occupies the size of $60 \times 60 \times 1$ mm³. The gap between two antenna



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Deep Machine Learning Based Neural Networks Reference and Full-Reference Image Quality Assessment

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ABSTRACT— We introduce an IQA (IQA) story based on profound neural networks. The system is taught start-to-end and comprises of ten matrix multiplication layers as well as five pooling layers for removal of features, also two completely linked correlation layers, making it considerably deeper than related I.Q.A designs. Exclusive characteristics of suggested design are that: 1) it is used in such a no-reference (NR) as well as in a complete-reference (FR) IQA environment with slight changes and 2) it enables joint teaching of local quality and benchmarks, i.e. the comparative significance of local value to the worldwide performance assessment, in a coherent context. Our strategy is ambitious information exclusively and does not focus on hand-crafted characteristics or other kinds of previous domain knowledge about both human nervous system and image statistics. We assess the suggested strategy for the apps for L.I.V.E, C.I.S.Q, and TID2013 as well as the Reside in the Wild Picture Quality Challenge Box and demonstrate superior results for proposed NR and FR IQA techniques. Ultimately, multi-available data assessment demonstrates a strong capacity to generalize between distinct databases, showing a strong precision of the characteristics obtained.

Keywords—Image Quality Assessment (IQA), deep machine learning, neural networks, full reference image.

I. INTRODUCTION

IQA assumes a significant job in picture and video preparing applications. Supplanting abstract IQA strategies with machine evaluation techniques is an essential and testing innovation in vision examine. The objective IQA methods can be separated into 3 categories as stated by the availability of the input image: full-reference (FR), reduced-reference (RR) and no-reference (NR). FR metric involves a dismembered mark and a full comparison signal, RR metric needs an inaccurate sign and part of the power icon and NR measurement is a solitary finished metric using only the distorted sign [1]. The debate in this paper focuses on measuring FR IQA. FR IQA's traditional estimates are a median squared error (MSE) and peak signal-to-noise ratio (PSNR) associated with computationally expensive simple designs. Nonetheless, mathematical ideas fail to connect with both the natural viewing scheme (HVS) and thus make MSE and PSNR unreliable [2]. As of late, IQA appears start to believe about the characteristics of facial recognition [3]. The original stage in an IQA stream is to extract independent small-level image spots that are touchy to the HVS, followed by comparison grids. Together with sensory

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Cost Optimization Methods for Computational Time and Storage Space using Compression and Crypto-Graphical Techniques for a File in the Cloud

S. Sandhya Rani

Challa Narasimham

Abstract

All the transactions are digitalized today and there is an extreme need for information security to be available in efficient and effective way. Security plays a vital role in this digital world. A secure connection must be established between the sender and receiver; this paper describes through Diffie-Hellman key exchange algorithm. Valuable data must be kept as safe as possible in order to stay away from attacks. This can be achieved through cryptography. Reducing the amount of space to store data we can enhance security in best and cheap way. Using various symmetric and asymmetric algorithms, data security can be enhanced. There are proven results that compared to symmetric algorithms, asymmetric algorithms are the best ones due to its advanced feature like private (secret) key. This paper narrated about how effectively the space and computational time can be obtained in a cloud. This is applicable in Business Organizations, Research centers, nuclear power plants, satellites, etc.

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Cross validation of an effective machine learning model on unified data sets to detect and analyse spear phishing attacks

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Abstract: Social Engineering methodologies and communication approaches encountering information and data security problem constructed because of sophisticated spear and whale phishing attacks on world wide web, phishing is even extended to SMS and Voice messages. Fake URLs and cloned websites are other operations related to phishing. This paper concentrated on different phishing methods and Défense approaches related to data security. It has been focused on different datasets related to phishing and classification methods along with implementation of machine learning techniques. An Experimental Methodology is provided to tackle malicious websites and email spams. This paper focused on designing an algorithm in order to implement on the data set along with the comparison analysis on existing algorithms. The result analysis is given in a tabular form along with the accuracy rate and error rate in detecting and classification based on datasets. Finally, this paper depicts the tabular analysis and conclusions based on the experimental results.

Keywords: Machine Learning, classification, data sets, social engineering, Phishing Attacks.

I. INTRODUCTION

Spear Phishing Attacks are intentionally prepared for data theft and financial gain, mostly done by an individual or a group. Now a days the communication is very high-speed through data sharing, file transfer and emails in the form of multimedia data files. while dynamic websites along with payment gateways are intended for money transactions. The initial mission accomplished by the malicious operators via implementing various methodologies to obtain basic data and information concerning genuine users founded based on machine learning mechanisms. Most invaders remain directing established mechanisms upon source of the information they obtained, the acquired data may be individual, professional, and commercial. Ecommerce is the fast-growing mechanism that linked the customer or consumer with the seller or manufacturer, public from all over the world are doing transactions effectively by eliminating all topographical barrier. Millions of dollars are lost or losing by internet customers all over the world due to cloned, malicious, and fraudulent websites and phishing emails. The different types of phishing methods are involved in data theft for financial gain, such as pharming, masking, plugging, spoofing, and probing mechanisms are adopted to steel intellectual property, financial and business assets [1]. After gathering information about the victim, the attacker sends the spam email which looks like a legitimate email, with malicious URL links and malware attachments. To analyse and classify the emails, we adopted machine learning techniques on datasets to verify such as spam or legitimate, as there are only two options either ham or spam, the classification method used here is binary classification. The machine learning mechanism adopted different models that can implement on data sets to find the accuracy and error rate of the classification, finally the performance of the model will be calculated.

Artificial Intelligence based methodology is a processing of intensive and a superset of artificial intelligence, where email filtering and classification used to identify the legitimate



Dual-polarized textile-based two/four element MIMO antenna with improved isolation for dual wideband application

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Abstract

This article presents the designs of dual-polarized dual wideband textile-based two and four elements multiple-input multiple-output (MIMO) antennas for WLAN (IEEE 802.11a/b/g/c/n) and WiMAX (IEEE 802.16d) applications. These MIMO antennas cover the frequency spectra from 1.5 to 3.8 GHz (87% bandwidth) and 4.1 to 6.1 GHz (40% bandwidth). The characterization of the textile jeans substrate is determined experimentally using a vector network analyzer and dielectric assessment kit. These antennas provide near about 70% radiation efficiency with around 4 dBi peak gain in desired frequency ranges. The diversity performance is improved noticeably by printing meandered line structures on both planes. The proposed MIMO structure has a very low envelop correlation coefficient (ECC) <0.1 and high diversity gain (DG) >9.9. The Medium effective gain (MEG) also lies within a satisfactory value of ± 3 dB. The two elements MIMO Antennas provide linear polarization at all desired frequency band while the four-element antenna provides circular polarization at 2.4 GHz and linear polarization at 5.2 and 5.8 GHz application bands. The antenna also depicts good performance in wearable condition with safe specific absorption rate < 1.6 W/kg in all desired frequencies.

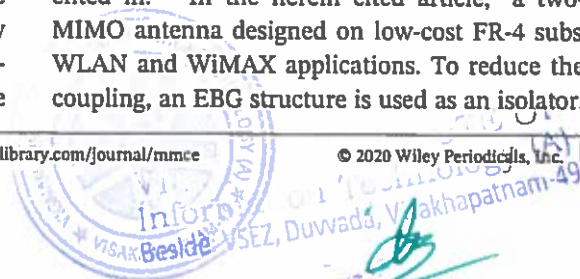
KEYWORDS

Dual band MIMO, Dual polarization, Textile antenna, Wearable MIMO antenna

1 | INTRODUCTION

In recent times, the development of wireless communication is increasing rapidly due to the high requirement of uninterrupted high speed and high data rate communication. The single input antenna system is not efficient enough as compared to the MIMO antenna system for satisfying all the wireless standard requirements. The development of the MIMO antenna is easily achieved by utilizing multiple radiators designed on some desired frequency bands. The MIMO antenna has a special feature

that is called spatial multiplexing. It enables number of users and enhances the system capacity. The MIMO antenna has a lot of additional advantages including enhanced efficiency, high signal to noise ratio, improved channel bandwidth, low multipath fading, and enhanced data throughput, etc. Design and analysis of diversity performance of two, four and eight-element MIMO are presented in.¹⁻⁶ In the herein cited article,¹ a two-element MIMO antenna designed on low-cost FR-4 substrate for WLAN and WiMAX applications. To reduce the mutual coupling, an EBG structure is used as an isolator. A dual-



ARCHIVES

Premature Detection of Cardiomegaly using Hybrid Machine Learning Technique

 Bhanu Prakash Doppala, Midhunchakkravarthy, Debnath Bhattacharyya

Abstract

The clinical field usually handles large measures of information. Taking care of tremendous information by conventional techniques can influence the outcomes. Utilization of calculations for artificial intelligence to discover realities in clinical research, mainly for the prediction of a particular disease. The early acknowledgement of the infection is vital for the examination of patient meds and experts. Utilizing machine learning techniques can prompt a quick ailment prediction system with high accuracy. In the medical area, machine learning applications playing a crucial role in predicting diseases. This particular paper assesses different classifiers used for the expectation of cardiovascular infirmities. There are major machine algorithms; for instance, Decision Tree, Random Forest, is used for envisaging heart diseases. We presented a forecast model with various features with different combinations and a few known grouping strategies. We produced an upgraded performance level with an accuracy of 84:42%.

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A Framework for Content Management System for Effectiveness of Web Applications

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Article Info

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Abstract:

For managing and creating the digital content it can consider a set of related programs or a software application as a content management system (CMS). All types of digital content provide and organize in a system by a content management system. By the use of IT and tools a CMS can accomplished. For web content management (WCM) and enterprise content management (ECM) generally CMS are used. For better academic management in educational planning and quantifying activities this paper study the concept of Content Management Systems. Education delivery management and Computer-based planning becomes knowledge for management and planning and an electronic database in future.

Keywords: content management system, web content management, enterprise content management, digital content.

Article History

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1. Introduction

In any type of unit of digital information the content is essential. It can be sound, graphics, records,

images, video, documents, text etc. Anything that is like to manage in an electronic format can also refer as Content Management. By combining process,

Component based Development Methodology for Real time Applications

Vasumathi Devi Majety¹, GL Sravanthi², K.Chandrakala³, **Dr.E.Laxmi Lydia⁴**
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Abstract

Software development mainly depends on the type of process model which has been selected for specific application. In earlier days object-oriented strategies have been applied but, later on the development process is being done in terms of components development to support reusability. However the predictability of development approach effects the time and cost of the process. This paper projects the different types of process models and also the current trends in the development process. The development methodologies, Behavior Driven Development (BDD) and Test Driven Development (TDD) is emphasized with an example. This work emphasizes components, and its development. The algorithm to develop real time applications is also projected in the work.

Keywords: Component , Test Driven Development(TDD) , Behavior Driven Development(BDD).

1. INTRODUCTION

The software engineering process models are Water fall model, Incremental process model, Prototyping , Spiral model , Agile process model and Scrum model. Above all these models, a different strategic approach is introduced in the midst of 1970-1975 , that is , Component based software engineering process model. In software development companies now a days , they are following Agile process model and Component based model[2].

Software product is developed by following an approach of Component based software engineering , which emphasizes the design and construction of computer based components which can be reusable in future. This supports the reusability in Object-Oriented programming. These components are used in

some another different application of the same domain[1].

2.LITERATURE SURVEY

In software product development time, cost and quality are very crucial metrics. Software development time can be reduced using component based development. The component based development supports the reusability. There by the productivity can be increased. It also reduces the time duration for the completion of the project there by reducing the development cost. But this is not suitable for real time embedded systems development[8].

The comparison between traditional process models and component based development has presented in Table:1. Here development cost , time , man power required , quality and applicability aspects have been observed and presented.

Table 1: Comparison of CBSE with Traditional Process models

Non-funtional parameters	Component Based Development	Traditional Development models
Development Cost	This approach follows reusability in	Cost depends on the application as,

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Constructing a Model to Predict Fraudulent Credit Card Transactions using Machine Learning Techniques

K.Chandra Kala, N.Ashok Kumar, Dr.Vasumathi Devi Majety, G.L.Sravanthi, **Dr.E.Laxmi Lydia**

Abstract

As there is an increase in electronic payments volume, the economic stress on the fake detection of credit cards is becoming a fundamental challenge for service providers and financial institution, accordingly continuous forcing is done for enhancing the systems of fraud detection. As the e-commerce is so popular now a day, the credit card fraud is also becoming even more serious. Hence, the analysis on the detection of fraud is important and attractive. In view of financial services, the fraud in credit card is a critical problem because of every year there is a loss of Billion dollars. In the research studies there is a deficiency on reviewing the data of credit card owing in the real world to the problems of confidentiality. There are 2 major aspects due to the scarcity of practical concern. First one is the way and timing based on the supervised information available and the second is the measures utilized for the evaluation of the performance of fraud detection. In this paper, we suggest a methodology to construct a model which predicts fraudulent credit card transactions by making use of Machine Learning Techniques. We have applied single and ensemble classifiers to build the fraud detection model. We have developed different models by applying various Supervised Learning algorithms. And we have compared the performance of these models using Precision and Recall measure as the accuracy is not correct measure for the imbalanced data. The class imbalance problem has been overcome by using SMOTE analysis. We have shown that the model build using Random Forest has given better performance than the other classifiers. So we conclude that this model can be used to predict credit card fraudulent transactions.

Fundamental Concept of Managerial Economics: A Business Advancement of Today and Tomorrow Management

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Abstract:

The Managerial economics is the most common word in term of business economics. As its name the managerial economics, it supports the basic business model and helps to take in decision making methods. Its also works on the model which helps to implement the theoretical concepts into practical business model. The main aim of managerial economics is to guide the business in taking decision, built the strategy and provide the comfortable solution for the business. The managerial economics also boost the power of taking hard decisions which may provides long term benefits. The main objective of managerial economics is to support the business in order to achieve its short term and long term goals. This strategy works on assume and predict model to solve the problem. This research study the design provided by the managerial economics to understanding the future by the business persons, the leaders and the persons associated with the business and do the proper analysis for decision making. It also provides many ways for the business strategy for future.

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Keywords: Conflict management strategies, Conflict Management Skills, Industrial Excellence, Conflict Management and Industry.

1. Introduction

The management tells the managers or persons connected to organization that what strategies should applied for achieve any goals and how to motivate the workers of the organization to

work with maximum efficiently. The business economics also known as managerial economics which provides the base theory and mechanism to take business decision and helps to process more than one decision for testing purpose. The probability of lose can be minimized with such

The Role of Business Management Efficiency in PPP Projects in World

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Abstract:

The maximum contemporary-day global revel in suggests that public-private-partnership are regularly a public procurement that improves the manager of public and municipal assets in the production quarter. This article proposes a style for rating international locations with the assist of the chance of being successful in implementing a public-private partnerships. The sparkling approach is based on a device of symptoms to assess the usual of the institutional environment, the revel in of task implementation, the kingdom Readiness, personal companies, and therefore the society for the powerful implementation of public-private partnership duties. we increase a substitute method to stay difficult Russia's new rules that, even though having been delivered in 2015, has already boosted a tumultuous type of new public-private partnership tasks and it's far anticipated to reinforce public-private partnership possibilities in the planet further.

Keywords: Role of Business Management, Public-Private-Partnership, Efficiency in PPP in World, Benefits.

1. Introduction

Business management the planet of commercial enterprise has passed through radical and dramatic changes in the remaining decade adjustments that gift exceptional challenges for the contemporary manager. A manager is an organizational member who is answerable for planning, organizing, leading, and controlling the activities of the organization in order that the goals are often done. Constant with a widely referenced have a look at with the aid of henry, managers serve three primary roles: interpersonal, informational, and decision-making. Management is system of administrating and coordinating sources successfully and successfully in a try to understand the desires of the employer. Controlling is tracking the performance of the enterprise, identifying deviations between planned and actual outcomes, and taking corrective action while vital. With of these four functions that are

worried inside the system of management, if all are followed correctly the company are going to be properly ran and could have few headaches. In each employer there are managers, and every manager is classified on extraordinary degrees in phrases of the abilities they've and consequently the activities they're concerned in. managers exist at numerous stages inside the company hierarchy. Little organization may have one layer of management, where as an outsized agency may also have numerous. In maximum businesses there are three level of managers. The three degree of managers are, first line supervisor, center supervisor, and subsequently the pinnacle-degree supervisor. Managers at exceptional job stages have one-of-a-kind job obligations and therefor require distinct competencies.

First-line managers supervise who are immediately liable for producing the agency's product or handing

Transformation in the Teaching-Learning Process of Engineering Education

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Abstract

Due to lack of direct industry interaction, the current system does not prepare future engineers for innovative entrepreneurship and self-employment, as engineering colleges focus on Score-Based Education rather than moving towards practical approach. Engineering colleges need to set Short-term and Long-term goals for Teachers as well as Students. Teachers achieving short term goals like having attention to their teaching, interactive classrooms etc. A long term goal of teacher is to transform a student into independent source for the society, reaching academic visions, effective course design. Students achieving short term goals learn within the class and try it in laboratory. Long term goals performing well in examinations and solve real time problems in the society. This develops the transformation in teaching learning process. The main motivation behind writing this research paper is, firstly the problems faced by the students to get the job in industry secondly problems faced by the faculties to provide innovative teaching modes for the millennial learners. The main objective is to improve the Teaching Learning Process through invocative teaching mechanisms such as creating Dynamic Classrooms, Power of Technology, and Collaborative Learning. Thus to bring the transformation in engineering education we implemented student and teacher level transformation to produce more competent engineers for the society.

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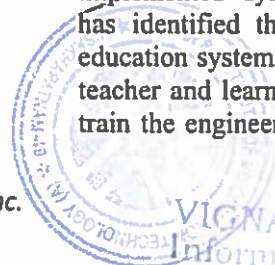
Publication: 06 January 2020

Keywords: Outcome Based Education, Collaborative Learning, Dynamic Classroom, Virtual Laboratories, Course Design, Effective Assessment.

I INTRODUCTION

Since two decades, four thousand Indian engineering colleges certifying students as graduates without any proper knowledge. For quality education, IUCEE (Indo Universal Collaboration for Engineering Education) has identified the challenging issues faced by the engineering education system and took initiative to transform the engineering education system in India. In this IUCEE has

selected more than 200 colleges to train the faculty through faculty development programs throughout the academia as International Engineering Educator Certification Program (IIEECP). From 2007 to now, the education system has been changing innovatively with implemented systematic approaches. IUCEE has identified the primary objectives of the education system, i.e, teaching approaches of a teacher and learning methods of a student. To train the engineering faculty, this program has





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Utilizing the Empowerment of People-Owned Enterprises Economic Institutions

✎ R Rahmaniah, Hamsinah Baharuddin, Phong Thanh Nguyen, **E. Laxmi Lydia**, Ruly Artha

Abstract

-Individuals Owned Enterprises as a partnership can possibly develop and create in the event that it can adjust to essential business law. Business begins from advertise that implies no market, no business. In this way, People-Owned Enterprises model methodology starts with advertise the board both broadly and universally or exchange as a significant exertion to deal with a powerful market. It is the business as well as enormous scope business that decides the nature of crude material supplies sourced from makers (rancher gatherings, anglers, skilled workers, and so on.), which is facilitated in the structure and the executive's arrangement of People-Owned Enterprises. Individuals Owned Enterprises as an establishment of monetary entertainers will empower expanded creation and efficiency as the premise of monetary development and comprehensive money related which is solid and reasonable. A comprehensive economy and account lifts individuals or society from the base of the pyramid position. The nation's financial strategy and even governmental issues have not been benevolent to the general public. In addition, the limit of neighborhood authorities to manufacture a comprehensive people's economy is still constrained. Other than physical and non-physical framework including the board abilities from the legislature and nearby networks is restricted.

Paper Details

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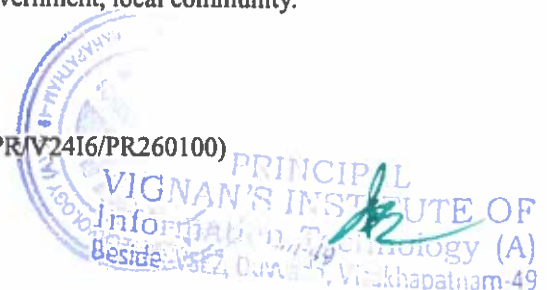
Keywords: People-Owned Enterprises, dynamic market, society, government, local community.

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AN ASSESSMENT OF TRAINING FRAMEWORK: A REVIEW OF THE TRAINING AND DEVELOPMENT PROCESS PRIVATE BANKS IN INDIA

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Abstract

In the current era of a highly trained business environment in banking, organizations encounter transpiring challenges in form of optimization and acquisition of human resources. Being valuable and scarce capabilities, human resources are considered as a source of tenable vying mastery. The success of a banking organization depends upon several factors; however, one of the most crucial factors that influence the organization's performance is its employee. The HRM practices like Training, Team Work, Performance Appraisal, and Compensation has an imperative impact on the banks. Human resources play an integral role in achieving an innovative and high-quality service/ product. The present study through the SWOT evaluation attempts to examine and analyze the impact of all these factors and the role of training and development of private sector banking employees in India. Also to assess the present status of the employee effectiveness in discharging the roles and responsibilities in tune with the objectives of the bank. The effectiveness of the various facets of training i.e. employee's attitude towards the application of practice; training inputs; quality of training programs and training inputs to the actual job.

Keywords : Human Resource Management Practices, HRM, SWOT, training programs, Training, Performance Appraisal, Team Work, Employee Participation

I. Introduction

In the efficient implementation of human resource management practices in the banking sector, one of the key factors to be observed is training and development. Training and development also boost in improving an employee's performance that in turn would enhance not only their knowledge and skills in their thorough learning but also will alter employees' attitudes (Goswami, Pandey, & Vashisht, 2017). Additionally, it is an attempt to improve the employee's performance not only in their current job but also to prepare them for an intended job as well. Hameed, Rajinikanth, & Mohanraj, (2014) reported that employee training and development in the banking sector is an activity that is desirable and also an imperative activity wherein an organization must be resourceful if it has to maintain a knowledgeable and viable

Rakesh Uppuluri et al

Simulation Studies on the Performance of BCI

Kasa Lalith Kumar¹⁾, Swathi Kalam²⁾

Abstract

A large amount of persons approximately the world knowledge the unwell belongings of beating of action, rendering them reliant on others to perform even the most essential errands. In any case, that could change, due to the most recent accomplishments in the Brain-Computer Interface (BCI), which could enable them to recapture a segment of their lost freedom. Indeed, even ordinary people may likewise have the capacity to use Brain Chip Technology to improve their association with the advanced world-if they will get the embed. The term 'Mind Computer Interface' alludes to the immediate connection between a solid cerebrum and a PC. Serious endeavors and research in this BCI field over the previous decade have as of late brought about a human BCI implantation, which is incredible news for every one of us, particularly for the individuals who have been surrendered to spending their lives in wheel seats. This Brain Chip Technology is a stage for the advancement of an extensive variety of other helping gadgets. This paper concentrates on the Brain Chip Technology which encourages quadriplegic individuals to do things like checking email, turning the TV, lights on or off with simply their contemplations. Likewise the meaning of Brain-Computer Interface, the essential objective of planning Brain entryway, the fundamental components of Brain Gate, the exploration work led on it at various Universities and some inadequacies of Brain Gate were additionally introduced.

Keywords: Genetic Algorithm, Genetic based Function System, Cryptography, Encryption, Decryption.

1. Introduction

An implantable mind PC interface the measure of a headache medicine has been clinically tried on people by American organization Cyber energy. The 'Mind Gate' widget will provide incapacitated or engine debilitated patients a method of communication throughout the explanation of consideration into coordinate PC organizes. A Brain-Computer Interface in some cases called a straight neural edge or a mind machine interface (BMI) acknowledges orders straightforwardly from the human or creature cerebrum without requiring physical development and can be utilized to work a PC or different innovations. This wide term can depict numerous genuine and hypothetical interfaces. In this meaning

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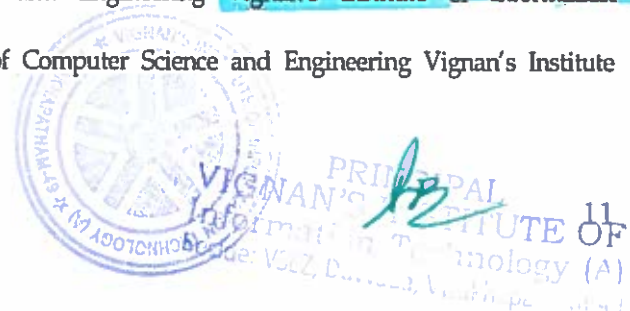
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Consequential Prediction of Brain Status and Diagnosis of Epilepsy

Dr. G Rajendra Kumar, Suneel pappala, Madugula Muralikrishna, Dr. J. Bala Bhaskara Rao, J.Nageswara Rao

Abstract

Seizures cannot be cured and can only be controlled with appropriate drugs. The diagnosis of epilepsy patients aims to determine the type of seizure (epilepsy or non-epilepsy) and its cause, because each type of seizure responds best to a particular treatment. The diagnosis of epilepsy is based on feedback information collected from the patient about family history, age, and other drugs used by the patient for a longer period of time, such as any other diseases used by the patient.

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How to Cite

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PERFORMANCE ANALYSIS OF ENERGY CONSUMPTION BASED ALGORITHMIC APPROACH MODEL TO ENHANCE BATTERY LIFE

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Abstract:

One of the most intriguing topics over the past few years has been minimizing energy consumption in convenient gadgets and enhancing their battery life. The production of portable devices has made society's work more accessible and has increased comfort levels by using those devices to the maximum threshold. Batteries fuel such gadgets. Most of the companies invest their time, energy, and money looking for new ideas for increasing battery life, and most of these ideas are related to hardware. Their uptime subsequently depends on the vitality utilization of the parts and components. By exploring fresh approaches that empower frameworks to adjust powerfully at runtime, energy utilization can be effectively decreased. This article focuses on employing a portion of vitality administration that can dynamically select the most excellent calculation so that a battery can have maximum life and utilization. The analysis shows that quicksort is the first viable sorting approach when it comes to vitality sorting; For Minimal Spanning Tree: Prim's, For Graph Searching: BFS and For Implementing and Searching Trees: RBT.

Keywords:

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Content image Retrieval Based on using open Computer Vision and Deep Learning Techniques

J.Nageswara Rao, Dr.Rambabu Busi, Dr. G Rajendra Kumar, U. Surya Kameswari

Abstract

Content Based Image Retrieval is one of the key Information Retrieval sub field of Image Processing In research. The aim of CBIR Technique is to recognize lexically similar images in reference to a query image specified by the end user. Due to With ever-increasing image collections from multiple sources including companies, military and civilians, browsing and searching across image archives is essential. Content Based Image Retrieval (CBIR) involves multiple techniques to image processing by evaluating image content, such as color, pattern, structure and salient features. By using Filtering technique we can enhance or change the part of input image data. Using edge detection, various type of contents present in image can be retrieved. In deep learning, the model is prepared and it will train on the set of pre-defined images. The accuracy of retrieving content of the image depends upon the model and its training and Various resources generating big data are cc camas, social media, cloud data, IoT. In the proposed approach to perform image classification and to process the image using Filtering and Edge Detection of Artificial Intelligence, Deep learning Techniques [CNN]. Such like Classification using SVM classifier for learning and recognition.

PDF

How to Cite



Assay: Next Generation Automated Cyber Defense Mechanism against Advanced Phishing Attacks and Campaigns using Threat Hunting & SOAR Capabilities

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Abstract— We are in the new era of cyber security; Now a day’s lot of companies and organizations are facing issues against cybercriminals. They are getting more sophisticated attacks creatively and 50-60% of those attacks and incidents are coming through Phishing. Phishing is the simple way of sending an email or something similar and hoping you get information from the user. To detect these attacks one of solution is Threat Hunting. This whole process takes tedious manual effort and time. To avoid manual intervention and vast time effort we have implemented a framework using different threat hunting approaches that can conduct an in-depth analysis of phishing emails, integrating with Security Orchestration Automation Response (SOAR), Security Information Event Management tools and Automated Threat Intel detection using Internal & External feeds. Here, we combine both Automated workflows and Human Investigation to identify advanced persistent attacks. In this way, we can identify 80-90% of threats against any organization and generate accurate metrics & reports.

Keywords— Threat Hunting, SOAR, Automation, Threat Intelligence, SIEM

I. INTRODUCTION

Now a days phishing attacks are the most popular attack vectors in social engineering, malware infections, Advanced Persistent Threats (APT). It is arguably the most damaging and high-profile cybersecurity threat facing in different organizations. Cybercriminals can able to gain access to email accounts, sensitive business data like customer names, confidential documents and medical records, irrespective of different industrial sectors. In this case, threat hunting needs internal and external log data resources and threat intel feeds as well. Based on the raw data we can create a hypothesis and implement a real-time threat detection mechanism. Here, we are improving our detection capabilities using internal email data and external & internal threat intelligence feed data sources.

II. RELATED WORK

Today most of the research work is going on malicious pattern identification, deep learning on malware samples and threat hunting hypothesis and processes. In our research work, we are automating existing processes and implementing advanced threat hunting approaches that can correlate with different log sources and detecting advanced threats in organization wide. Here we are integrating multiple log data sources, which include Phishing Email data, Security Logs, Threat Intelligence feeds and Certificate Transparency Logs. Reference [3] validates results with advanced detection within less response time, that mechanism will give in-detail analysis and correlated with existing logs and gives high-level insights on specific threats with advanced reporting.

III. ILLUSTRATIONS

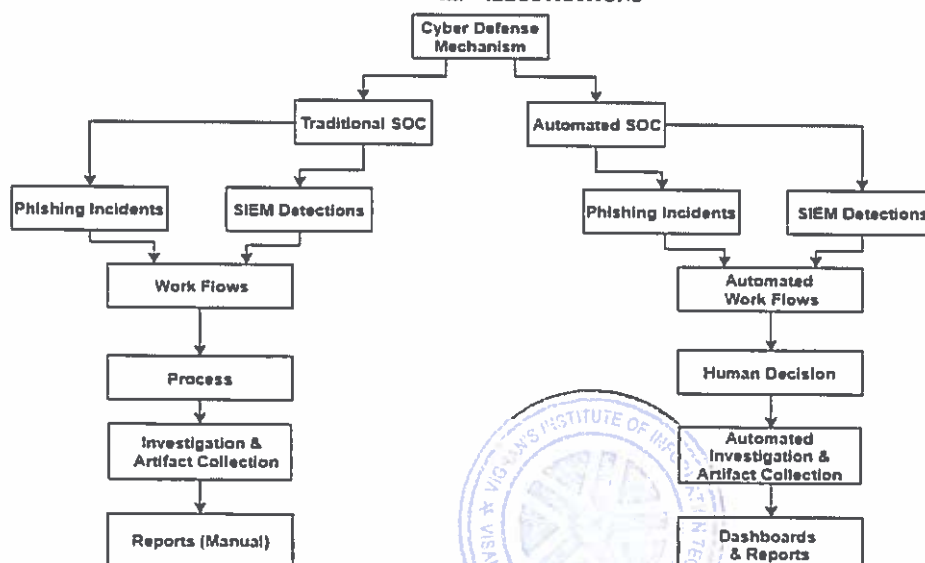


Fig. 1. Illustration about Cyber Defense Mechanism

Abstract

This study is mainly concerned with a spatially homogeneous and anisotropic Kantowski–Sachs cosmological model with anisotropic dark energy fluid and massive scalar field. We solve the field equations using (i) the shear scalar proportionality to the expansion scalar and (ii) a mathematical condition that is a consequence of the power law between the scalar field and the average scale factor of the universe, and the corresponding dark energy model is presented. The cosmological parameters of the model are computed and discussed, as well as the relevance of its dynamical aspects to the recent scenario of the accelerated expansion of the universe.

Résumé

Cette étude se penche surtout sur un modèle cosmologique spatialement homogène et anisotrope de Kantowski–Sachs, avec un fluide d'énergie sombre (ES/DE) anisotrope et un fluide scalaire massif. Nous solutionnons les équations de champ en posant que, (i) le scalaire de cisaillement est proportionnel au scalaire d'expansion et (ii) il y a une condition mathématique qui est une conséquence de la loi de puissance entre le champ scalaire et le facteur d'échelle moyen de l'univers et nous présentons ensuite le modèle ES correspondant. Nous calculons les paramètres cosmologiques du modèle et discutons leurs aspects dynamiques pertinents au récent scénario d'une expansion accélérée de l'univers. [Traduit par la Rédaction]

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Damage Assessment of Reinforced Concrete-Framed Building Considering Multiple Demand Parameters in Indian Codal Provisions

Pritam Hait¹ · Arjun Sil¹ · Satyabrata Choudhury¹

Received: 22 August 2018 / Accepted: 19 March 2020
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Abstract

This paper investigated multi-objective seismic damage assessment procedure. Primarily, it estimates damage index (DI) of reinforced concrete-framed residential buildings situated in seismic zone V as per IS-1893-2016 (0.36 g) in India. Three-dimensional DI has been estimated for a four-storey building by Park–Ang method. With the increase in the storey number, calculation of Park–Ang DI becomes tedious and more time-consuming procedure; therefore, this method is not suitable for large-scale damage investigation. To avoid the complexity, a simplified method has been proposed to estimate global damage index (GDI) of buildings easily. For this purpose, a four-storey residential building having plan aspect ratio 0.5, 0.75 and 1 has been analysed. In this study, the most influential parameters such as inter-storey drift, joint rotation and peak roof displacement have been combined to estimate GDI of structures directly. Based on this study, it has been observed that 0.893 times ground-storey DI (i.e. local DI) estimates similar Park–Ang GDI for a four-storey building. In this study, it has been observed that ground floor experiences maximum damage and top floor experiences least damage for all cases. The proposed approach effectively estimates reliable GDI that is useful for small- to large-scale damage assessment of buildings.

Keywords Correlation matrix · Damage assessment · Engineering demand parameters · Global and local DI · Nonlinear time history analysis · RC frame building

1 Introduction

An earthquake is the most severe, unavoidable and unanticipated natural calamity of all time. Numerous life and property losses are the consequences of an earthquake in the world every year and essentially responsible for several multi-hazard effects. Structures normally get damaged or collapsed because of the intensity level of earthquake, resulting in the imposition of excessive lateral load on the structure which is highly uncertain in nature. Therefore, structural system should be sufficiently robust to withstand the uncertain loading. However, the consideration of uncertainties in ultimate structural capacity along with validation is the key point in this type of study. On the other hand, within or beyond permissible range of its capacity, the structure may remain fully functional, partially and fully damaged or in unserviceable condition. Indeed, damage is a process or

mechanism in a system responsible for the degradation of strength, stiffness or ductility through which the structures mortify with respect to its initial capacity. However, normally in the early stage of construction process, the system failure is accidental; in the intermediate ages, the structural failure mainly occurs due to this randomly occurring load event; hence, up to the middle age, hazard rate is constant and could be modelled using Poisson distribution or any other techniques. Conversely, in case of RC frame structures, damage normally occurs in joints for rotation or twisting moment (torsional), in mid-span, corner of storey/position for excessive deflection or deformation, and yielding of material strains mainly depends on the determinacy of the structural system.

DI has been evaluated in RC buildings using different methods proposed time to time by researchers, for example, for reinforced concrete component; the correlation between maximum deformation and cyclic loading is chiefly considered as the prime damage parameters of a building with the application of lognormal distribution to assess DI being depicted in (Park and Ang 1985). The term DI is re-justified (Park et al. 1985) with respect to the

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Seismic damage assessment and prediction using artificial neural network of RC building considering irregularities

Pritam Hait, Arjun Sil & Satyabrata Choudhury

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CONTROLLERS FOR HANDLING THREE PHASE GRID FAULTS IN VOLTAGE SOURCE CONVERTER BASED HVDC TRANSMISSION SYSTEMS

D.A.Suresh,P.Ramesh, Dr. S.Prakash,Dr.R.Dhanasekaran

Abstract

Integrating asynchronous AC generators to AC grid is a challenging task. For example if there are AC generators of 50 Hz and 60 Hz frequency, synchronizing them to a common grid not possible. Such issues can be addressed using High Voltage Direct Current (HVDC) transmission which connects asynchronous sources at either ends. In Voltage Source Converter (VSC) based HVDC transmission both real and reactive power transmitted can be controlled where as in conventional line commutated converter based HVDC transmission system, only the real power transmitted was controlled. There may be chances of grid faults in both the ends. The typical faults are single line to ground fault, double line to ground fault and three phase fault. The faults occurring in one grid side should not affect the other side grid. To handle such faults, the voltage sources converters should be controlled to regulate the power transmitted through the line such a way that the fault in one grid will not affect the other grid parameters. This paper represents a control structure for VSC based HVDC transmission system which will handle three phase fault in both the grids.

 PDF

How to Cite

Investigations on strain distribution, stress-based fracture limit and corrosion behaviour of titanium Grade 2 sheets during single point incremental forming

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Department of Metallurgical and Materials Engineering, National Institute of Technology Tiruchirappalli, Tiruchirappalli, India, and

C. Sathiya Narayanan

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Abstract

Purpose – The purpose of this paper is to investigate the strain distribution, stress-based fracture limit and corrosion behaviour of titanium Grade 2 sheets during single point incremental forming (SPIF) process, with various computerized numerical control (CNC) spindle rotational speeds and step depths. The development of corrosion pits in 3.5 (%) NaCl solution has also been studied during the SPIF process.

Design/methodology/approach – A potentiodynamic polarization (PDP) study was performed to investigate the corrosion behaviour of titanium Grade 2 deformed samples, with various spindle rotational speeds in 3.5 (%) NaCl solution. The scanning electron microscope (SEM) and transmission electron microscope (TEM) analysis was carried out to study the fracture behaviour, dislocation densities and corrosion morphology of deformed samples.

Findings – The titanium Grade 2 sheets exhibited better strain distribution, fracture limit and corrosion resistance by increasing the CNC spindle rotational speeds, tool diameters and vertical step depths (VSD). It was recorded that varying the spindle speed affected plastic deformation which in turn affected corrosion rate.

Research limitations/implications – In this study, poor corrosion rate was observed for the as-received condition, and better corrosion rate was achieved at maximum speed of 600 rpm and 0.6 mm of VSD in the deformed sheet. This indicates that corrosion rate improved with increase in the plastic deformation. The EDS analysis report of corroded surface revealed the composition to be mainly of titanium and oxides.

Practical implications – This study discusses the strain distribution, stress-based fracture limit and corrosion behaviour by using titanium Grade 2 sheets during SPIF process.

Social implications – This study is useful in the field of automobile and industrial applications.

Originality/value – With an increase in the spindle rotational speeds and VSD, the titanium Grade 2 sheets showed better strain distribution, fracture limit and corrosion behaviour; the same is evidenced in fracture limit curve and PDP curves.

Keywords SEM, Corrosion behaviour, TEM, Strain distribution analysis, Strain triaxiality, Stress-based fracture limit curve, Titanium grade 2 sheets, Fracture limit curve

Paper type Research paper

1. Introduction

Ambrogio *et al.* studied the titanium and its alloys, the most frequently used materials in aircrafts, orthopedic, marine and dental implant industries because these materials have a high strength-to-weight ratio and good corrosion resistance compared to those of steel and aluminum alloys (Ambrogio *et al.*, 2012). Ehrif and Hrairi, defined single point incremental

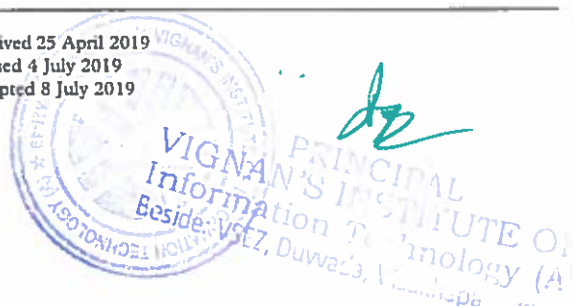
forming (SPIF); it is a process which uses the forming tool having continuous contact with sheet metals and does not use the dies (Ehrif and Hrairi, 2011). Leacock, Faraji *et al.* and Djavanroodi *et al.* proved that SPIF is an advanced die-less process of forming the sheet, and that it is a promising technique for providing better performance over other forming processes (Leacock, 2012; Faraji *et al.*, 2010; Djavanroodi *et al.*, 2011). Jawale *et al.* carried out a micro-structural investigation of a polycrystalline copper sheet that had been incrementally formed to a truncated conical geometry using various lubricants; the lubricant was used in paste-state,

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Research Article

Investigation on turning process performance using hybrid-textured tools under dry and conventional cooling environment

P. Sivaiah , Muralidhar Singh M, Sadu Venkatesu & G. Yoganjaneyulu
Pages 1852-1859 | Received 30 Apr 2020, Accepted 11 Aug 2020, Published online: 09 Sep 2020 Download citation  <https://doi.org/10.1080/10426914.2020.1813893> Check for updates

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ABSTRACT

In the context of the surface texture of the tool, turning process performance is sensitively affected by the surface texture geometry, design, and working environment. Therefore, present work focused on the fabrication of new texture design tools (an amalgamation of linear microgrooves and circular pit holes) and machinability evaluation of so developed tools in turning of AISI 304 material under dry and conventional cutting environment, respectively. Machinability measures considered in the work are cutting zone temperature (T), average surface roughness



Influence of *Parthenium Hysterophorus* and *Impomea Pes-caprae* Fibers Stacking Sequence on the Performance Characteristics of Epoxy Composites

Vijay Raghunathan , Kumaran Palani, Pottathil Shinu,

Jafrey Daniel James Dhillip  , Gunda Yoganjaneyulu & Saikrishnan Ganesh

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ABSTRACT

The application suitability of natural fibers is increased by the method of hybridization. The current study deals with the development and characterization of four different tri-layer composites by varying the stacking sequence of *Parthenium hysterophorus* and *Impomea pes-caprae* fibers with epoxy as a matrix, by using the conventional hand layup process. The mechanical properties, namely tensile, flexural, impact, Shore D hardness, and water absorption properties, were analyzed as per ASTM. The test results show that composites with upper layers of *Impomea pes-caprae* and a core layer of *Parthenium hysterophorus* fibers showed enhanced mechanical properties and reduced water absorption, thereby proving its suitability

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Investigation of Caryota urens fibers on physical, chemical, mechanical and tribological properties for brake pad applications

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Journal of the Chinese Chemical Society / Volume 68, Issue 4 / p. 592-600

ARTICLE

Efficacy of cobalt-incorporated mesoporous silica toward photodegradation of Alizarin Red S and its kinetic study

Tharividi Venkata Siva Parvathi Veera Satya Guru, Vaddadi Krishna ✉, Ella Rajesh

First published: 09 November 2020

<https://doi.org/10.1002/jccs.202000335>

Citations: 1

Abstract

Cobalt-incorporated mesoporous silica (Co-MCM-41) has been synthesized along with MCM-41. The materials were characterized using powder X-ray diffraction, scanning electron microscope, and nitrogen adsorption–desorption study techniques. The surface area (S_{BET} , m^2/g), pore size (\AA), and pore volume (cc/g) have been found to be reduced in the Co-MCM-41 compared with MCM-41. Furthermore, the Scanning electron microscopy coupled with energy dispersive X-Ray spectroscopy (SEM-EDAX) analysis has clearly shown the presence of the respective elements in the materials. The bandgap (eV) was also significantly reduced in the Co-MCM-41 compared with its parent template, observed by applying the Kubelka-Munk function to the results of UV–Vis DRS. The materials were successfully used as photocatalysts in the photodegradation studies of the Alizarin Red S dye, and pseudo-first-order kinetics was performed using the Langmuir-Hinshelwood kinetic model. All the required experimental conditions were optimized.

Citing Literature



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Factorization using Square representations of a Binary Quadratic Form

K.Vijaya Prasamsa, P.Anuradha Kameswari, D.Mrudula Devi



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PENALTY DIFFERENCE ALGORITHM FOR BASIC FEASIBLE COST OF TPP

Authors **ZINDIRA SINGULUR** DR.RAMYA NEMANI

Publication date 2020/8

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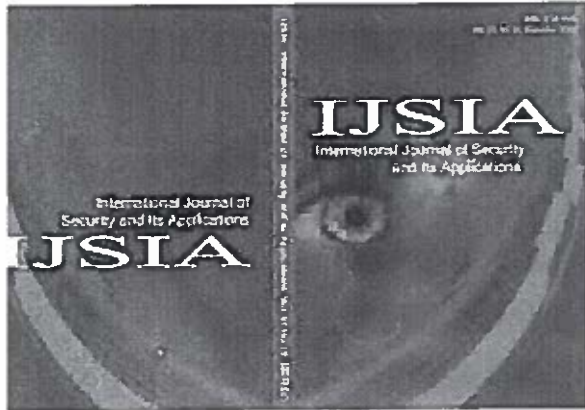
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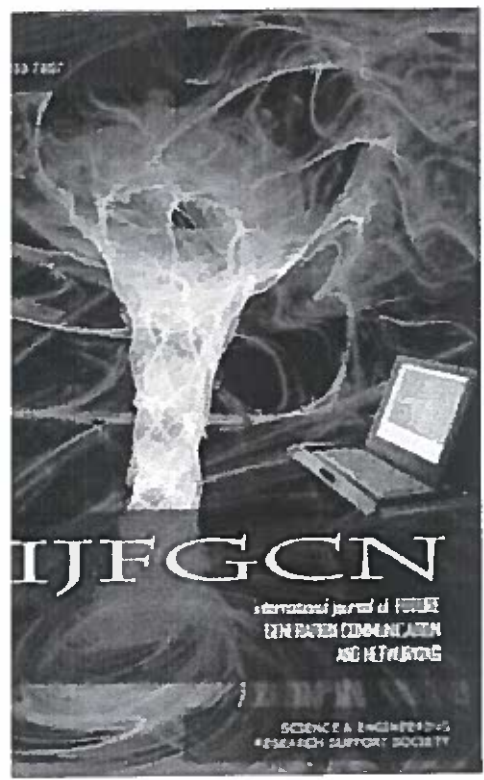
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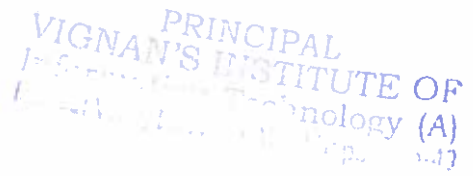
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DYNAMIC MODELING AND SIMULATION OF ELECTRIC VEHICLES

P. Suresh Kumar¹, Ramesh Kumar Patro², V. V. Sai Santoshi³, Madisa V G Varaprasad⁴

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Received: 14 March 2020 Revised and Accepted: 8 July 2020

ABSTRACT: This paper presents the benefits of EV's with conventional IC vehicles. Along with that we discuss about various Motor drive technologies (MDT), Battery charging technologies (BCT), Energy source technologies, configurations of EV's and HEV's. Based on the dynamic modeling of EV's we reduce the tractive effort on the Electric vehicles.

KEYWORDS: Electric vehicles (EV's), Hybrid Electric Vehicles (HEV's), Internal Combustion Engine (IC Engine).

I. INTRODUCTION

It seems the population has been increasing globally to around 10 billion by 2050. And if all these vehicles are of IC Engine type then all the cities will be covered by smog and severe air pollution. This leads to damage of health, As per Air Research Board in California almost 9000 people die due to fine air dust particles. So the only promising solution to reduce this is by using EV's and HEV's [1],[2]. So based on the benefits of EV's we study about the Dynamic modeling of Electric vehicles to develop an efficient Hybrid Electric Vehicle which consumes less energy, more efficient, less emissions.

Electric vehicles can be classified into different types on the terms of energy sources, propulsion devices, energy carriers that are uses as medium to transfer energy to propulsion devices from energy sources.

II. EV'S BASED ON VARIOUS INPUT METHODS

Electric vehicles are mainly classified into different types based on the various input methods adopted the table below shows the classification of different EV's.

Types of Electric Vehicles	Propulsion type	Energy carriers	Energy sources
Micro Hybrid EV'S	IC Engine + motor	Liquid fuel+ Electricity	Liquid fuels+ Battery
Mild Hybrid EV'S			
Full Hybrid EV'S			
Plug in Hybrid EV's			
Range Extended EV's			
Battery EV's	Electric motor	Electricity	Battery
Ultra fly wheel EV's			Ultra fly wheel
Ultra capacitor EV's			Ultra capacitor
Fuel cell and Battery			Hydrog



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A SURVEY ON ANOMALY DETECTION OF BIG DATA USING MACHINE LEARNING TECHNIQUES

ASWADHATI SIRISHA ¹, B. PREMAMAYUDU ²

Research Scholar¹ Department of Information Technology, VFSTR Deemed to be University, GUNTUR, Andhra Pradesh, India.

Professor ² Department of Information Technology, VFSTR Deemed to be University, GUNTUR, Andhra Pradesh, India.

Abstract

As we know that there is a tremendous increase in data in the new era, the processing of information is becoming a challenging issue for the human beings. There may be many potential and useful values that are hidden in that information, but to provide privacy for such information plays a main role in the administrators. In current days there is a huge demand for an intrusion detection system for detecting unknown attack patterns. There is a lot of research work going on to identify the anomaly on big data, but no technique is a complete success in identifying and preventing the anomaly in a pro-active manner. Anomaly detection is one of the primary issues in which agitation of normal behavior indicates a presence of intended or unintended induced attacks, defects, and external attacks. Almost all the useful information is stored in the database, if there is an attacker who try to create an attack on that data, the privacy of information will be lost and a lot of users need to suffer from a negative outcome. In this research thesis, we nearly provide the review of more than 10 research papers suggesting various methods adopted for the effective anomaly detection of big data clustering using machine learning techniques. In each and every research topic there is one part discussing more about the importance of several anomaly detection schemes for identifying normal and anomalies in a network anomaly data and another paper discussing the cons of the previous paper. Eventually, the research issues and gaps of various big data anomaly detection techniques are presented in a single paper for benefiting the researchers for inception towards better big data clustering.

Keywords:Intrusion Detection System, Machine Learning Techniques, Anomaly Detection Schemes, Network Anomaly Data, Inception, Big Data Clustering.

1. INTRODUCTION

Big data is the term for a collection of large number of data sets with its complex nature and becomes very tough by the traditional data processing tools. Big data is also known as V3 in turn categorized as

- 1) Volume (large amounts of data)
- 2) Variety (includes different types of data) and
- 3) Velocity (constantly accumulating new data)

This term 'big data' is evolved due to because of some situation where the data become big based on their volume, velocity, or variety exceed the abilities of IT systems to store, analyse, and process them. In general the same big data is added with extra two more V's like Veracity, Value and totally big data can be summarized as 5V's. Big data are not just about lot of data; they are actually a new concept providing an opportunity to find a new insight into the existing data. In the procedure of information extraction different types of objects are present for retrieval which may vary from one type to other depending on the user on the requirement like text documents, images, pdfdocuments, audiofiles, videofiles, maps and a lot more[1].

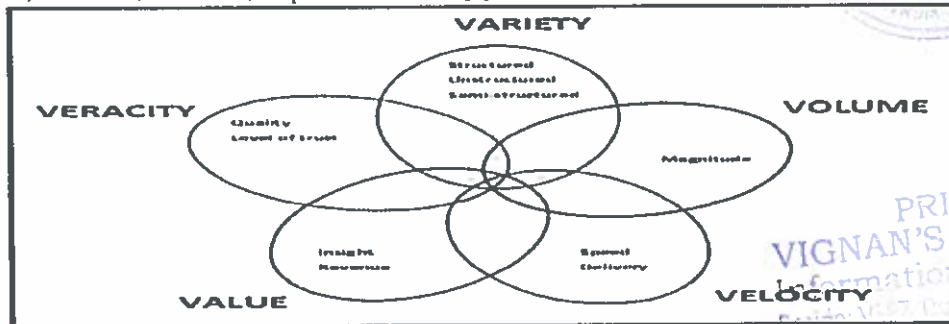


Figure 1. Denotes the Sample Big Data Architecturewith Five V's

A novel reconfigurable G shaped patch antenna for wireless IoT applications using BAR64-02W PIN diode

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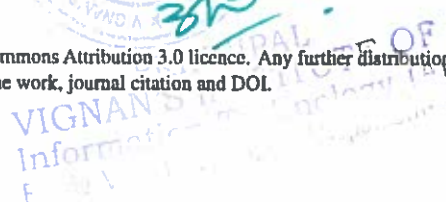
⁴Department of E.E.E., Vignán Institute of information technology, Duvvada, 530049, India

Abstract. In this paper, a novel reconfigurable antenna for wireless IoT operations is proposed. The antenna dimensions of $27.5 \times 8 \times 0.8 \text{ mm}^3$ and fabricated on the FR-4 dielectric substrate with a half ground plane. The designed antenna works in the frequency range of WiMAX, I.S.M. and X band (3.2-3.8 GHz, 5.2-6.9 GHz, and 7.1-10 GHz). The frequencies can be reconfigured by one P.I.N. diode BAR64-03W, and antenna attained the gain ranging of 2.84-3.26 dBi. The proposed antenna has bidirectional radiation at higher-frequency bands and unidirectional at lower frequency bands. The suggested frequency reconfigurable antenna has a radiation efficiency of 96.12% at 3.5 GHz and 94.34% at 5.9 GHz, 92.02% at 8.4 GHz in ON state. Antenna giving the best agreement between the measured and simulated results (C.S.T. Microwave Studio)

1. Introduction

Due to rapid growth in the communication field, the number of applications is increasing daily. Therefore, different novel antennas are proposed to meet the needs of these applications. These antennas are lightweight, low profile and compact. Space is the primary constraint in mobiles, satellites, and automobiles. Due to this, the reconfigurable antenna is employed. By using one reconfigurable antenna, we can use it for different wireless IoT applications.

Tong Li in [1] proposed a bowtie antenna Wi-Fi, Wi-MAX, and WLAN implementations. The actual electrical length of the antenna can modify by utilizing P.I.N. diodes over the arms of the bowtie, resulting in an electrically tunable working band. S. W. Cheung et., al. Introduced in [2], a light weight frequency-reconfigurable slot antenna has been equipped by a broad fine-tuning array for the cognitive telephone system. The antenna comprises of a four-sided slot, a T-shaped flip-flopped stub, double varactors along with a T-shaped feed line on the other side of the substrate. Ruina Lian et., al. Proposed Reconfigurable F.P. resonator antenna with high-gain polarisation for WI-MAX/WLAN products. The planned antenna uses a P.R.S. coating as the central part of the F.P. space, and the primary source is a slot-combined patch array. The wide 3-dB gain bandwidth is realized by designing the P.R.S. layer to have as full a band as possible a reflective phase with a positive slope over, while the reconfigurable polarization is obtained by using a patch set that can toggle between horizontal and vertical polarizations as a feeder. The manufactured antenna prototype achieves a return loss in a range from 2.2 GHz to 2.72 GHz higher than 10 dB [3]. Vamsee et., al. Proposed [4] reconfigurable notch band antenna using pin diodes for S-band, C-band, and X-band applications. A novel reconfigurable bandpass filtering antenna is proposed in [5]. Two filters are used to allow specific band frequencies





Document details - Design and Performance Analysis of Textile Antenna for Wearable Applications

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International Conference on Advanced Communication Technologies and Signal Processing, ACTS 2020
4 December 2020, Article number 9350489
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Design and Performance Analysis of Textile Antenna for Wearable Applications(Conference Paper)

Roy, S., Guru, S., Debnath, S.

^aVignan's Institute of Information Technology, Ece Department, Visakhapatnam, India

^bNit Silchar, Ece Department, Silchar, India

Abstract

A Textile antenna for wearable body applications is designed and analyzed in this article. The antenna is designed on low cost flexible Jean's substrate. The design and analysis of the antenna has been carried out with no slot, one slot and varying ground width. The proposed antenna is analyzed in bent conditions and human body model using electromagnetic simulator HFSS. The prototype of the antenna is fabricated manually using copper sheet and analyzed the result after placing it on various parts of the human body as well as on a cylindrical foam sheet. The measured results shown good agreement with simulated ones. © 2020 IEEE.

Author keywords

HFSS Textile Antenna WBAN

Indexed keywords

Engineering controlled terms:

Electromagnetic simulation Signal processing Slot antennas Textiles

Engineering uncontrolled terms

Copper sheets Design and analysis Electromagnetic simulators Human body modeling Measured results Performance analysis Textile antennas Wearable applications

Engineering main heading:

Wearable antennas



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Sponsors: IEEE Kolkata Section
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SciVal Topic Prominence ①

Topic:

Prominence percentile: ①

Studying the Applications of Linear Programming in Basic Science and Engineering Curriculum

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¹Professor, Department of Mathematics, OPJS University, Churu, Rajasthan, India

²Associate Professor, Department of Mathematics, Vignan's Institute of Information Technology(A), Visakhapatnam.

Abstract – Linear Programming deals with the statistical data to maximize or minimize the given function of variables. It provides the complete structure of Linear Programming. Considering the assumptions we can determine the different test statistics in Linear programming models like transportation, Variation transportation, unbalance business supply and demand problems, Degeneracy and its resolution problems etc., LPP provides different methods of finding initial feasible solutions with given data. Graphical Method representations can be utilized for representation of test statistics for easy understanding. Simplex applications, Penalty methods, Least Cost Approximation Methods, Degeneracy methods are the major applications in Linear Programming Solutions. Properties of LPP and graphical method of solving a LPP with distinct variable cases Dual form, are also discussed in this Study of Research paper. Solving the Analytical problems using Matrix form of LP, Two Phase method approaches, Computational procedure of Simplex methods, Artificial Variable Techniques are also discussed in this Study of Linear Programming Problem.

Key Words: Artificial variable, Degeneracy, Dual form, Graphical method, Penalty method, Simplex method, Two phase method,

1. INTRODUCTION

Linear programming provides the optimisation of a function of variables known as objective functions. It consists set of linear equalities or inequalities. In evaluation methods we consider the approach as mathematical technique which involves the allocation of limited resources in a optimal manner. Properties of Linear Programming Problems with distinct approaches are discussed in this Research method. In majority of cases we use simplex method using the Linear Programming Problem. In case of more than two variables Graphical solution is not possible in such stages for further evaluation we use Simplex method. In general simplex method provides a systematic mathematical algorithm which consists of moving from one basic feasible solution to another basic feasible solution in a systematic manner so that the values of the objective functions is improved at each level.

One of the most important discoveries in the early development of linear programming was the concept of duality and its division into important stages. The optimal solution of given problem reveals information related to the optimal solution of the other. If we know the optimal solution result then the optimal solution of the other is readily available. Formulation of LPP in standard form, Graphical solution of two variables, Geometric properties of LPP, Standard form of LPP, Introduction of surplus and slack variables, matrix form of LPP, Applications of LPP and their Advantages, Artificial variable approach methods, Penalty methods are introduced in Linear Programming Optimization in Business Statistics and Science and Engineering Organizations.

2. FORMULATION OF LPP

In any given statistical Analysis if we consider products x_1, x_2 elements respectively in A, B Objective functions such that then the objective function can be represented in terms of Objective function $Z = x_1 + x_2$

Example-1 : If a company produces two types of chairs. Each chair of the first type requires twice as much labor time as the second type. If all chairs are of the second type only, the company can produce a total of 300 chairs a day. The market limits daily sales of the first and second type to 100 and 200 chairs. Assuming that the profits per chairs are Rs.10 for type A and Rs.6 for type B, formulate the problem as a linear programming model in order to determine the number of chairs to be produced of each type so as to maximize he profit.

Example-1: From the given statistics Objective function for profit :

$$\text{Max}(z) = 10x_1 + 6x_2$$

$$\text{Stc:- } 2x_1 + x_2 \leq 300 ; \text{ where } x_1 \leq 100 \text{ and } x_2 \leq 200$$

Considering there will not any negative quantities such that $x_1, x_2 \geq 0$

2.1 Decision Variables

The given variables which are required to be determined using distinct approach methods are said to be decision variables!

Example-2 : If $8x_1 + 10x_2 \leq 24$ is an equation then a Slack variable(s_1) must be added on LHS of inequality.



Document details - A Study: Machine Learning and Deep Learning Approaches for Intrusion Detection System

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Lecture Notes on Data Engineering and Communications Technologies

Volume 44, 2020, Pages 845-849

A Study: Machine Learning and Deep Learning Approaches for Intrusion Detection System(Book Chapter)

Sekhar, C.H., Rao, K.V.

Department of Computer Science and Engineering, Vignan's Institute of Information Technology, Visakhapatnam, India

Abstract

System security is one of the real worries of the difficult time. With the fast advancement and monstrous utilization of web over the previous decade, the vulnerabilities of system security have turned into an important issue. Interruption identification framework is utilized to distinguish unapproved get to and uncommon assaults over the verified systems. High volume, assortment and fast of information produced in the system have made the information examination procedure to identify assaults by conventional strategies extremely troublesome. To comprehend the present status of usage of Machine and Deep learning methods for tackling the interruption recognition issues, this study paper listing out the related examinations in the continuous period focusing. This overview paper gives the various models of the detection system and briefly on Machine and Deep learning algorithms. © 2020, Springer Nature Switzerland AG.

Author keywords

Deep Learning Intrude Intrusion Detection Machine Learning

Indexed keywords

Engineering controlled terms:

Intrusion detection Learning algorithms Learning systems

Engineering uncontrolled terms

Detection system High volumes Intrusion Detection Systems Learning approach Learning methods On-machines Present status System security

Engineering main heading:

Deep learning

Cited by 3 documents

Fu, J.-J., Zhang, X.-L.

Gradient importance enhancement based feature fusion intrusion detection technique

(2022) Computer Networks

Sekhar, C., Kumar, P.H., Venkata Rao, K.

A Comparative Study on Network Intrusion Detection System Using Deep Learning Algorithms and Enhancement of Deep Learning Models Using Generative Adversarial Network (GAN)

(2022) Lecture Notes in Electrical Engineering

Zhong, W., Yu, N., Ai, C.

Applying big data based deep learning system to intrusion detection

(2020) Big Data Mining and Analytics

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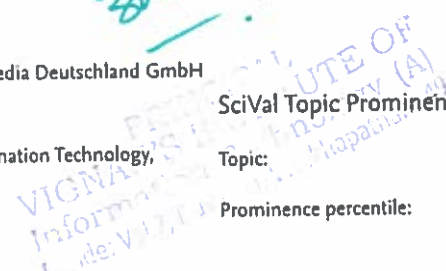


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Publisher: Springer Science and Business Media Deutschland GmbH

Sekhar, C.H.; Department of Computer Science and Engineering, Vignan's Institute of Information Technology, Visakhapatnam, India;

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Document details - Construction of small twin reverberation chamber for measurement of sound transmission loss

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Proceedings of 2020 International Congress on Noise Control Engineering, INTER-NOISE 2020
 23 August 2020
 49th International Congress and Exposition on Noise Control Engineering, INTER-NOISE 2020; Seoul; South Korea; 23 August 2020 through 26 August 2020; Code 166585

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Construction of small twin reverberation chamber for measurement of sound transmission loss(Conference Paper)

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Reddi, Ch.V.S.N., Somi Naidu, B.

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¹Aditya Engineering College, Department of Mechanical Engineering, Surampalem, Andhra Pradesh, India
²Vignan's Institute of Information Technology, Dept. of Mechanical Engineering, Duwada, Visakhapatnam, Andhra Pradesh, 530051, India

Authors > Keywords >

Abstract

Acoustics has become fundamental in daily life of human beings. The scope for noise control is growing there by for quieter ambience best sound absorbing material is needed. In order to develop market ready and efficient sound absorbing material, enormous amount of research is taking place among small and large industry suppliers. But, the testing set up for acoustic material property determination is not readily available and in majority of the cases it is distantly located and costlier. There is great deal of adequacy to build testing chambers with less space and cost. The present work is intended to build a low cost reverberation chamber for measurement of sound transmission loss coefficient (STC) at real time random noise atmosphere. The reverberation chamber consists of two small chambers namely source and receiver rooms with volume capacity of 5 m³ and 6 m³. The base and ceiling of both the chambers are pentagonal in shape and are inclined to each other. All the walls of both chambers are constructed such a way that no two walls are parallel to each other and all are fully reflective. This is to ensure complete sound diffusivity inside both the chambers. The corners of the chambers are sealed with acoustic sealant and wall panels are separated using neoprene rubber sheets to avoid any air leaks. The chambers are isolated from the ground using nylon wheels to avoid ground vibration transmissions. The chambers are made up of teak wood frames and are treated with glass wool of density 50kg/m³ and 50 mm thick and covered with plywood sheets which acts like walls. The outer layer of the plywood sheet is covered with fully reflective acrylic sheet. In order to ensure the correctness of measurements sound diffusivity measurement as per ASTM E90, Reverberation time measurement as per ASTM C423, Field transmission loss measurement as per ASTM E336 and flanking transmission loss measurement are performed. Measurement procedures of this small twin reverberation chamber adhere to ISO 10140-2:2010 and ISO 101420-4:2010. Samples of size 2' x 2' for various thickness can be tested. The sound transmission loss coefficient is determined as per ASTM E90 procedure. The results from the constructed reverberation chamber are verified with standard samples. © Proceedings of 2020 International Congress on Noise Control Engineering, INTER-NOISE 2020. All rights reserved.

Indexed keywords

Engineering controlled terms:

- Acoustic variables control
- Acoustic wave absorption
- Acoustic wave propagation
- Acoustic wave transmission
- Anechoic chambers
- Architectural acoustics
- Plywood
- Reverberation
- Transmissions
- Vibrations (mechanical)
- Wood products

Engineering uncontrolled terms

- Acoustic materials
- Diffusivity measurements
- Flanking transmission
- Measurement procedures
- Reverberation chambers
- Reverberation time
- Sound absorbing materials
- Sound transmission loss

Engineering main heading:

- Acoustic noise





Document details - Experimental investigation on performance of composite acoustic cement panel using recycled SMB waste

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Experimental investigation on performance of composite acoustic cement panel using recycled SMB waste(Conference Paper)

Viswanath Mantha, S.R., Joladarashi, S., Reddi, Ch.V.S.N.

^aNational Institute of Technology Karnataka, Dept. of Mechanical Engineering, Surathkal, Mangalore, 575025, India

^bAditya Engineering College, Dept. of Mechanical Engineering, Surampalem, Andhra Pradesh, 530051, India

^cVignan's Institute of Information Technology, Dept. of Mechanical Engineering, Duvada, Visakhapatnam, Andhra Pradesh, 530046, India

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Abstract

Recycling of E-waste is most viable and sustainable solution for handling environmental pollution which is a major requirement. Surface mounted boards (SMB) comprises of various materials such as Metals and Nonmetals. These boards are considered for E-waste study and this waste after crushing and sieving is used as a partial replacement of sand in cement and fly ash brick manufacturing. In which, sieved surface mounted boards waste in different percentages ranging from 0%,5%,10%,20% & 25% is used as replacement of sand. Along with these, 3% polypropylene is also used to enhance the compressive strength by maintaining mixture ratio of 1:3 (cement: sand). Compressive strength after 28 days is measured and noticed that addition of 3% polypropylene resulted in increase of compressive strength in the compositions of 0% & 5% SMB sieve but in later compositions its effect is not much seen. Sound absorption coefficient is measured for these samples using two microphone impedance tube test-setup with plane wave excitation as per ISO 10534:2 to determine acoustics properties. © Proceedings of 2020 International Congress on Noise Control Engineering, INTER-NOISE 2020. All rights reserved.

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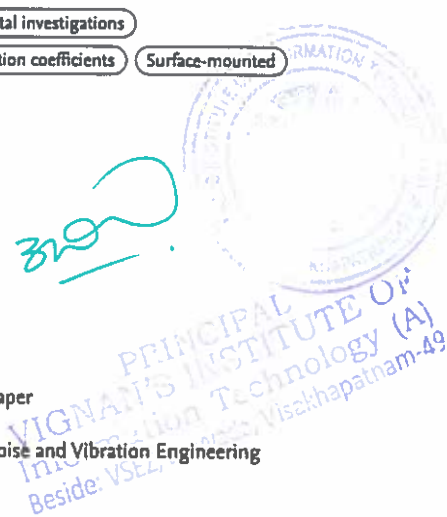
- Acoustic impedance
- Acoustic noise
- Acoustic variables control
- Acoustic wave absorption
- Cement industry
- Cement manufacture
- Cements
- Electronic Waste
- Fly ash
- Plastic recycling
- Polypropylenes
- Sound insulating materials

Engineering uncontrolled terms

- Acoustics property
- Environmental pollutions
- Experimental investigations
- Partial replacement
- Plane wave excitation
- Sound absorption coefficients
- Surface-mounted
- Sustainable solution

Engineering main heading:

- Compressive strength



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Original language: English

Document Type: Conference Paper
Volume Editors: Jeon J.Y.
Publisher: Korean Society of Noise and Vibration Engineering



Document details - Comparative study on sound absorption coefficient of various jute composite materials

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Comparative study on sound absorption coefficient of various jute composite materials(Conference Paper)

Somi Naidu, B., Pitchaimani, J., Reddi Chintapalli, V.S.N., Somi Naidu, B.

^aDepartment of Mechanical Engineering, National Institute of Technology Karnataka, Surathkal, Mangalore, Karnataka, 575 025, India

^bDepartment of Mechanical Engineering, Aditya Engineering College, Surampalem, Kakinada, Andhra Pradesh, 530051, India

^cDepartment of Mechanical Engineering, Vignans Institute of Information Technology, Duvvada, Visakhapatnam, Andhra Pradesh, 530051, India

Abstract

Natural fibre composites are getting attention in noise reduction applications replacing conventional materials. They are being used in passive noise control in which jute is showing its prominence. Though conventional sound absorbing materials are used for passive control, they can be replaced by natural fibres as they are abundantly available and are inexpensive. The present work is to test samples prepared from various jute materials with epoxy resin as bonding agent. Jute materials used for study are jute mats 190GSM, 420GSM and felt woven jute composites. Plain jute mat samples are designated as JM composites and samples prepared in combination of jute mat and felt woven jute are designated as JMW. The sound absorbing coefficient study is carried out experimentally using two microphone impedance tube test setup as per ISO 10534-2. Sound absorption coefficient comparative studies are carried out on perforated and sandwiched samples with air gap. It is observed that layered felt woven jute composites are having higher sound absorption coefficient than jute mat composites when several combinations of these are analyzed. This might be due to felt woven jute composites are having lesser density. Maximum noise reduction coefficient of 0.97 at 1250 Hz and 0.96 at 622 Hz in 1/3rd octave frequency band is obtained for 190GSM and 420GSM layered felt woven jute composites respectively. Maximum noise reduction coefficient of 0.93 at 922 Hz is recorded for 190GSM mat and felt oven jute composite samples with 20 mm thickness and 10 mm air gap. A comparative study is carried out between jute composites and glass wool fibre with 50 mm thick. It is observed that 420GSM samples are having better sound absorption properties than 190GSM sample in low frequency band because of better bonding capabilities. © Proceedings of 2020 International Congress on Noise Control Engineering, INTER-NOISE 2020. All rights reserved.

Indexed keywords

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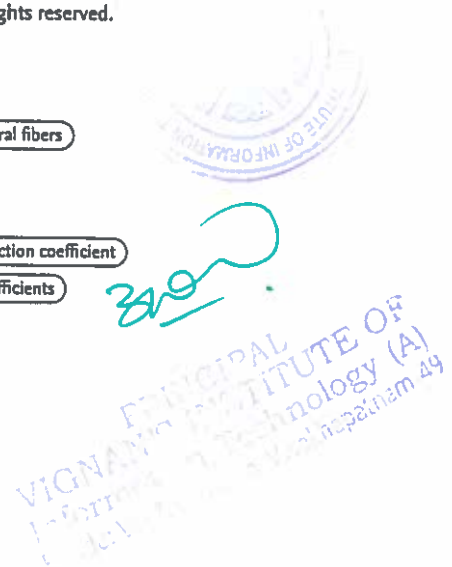
- Acoustic noise
- Acoustic variables control
- Epoxy resins
- Felt
- Felts
- Natural fibers
- Noise abatement
- Reduction
- Sound insulating materials

Engineering uncontrolled terms

- Conventional materials
- Natural fibre composites
- Passive noise control
- Reduction coefficient
- Sound absorbing coefficients
- Sound absorbing materials
- Sound absorption coefficients
- Sound absorption property

Engineering main heading:

- Acoustic wave absorption





Document details - Enhancing noise control in an acoustic cavity using mis-tuned embedded Resonators and Quarter wave tubes

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Enhancing noise control in an acoustic cavity using mis-tuned embedded Resonators and Quarter wave tubes(Conference Paper)

Reddi, C.V.S.N., Anusha, P.

¹Aditya Engineering College (Autonomous), Department of Mechanical Engineering, Surampalem Kakinada, India
²Vignana's Institute of Information Technology (Autonomous, Department of Mechanical Engineering, Visakhapatnam, India

Abstract

Helmholtz resonators (HRs) and Quarter wave tubes are used in acoustic cavities for low frequency noise reduction. The focus of this paper is to enhance the noise control inside an acoustic cavity using mis-tuned resonators and quarter wave tubes. A non-parallel pentagonal room with rigid wall boundary is considered as acoustic cavity. The acoustic cavity mode frequencies and detuned modes of the resonator and quarter wave tube are calculated using 3D finite element method using commercial software ANSYS [12]. The analysis is carried out by coupling each of the resonators and Quarterwave tubes to fundamental cavity mode and its split mode, higher order modes of acoustic cavity and their split modes. Similarly, to higher amplitude modes and their split modes. Later, through experimentation a combination of resonators and tubes tuned to low and medium frequencies are embedded in polyurethane foam and are analysed by coupling to the acoustic cavity. The results shows that the amount of noise reduction inside the coupled acoustic cavity is more when multiple resonators and quarter wave tubes which are tuned to various higher amplitude modes of cavity and their split modes. The analysis also shows the amount of noise reduction inside acoustic cavity depends on the coupling of several of these components tuned to various higher amplitude cavity and split mode frequencies. This study provided a solution to the suppression of split mode frequencies, an unwanted noise that is generated in resonator coupling. Numerical results are verified over various cavity geometries and amount of noise reduced is determined using experiments. © Proceedings of 2020 International Congress on Noise Control Engineering, INTER-NOISE 2020. All rights reserved.

Indexed keywords

Engineering controlled terms:

- Acoustic fields
- Acoustic noise
- Acoustic variables control
- Noise abatement
- Spurious signal noise
- Tubes (components)

Engineering uncontrolled terms

- 3-D finite element method
- Commercial software
- Embedded resonators
- Helmholtz resonators
- Higher-order modes
- Low-Frequency Noise
- Multiple resonators
- Resonator coupling

Engineering main heading:

- Acoustic resonators





Document details - Synthesis and anticancer activity of novel pyrazolo[4',3':5,6]pyrano[2,3-d] pyrimidin-5(2H)-one derivatives

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Volume 28, August 2020, Article number 100471

Bennani, F.E., Doudach, L., Karrouchi, K.

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(2023) *Computational Toxicology*

Apparao, B., Robert, A.R., Kumar, M.M.K.

Design of novel 2-amino-pyrans via a green and facile one-pot multicomponent protocol using RuO₂/Al₂O₃ as reusable catalyst

(2023) *Research on Chemical Intermediates*

Singh, K., Malhi, D.S., Singh, B.

Synthesis and Antimicrobial Evaluation of Some Novel 2-[4-Substituted 5-(ethoxycarbonyl)-3... Acid Derivatives

(2023) *Russian Journal of Organic Chemistry*

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Synthesis and anticancer activity of novel pyrazolo[4',3':5,6]pyrano[2,3-d] pyrimidin-5(2H)-one derivatives(Article)

Gorle, S., Gangu, K.K., Maddila, S., Jonnalagadda, S.B.

^aDepartment of Chemistry, GITAM Institute of Sciences, GITAM University, Visakhapatnam, Andhra Pradesh, India^bSchool of Chemistry & Physics, University of KwaZulu-Natal, Westville Campus, Chiltern Hills, Durban, 4000, South Africa^cVignans Institute of Information Technology (VIIT), Duvvada, Visakhapatnam, Andhra Pradesh 530049, India

Abstract

A novel sequence of pyrazole connected pyrano[2,3-d]-pyrimidin-5(2H)-one derivatives (6a-j) were designed, prepared and screened for their cytotoxicity against four human cancer cell lines like MCF-7 (breast), HeLa (cervical), CaCo2 (colorectal) and HepG2 (liver) by MTT assay. Most of the tested molecules were exhibited good to excellent cytotoxicity against all tested cell lines when compared to the standard drug Doxorubicin. Amongst all the synthesized target compounds, the molecules (7e & 7d) exhibited the excellent anticancer activity against all the human MCF-7, HeLa, CaCo2 and HepG2 tumor cell lines, with the inhibitory concentration (IC₅₀) values of 14, 14, 13, & 16 μg mL⁻¹ and 16, 14, 15 & 17 μg mL⁻¹, respectively, while, molecules (7f & 7i) revealed good inhibitory activity against all screened cell lines with the IC₅₀ values of 22, 25, 25 & 24 μg mL⁻¹ and 21, 20, 21, & 20 μg mL⁻¹. All the novel target molecules were determined and characterized by various spectroscopic (¹H NMR, ¹³C NMR and HR-MS) analysis. © 2020

Author keywords

Anticancer activity Pyrano[2,3-d]pyrimidin-5(2H)-ones Pyrazoles Synthesis

Indexed keywords

Engineering controlled terms:

Cell culture Cells Lanthanum compounds Molecules Spectroscopic analysis

Engineering uncontrolled terms

Anticancer activities Cancer cell lines Cell lines Doxorubicin Human cancer cells
MTT assays Pyrano[2,3-d]pyrimidin-5(2h)-one Pyrazoles Synthesised Target compound

Engineering main heading:

Synthesis (chemical)

Funding details

Funding sponsor

Funding number

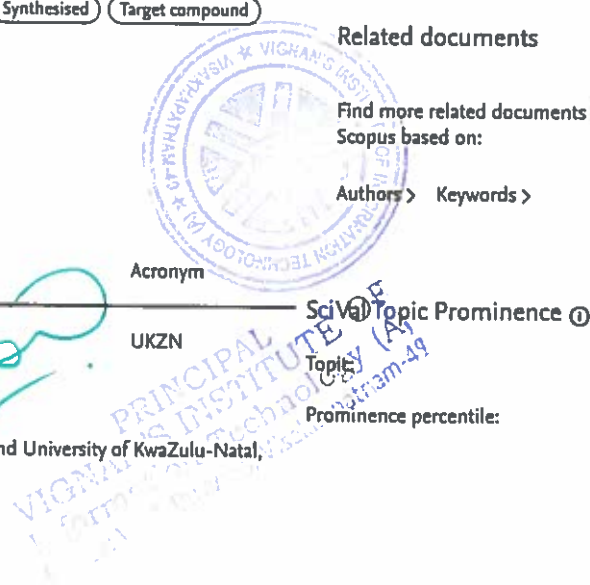
Acronym

Inyuvesi Yakwazulu-Natali

UKZN

Funding text

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Document details - A case study of service firm to optimize the cycle time – advanced lean techniques to design plant layout

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Volume 59, 2020, Pages 1609-1634

2nd African International Conference on Industrial Engineering and Operations Management, IEOM 2020; Harare; Zimbabwe; 7 December 2020 through 10 December 2020; Code 257779

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A case study of service firm to optimize the cycle time – advanced lean techniques to design plant layout(Conference Paper)

Kamma, T.K., Shankar, N.V.S., Jajimogala, S., Rama Krishna, S., Shabana

^aDepartment of Mechanical Engineering, Vignan Institute of information Technology, Duvvada, Visakhapatnam, 17, India

^bDepartment of Mechanical Engineering GITAM, Rushikonda, Visakhapatnam, 45, India

Abstract

Plant layout and design plays a very important role in the design and engineering phases of any industrial facility. Implementation of lean manufacturing principles and believing in continuous improvement are the tools which help industries to sustain global competition. With the escalation in population, the demand for technology is increased more than ever. This leads to the steady increase in production rates of existing models and even introduction of new product models. These factors often results in "layout modification" of manufacturing industries. This study simplifies the application of systematic layout planning in the development of new layout. It is a technique used for layout development and material flow improvement. The results include five possible rearrangements of production departments. These layout alternatives are evaluated on basis of improved accessibility and material flow efficiency criteria. Hence in order to study and modify a service sector plant (Zonal Workshop APSRTC Vizianagaram) has been chosen to carry out the project further. The main aim of study is to understand operations performed with respect to time taken in their assigned station in order to reduce the overall transportation time by either combining different operations, removing machining errors or removing idle stations to reduce the cycle time as well as man power involved. The process improvement activity achievement not only depends on the redesign of the layout but also involves operators' utilization and their position arrangement. The relation between them was computed by taking the man power occupancy on machinery calculations, minimized idling time and changing the work sequence. This study adopts a multifarious approach combining manpower occupancy on machinery, lean manufacturing line balancing and layout improvement in productivity on the product. A comprehensive methodology is adapted to systematically to investigate and analyzes the current situation of wastes elimination of the manufacturing firms. This is followed by waste identification (MUDA) and elimination of unnecessary resources to balance the line and optimize the cycle time and promote lean thinking © IEOM Society International.

Author keywords

[Cycle time](#) [Lean framework](#) [Plant design](#)

ISSN: 21698767
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 Source Type: Conference Proceeding
 Original language: English

Document Type: Conference Paper
 Publisher: IEOM Society

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SciVal Topic Prominence

Topic:





Document details - Investigations on sputter deposited lithium nickel manganese oxide thin film cathodes for micro battery applications

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Materials Today: Proceedings
 Volume 40, 2020, Pages S28-S34
 4th International Conference on Recent Advances in Material Chemistry, ICRAMC 2020; Chennai; India; 19 February 2020 through 21 February 2020; Code 168013

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Patnaik, S.G. , Pech, D.
 Low Temperature Deposition of Highly Cyclable Porous Prussian Blue Cathode for Lithium-Ion Microbattery

(2021) Small

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Investigations on sputter deposited lithium nickel manganese oxide thin film cathodes for micro battery applications(Conference Paper)(Open Access)

Yellareswara Rao, K., Narasimham, S., Narayan, K., Mohan Rao, G.

^aDept. of Physics, Vignan's Institute of Information Technology, Visakhapatnam, Andhra Pradesh 530049, India

^bDept. of Electronics and Communication Engineering, Sai Vidya Institute of Technology, Bangalore, Karnataka 560064, India

^cDept of Instrumentation and Applied Physics, Indian Institute of Science, Bangalore, 560012, India

Abstract

Lithium manganese oxide thin films have been deposited on nickel (Ni) and platinum (Pt) coated stainless steel substrates at room temperature using powder target by Radio Frequency (rf) reactive magnetron sputtering. The samples are exposed to heat treatment at 500 °C to form crystalline phase. Nickel and platinum thin film coatings have been carried out using direct current (DC) sputtering. X-ray diffraction (XRD), X-ray photoelectron spectroscopy (XPS), scanning electron microscopy (SEM) and electrochemical characterizations have been carried out. XPS spectra indicate the presence of all elements present in the powder target. A discharge capacity of 54 mAh mm⁻¹ cm⁻² and 48 mAh mm⁻¹ cm⁻² has been obtained from charge discharge studies in the potential range 2.0 to 4.4 V for the thin film samples deposited on Ni and Pt coated SS substrates correspondingly Charge discharge cycles are conducted up to 40 cycles. © 2020 The Authors. Published by Elsevier Ltd.

Related documents

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SciVal Topic Prominence

Topic:

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Author keywords

Electrochemistry Li-ion battery cathodes Sputtering Thin films XPS

Indexed keywords

Engineering controlled terms:

Cathodes Lithium compounds Magnetron sputtering Manganese oxide Nickel coatings
 Nickel oxide Oxide films Scanning electron microscopy Thin film lithium ion batteries
 X ray photoelectron spectroscopy

Engineering uncontrolled terms

Battery applications Exposed to Li-ion battery cathode Micro battery Powder target
 Radio frequency reactive magnetron sputtering Sputtering Stainless steel substrates
 Thin films cathode Thin-films

Engineering main heading:

Thin films

Funding details

Funding sponsor

Funding number

ECR/2017/001127





Document details - Strength analysis and validation of recycled aggregate concrete

1 of 1

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Materials Today: Proceedings
 Volume 37, Issue Part 2, 2020, Pages 2312-2317
 International Conference on Newer trends and Innovations in Mechanical Engineering, ICONTIME 2020; Trichy, Tamil Nadu; India; 27 March 2020 through 28 March 2020; Code 145098

Strength analysis and validation of recycled aggregate concrete (Conference Paper)

Barhmaiah, B., Priyanka, M.L., Padmakar, M.

Vignan's Institute of Information Technology, Civil Eng. Dept., JNTUK, India

Abstract

This study investigates the effect of recycled aggregate on strength of concrete and the results were compared with virgin aggregate concrete (VAC). The recycled aggregate were collected from many demolished buildings nearby Duvvada in Visakhapatnam city, and laboratory tests was conducted to know the properties of recycle aggregates (RA) and virgin aggregate (VA). From the previous researchers, strength variations observed that approximately at every 25% replacement of RA. So in this study analyse the strength of concrete mixes, at the w/c ratio and mix proportion (i.e. M-30 and M-20) were kept constant at different proportion of RA. Compressive strength (CS) of Recycled Aggregate Concrete (RAC) determined at the age of 3, 7, 14 and 28 days and the flexural strength (FS) conducted at 7 and 28 days. For each grade of concrete five mixes were produced with varying percentage of RA (0%, 25%, 50%, 75%, and 100%). Further strength analysis was continued on M20 grade, by replacing the fly ash with binder at the 50% replacement of RA. Because 0 to 50% replacement of RA % did not have a significant effect on CS, further increment of RA (i.e. 75%) the mixes are not reached the target strength. The strength reduction obtained, 40.81% and 41.20% for both the grades M-20 and M-30 respectively. Only 13% FS reduction was obtained as compared to VAC, so it is considerable. From the results of fly ash concrete observed that up to 25% replacement fly ash didn't get any significant effect on compressive strength. © 2020 Elsevier Ltd. All rights reserved.

Author keywords

Compressive strength Flexural strength Fly ash Recycled aggregate concrete Virgin aggregate concrete

Indexed keywords

Engineering controlled terms:

Bending strength Concrete aggregates Fly ash Recycling

Engineering uncontrolled terms

Aggregate concrete Demolished buildings Laboratory test Recycled aggregate concrete
 Recycled aggregates Strength analysis Strength of concrete Strength reduction
 Virgin aggregate concrete Visakhapatnam

Engineering main heading:

Compressive strength

Cited by 8 documents

Liu, C. , Gao, Y. , Luan, K.
 Size effect on dynamic compressive failure mode and mechanical properties of recycled concrete

(2023) *Structural Concrete*

Zhang, P. , Wang, W. , Zheng, Y.
 Effect of Recycled Aggregate and Slag as Substitutes for Natural Aggregate and Cement on the Properties of Concrete: A Review

(2023) *Journal of Renewable Materials*

Naser, A.H. , Badr, A.H. , Henedy, S.N.

Application of Multivariate Adaptive Regression Splines (MARS) approach in prediction of compressive strength of eco-friendly concrete

(2022) *Case Studies in Construction Materials*

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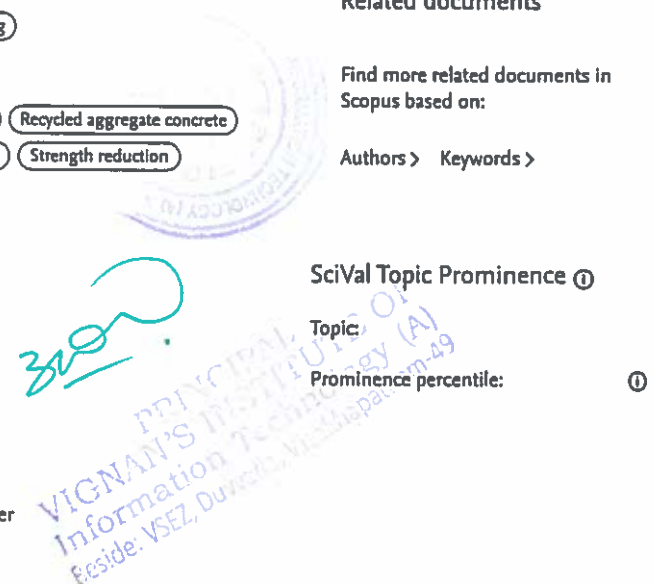
Authors > Keywords >

SciVal Topic Prominence

Topic:
 Prominence percentile:

ISSN: 22147853
 Source Type: Journal
 Original language: English

DOI: 10.1016/j.matpr.2020.07.730
 Document Type: Conference Paper
 Publisher: Elsevier Ltd





Document details - Growth and photoluminescence study of nickel sulfate doped Zinc tris-Thiourea Sulfate (ZTS) crystal

1 of 1

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Materials Today: Proceedings
 Volume 37, Issue Part 2, 2020, Pages 2189-2192
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Growth and photoluminescence study of nickel sulfate doped Zinc tris-Thiourea Sulfate (ZTS) crystal(Conference Paper)

George, R., Patel, I.B., Rathod, K.T.

^aVignani's Institute of Information Technology, Duvvada, Viskhapatnam, India

^bDepartment Of Physics, South Gujarat University, Surat, Gujarat, 395007, India

^cDepartment of Physics, Veer Narmad South Gujarat University, Surat, Gujarat, 395007, India

Abstract

Nickel sulfate doped Zinc tris-Thiourea Sulfate (ZTS) crystal is one of the non linear optical crystals which were successfully grown by applying gel technique. The morphological alteration is observed due to the effect of dopant in the doped crystal. The elemental identification was verified using EDAX test. The orthorhombic structure of the doped crystal was confirmed using powder XRD analysis. The functional groups of Nickel sulfate doped ZTS crystals were observed and recorded by FT IR analysis. The presence of functional groups like as = C-H bend, C-N stretch, C-O stretch, C-C stretch, N-H wag, N-O asymmetric stretch, N-H bend, O-H stretch, N-H stretch etc. were revealed by FTIR analysis. The mechanical strength was assessed in terms of hardness using Vickers hardness measurement. The doped crystal was found to hard material due to the effect of dopant. The excitation spectra and the emission spectra were obtained by Photoluminescence study which was carried out to know the nature of crystal as it possesses insulating nature. The SHG efficiency was significantly enhanced due to doping as confirmed implied by the test with Kurtz-Perry method using Nd: YAG laser. © 2020 Elsevier Ltd. All rights reserved.

Author keywords

Dopant Gel technique NLO crystal Photoluminescence study ZTS

Indexed keywords

Engineering controlled terms:

Crystal structure Emission spectroscopy Fourier transform infrared spectroscopy
 Harmonic generation Neodymium lasers Nickel compounds Nonlinear optics Thioureas
 Vickers hardness Yttrium aluminum garnet Zinc compounds

Engineering uncontrolled terms

Doped crystals Effect of dopants Elemental identifications Gel technique
 Morphological alteration NLO crystals Nonlinear optical crystal Photoluminescence study
 Sulphates Zinc tris-thiourea sulphate

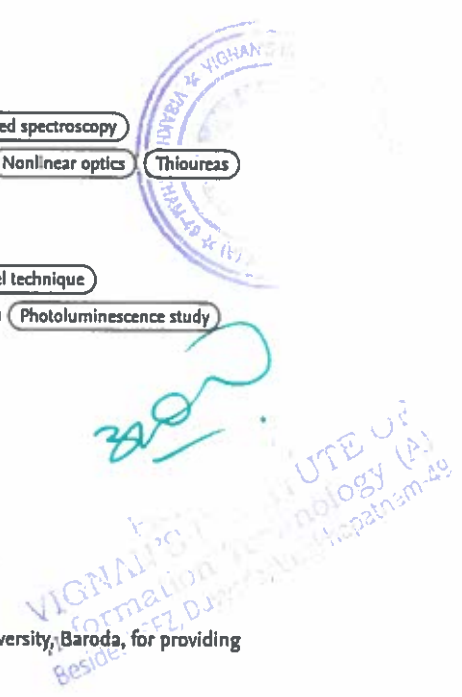
Engineering main heading:

Photoluminescence

Funding details

Funding text

The authors are grateful to Dr. KVR Murthy, Department of applied physics, The M.S.University, Baroda, for providing photoluminescence testing facility.





Document details - Performance analysis of OFDM and FBMC over selective channels

1 of 1

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Materials Today: Proceedings
 Volume 33, 2020, Pages 4237-4242
 2019 International Conference on Nanotechnology: Ideas, Innovation and Industries, ICN 2019; Tamilnadu; India; 12 December 2019 through 14 December 2019; Code 165932

Performance analysis of OFDM and FBMC over selective channels(Conference Paper)

Thammana, A., Sampath Dakshina Murthy, A., Usha Kumari, Ch., Kishore, P.

^aVignans Institute of Information Technology, Visakhapatnam, Andhra Pradesh, India

^bGokaraju Rangaraju Institute of Engineering and Technology, Hyderabad, India

^cVNR Vignana Jyothi Institute of Engineering and Technolog, Hyderabad, India

Abstract

Compared to OFDM, FBMC is the modulation technique that has enhanced spectral characteristics. To support higher data rates over the time and frequency selective channels FBMC plays a crucial role compared to OFDM. Simulation results shows that over flat fading channel, there is no significant changes between OFDM and FBMC, where as in frequency selective and time selective channels. FBMC shows superior performance improvement over Conventional OFDM system. © 2019 Elsevier Ltd. All rights reserved. Selection and peer-review under responsibility of the scientific committee of the International Conference on Nanotechnology: Ideas, Innovation and Industries.

Author keywords

Bit error rate Filtered bank multi carrier systems Frequency selective channel OFDM Power spectral density (PSD)
 Time-selective channel

Indexed keywords

Engineering controlled terms:

Fading channels Nanotechnology Orthogonal frequency division multiplexing
 Power spectral density

Engineering uncontrolled terms

Bit-error rate Filtered bank multi carrier system Frequency selective channel
 Modulation techniques Multi carrier systems Performances analysis Power spectral density
 Selective channels Spectral characteristics Time selective channels

Engineering main heading:

Bit error rate

ISSN: 22147853
 Source Type: Journal
 Original language: English

DOI: 10.1016/j.matpr.2020.07.348
 Document Type: Conference Paper
 Volume Editors: Sakthivel S.,Karthikeyan S.,Palani A.
 Publisher: Elsevier Ltd

Cited by 3 documents

Özkan, E.Y., Hazarika, B.
 Approximation results by fuzzy Bernstein type rational functions via interval-valued fuzzy number

(2023) *Soft Computing*

Swain, C.M.K., Raghu, I., Raiguru, J.

Performance Analysis of OFDM and OQAM/FBMC based Communication Networks under Vehicular Channel Models: A Comparative Study

(2022) *Proceedings - 2nd International Conference on Next Generation Intelligent Systems, ICNGIS 2022*

Vaigandla, K.K., J, B.

Study and analysis of multi carrier modulation techniques – FBMC and OFDM

(2022) *Materials Today: Proceedings*

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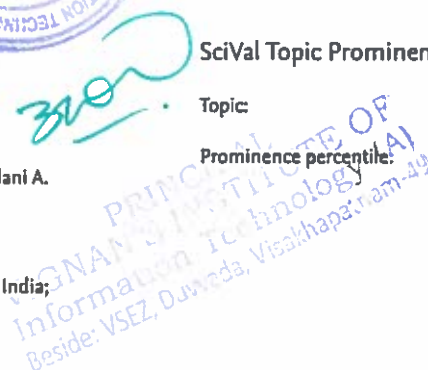
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SciVal Topic Prominence

Topic:
 Prominence percentile: 1

Thammana, A.; Vignans Institute of Information Technology, Visakhapatnam, Andhra Pradesh, India;

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Document details - Design and analysis of roll cage chassis

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Materials Today: Proceedings
Volume 33, 2020, Pages 4450-4457
2019 International Conference on Nanotechnology: Ideas, Innovation and Industries, ICN 2019; Tamilnadu; India; 12 December 2019 through 14 December 2019; Code 165932

Design and analysis of roll cage chassis(Conference Paper)

Aakash, B.E.S.S., Reddy, D.M., Ramachandran, B., Abhishikt, C.B.N.S.

^aDepartment of Mechanical Engineering, Vignan's Institute of Information Technology, Duvada, Visakhapatnam, 530034, India

^bDepartment of Research and Development, NoobTron Pvt. Ltd, Chennai, 600064, India

^cDepartment of Mechanical Engineering, Hindustan Institute of Technology and Science, Padur, 601103, India

View additional affiliations v

Abstract

Despite tremendous advancements in the province of automotive, there has never been a fallback striving to enhance contemporary technology. genuinely seek fulfillment within accessible excellence. Chassis plays the pre-eminent role of a skeleton in an automobile, though the current design of chassis is fully functional, it does not mean that it cannot be enhanced. In this context, the paper proposes a unique ATV chassis design that outsmarting the limitations of the current design. The paper converges on the new design of the roll cage chassis without altering its actual performance and functionality by performing impact and torsional tests to ensure the design is entirely safe. The roll cage is designed in CATIA, and simulation is performed in ANSYS. Two different materials are taken into consideration to run comparative analysis, and the material that renders assuring optimized results is decided to serve the purpose of fabrication. The design stands undeniably in favor of the concrete results predicted. Further studies can be made to add superiority to these outcomes. © 2019 Elsevier Ltd. All rights reserved. Selection and peer-review under responsibility of the scientific committee of the International Conference on Nanotechnology: Ideas, Innovation and Industries.

Author keywords

- ALL-terrain vehicle chassis
- Bump analysis
- CATIA
- Impact tests
- Roll cage
- Torsional test

Indexed keywords

Engineering controlled terms:

- Nanotechnology
- Off road vehicles

Engineering uncontrolled terms

- current
- ALL-terrain vehicle chassi
- Bump analyse
- CATIA
- Design and analysis
- Impact test
- Roll cage
- Terrain vehicles
- Torsional tests
- Vehicle chassis

Engineering main heading:

- Chassis

ISSN: 22147853
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 Original language: English

DOI: 10.1016/j.matpr.2020.07.709
 Document Type: Conference Paper
 Volume Editors: Sakthivel S.,Karthikeyan S.,Palani A.
 Publisher: Elsevier Ltd

Cited by 1 document

Yadav, J. , Kurre, S.K. , Thakur, S.
 Estimation of the dynamic response of roll cage under impact loading by modeling and simulation

(2021) Materials Today: Proceedings

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 Information Technology (A)
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Document details - Skin cancer detection and classification using machine learning

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Materials Today: Proceedings
 Volume 33, 2020, Pages 4266-4270
 2019 International Conference on Nanotechnology: Ideas, Innovation and Industries, ICN 2019; Tamilnadu; India; 12 December 2019 through 14 December 2019; Code 165932

Skin cancer detection and classification using machine learning (Conference Paper)

Krishna Monika, M., Arun Vignesh, N., Usha Kumari, Ch., Kumar, M.N.V.S.S., **Laxmi Lydia, E.**

^aGokaraju Rangaraju Institute of Engineering and Technology, Hyderabad, India

^bAditya Institute of Technology and Management, Srikakulam, Andhra Pradesh, India

^cVignan's Institute of Information Technology, Visakhapatnam, Andhra Pradesh, India

Abstract

Skin cancer is considered as one of the most dangerous types of cancers and there is a drastic increase in the rate of deaths due to lack of knowledge on the symptoms and their prevention. Thus, early detection at premature stage is necessary so that one can prevent the spreading of cancer. Skin cancer is further divided into various types out of which the most hazardous ones are Melanoma, Basal cell carcinoma and Squamous cell carcinoma. This project is about detection and classification of various types of skin cancer using machine learning and image processing tools. In the pre-processing stage, dermoscopic images are considered as input. Dull razor method is used to remove all the unwanted hair particles on the skin lesion, then Gaussian filter is used for image smoothing. For noise filtering and to preserve the edges of the lesion, Median filter is used. Since color is an important feature in analyzing the type of cancer, color-based k-means clustering is performed in segmentation phase. The statistical and texture feature extraction is implemented using Asymmetry, Border, Color, Diameter, (ABCD) and Gray Level Co-occurrence Matrix (GLCM). The experimental analysis is conducted on ISIC 2019 Challenge dataset consisting of 8 different types of dermoscopic images. For classification purpose, Multi-class Support Vector Machine (MSVM) was implemented and the accuracy obtained is about 96.25. © 2019 Elsevier Ltd. All rights reserved. Selection and peer-review under responsibility of the scientific committee of the International Conference on Nanotechnology: Ideas, Innovation and Industries.

Author keywords

ABCD method Classification Dermoscopic images Dull razor method Feature extraction Filters GLCM method MSVM

Indexed keywords

Engineering controlled terms:

Classification (of information) Color Dermatology Diseases Extraction Image classification K-means clustering Median filters Nanotechnology Support vector machines Textures

Engineering uncontrolled terms

Asymmetry, border, color, diameter, method Dermoscopic images Dull razor method Features extraction Filter Gray level co-occurrence matrix method Gray-level co-occurrence matrix Grey-level co-occurrence matrixes Matrix methods Multi-class support vector machines

Engineering main heading:

Feature extraction

Cited by 32 documents

Huang, Q. , Ding, H. , Rashid Sheykhahmad, F.

A skin cancer diagnosis system for dermoscopy images according to deep training and metaheuristics

(2023) *Biomedical Signal Processing and Control*

Olayah, F. , Senan, E.M. , Ahmed, I.A.

AI Techniques of Dermoscopy Image Analysis for the Early Detection of Skin Lesions Based on Combined CNN Features

(2023) *Diagnostics*

Melarkode, N. , Srinivasan, K. , Qaisar, S.M.

AI-Powered Diagnosis of Skin Cancer: A Contemporary Review, Open Challenges and Future Research Directions

(2023) *Cancers*

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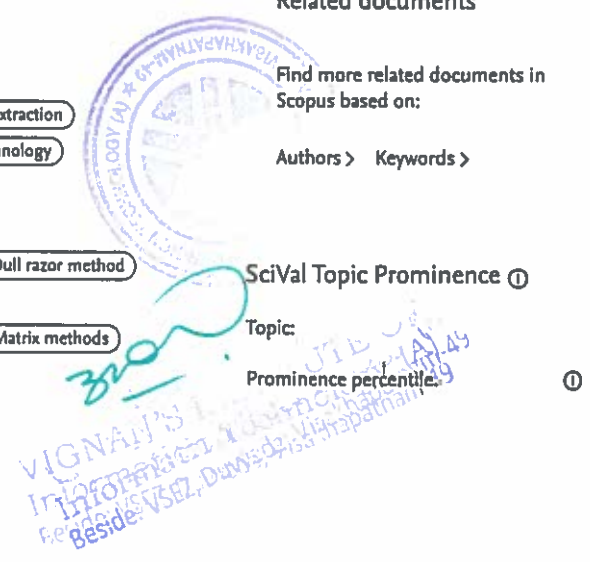
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Document details - Designing of wireless sensor nodes for providing good quality drinking water to the public

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Materials Today: Proceedings
 Volume 33, 2020, Pages 4250-4254
 2019 International Conference on Nanotechnology: Ideas, Innovation and Industries, ICN 2019; Tamilnadu; India; 12 December 2019 through 14 December 2019; Code 165932

Designing of wireless sensor nodes for providing good quality drinking water to the public(Conference Paper)

Usha Kumari, Ch., Laxmi Lydia, E., Sampath Dakshina Murthy, A., Kumar, M.N.V.S.S.

^aGokaraju Rangaraju Institute of Engineering and Technology, Hyderabad, India
^bVignans Institute of Information Technology, Visakhapatnam, Andhra Pradesh, India
^cAditya Institute of Technology and Management, Srikakulam, Andhra Pradesh, India

Abstract

Industrialization and urbanization in India have caused heavy environmental pollution. Most of the surface water had been polluted due to the environmental influence. Providing better quality drinking water to public is also a challenge due to pollution in the ground water and contamination even during distribution. Thus, it is very necessary to have adequate methods and equipment for water protection and drinking water quality measurement is an important aspect for the purpose. The protection of public health is an imperative and the potential of millions of severe effects from water contamination is not unrealistic. There is a need of In-situ monitoring, instant collection and calibration of data rather than manual collection of samples and testing. Wireless Sensor Network (WSN) has paved its significance into various applications. Although manual monitoring of water quality has been done, it requires a lot of labor, time and equipment. So, there is a need to develop a robust and reliable smart system where a real time monitoring of parameters of water quality for different water distribution tanks is done all the while. In this paper, Water Quality Monitoring (WQM) in a predefined Wireless Sensor zone using Zigbee Technology is implemented. Water Quality can be accessed in practical systems through the sensors which send the water quality data to the base station. Now a days, Renewable energy power generation is playing a main role in which Solar power is widely used. Maximum Power Point Tracking (MPPT) Controller improves the efficiency of Solar Power System. In this paper, a flexible, reliable Wireless Sensor Network (WSN) based method of monitoring the quality of water with maximum power point tracking controlled solar PV system is developed. © 2019 Elsevier Ltd. All rights reserved. Selection and peer-review under responsibility of the scientific committee of the International Conference on Nanotechnology: Ideas, Innovation and Industries.

Author keywords

Arduino UNO Sensors Solar panel Wireless Sensor Networks Zigbee

Indexed keywords

Engineering controlled terms: Groundwater, Maximum power point trackers, Monitoring, Nanotechnology, Potable water, Quality control, Sensor nodes, Solar energy, Solar panels, Surface waters, Water tanks, Zigbee

Engineering uncontrolled terms: Arduino UNO, Drinking-water qualities, Environmental influences, Environmental pollutions, Industrialisation, Maximum Power Point Tracking, Public IS, Solar panels, Water protection, Wireless sensor node

Engineering main heading: Water quality

Cited by 3 documents

Ali, M. , Ling, G. , Elmouazen, H.
 Design and Implementation of an Embedded System for Water Quality Monitoring (WQM) Based on Internet of Things (IOT)
 (2023) 2023 7th International Conference on Robotics, Control and Automation, ICRA 2023

Gurusamy, D. , Diriba, G.
 Sensor Network and Energy Harvesting Solutions Towards Water Quality Monitoring in Developing Countries

(2022) Wireless Personal Communications

Sardar, T. , Pandey, S. , Mishra, S.
 Sensing Material and Design of an Optical Sensor for Detection of Arsenic-A Review

(2022) IEEE Sensors Journal

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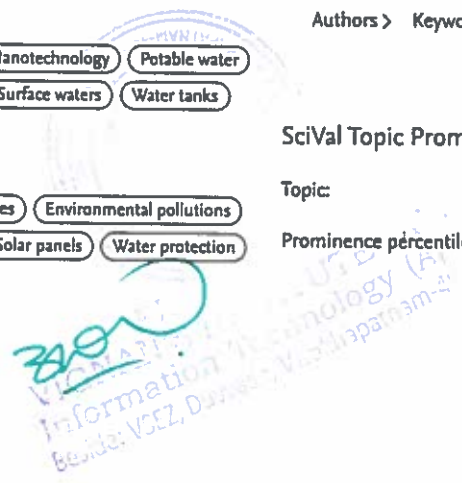
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Document details - Novel deep neural network for individual re recognizing physically disabled individuals

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 Volume 33, 2020, Pages 4323-4328
 2019 International Conference on Nanotechnology: Ideas, Innovation and Industries, ICN 2019; Tamilnadu; India; 12 December 2019 through 14 December 2019; Code 165932

Novel deep neural network for individual re recognizing physically disabled individuals(Conference Paper)

Sampath Dakshina Murthy, A., Karthikeyan, T., Omkar Lakshmi Jagan, B., Usha Kumari, Ch.

^aDepartment of ECE, Vignans Institute of Information Technology (A), Visakhapatnam, Andhra Pradesh, India

^bDepartment of ECE, Annamacharya Institute of Technology and Sciences (A), Rajampet, Andhra Pradesh, India

^cResearch Scholar, Department of EEE, KLEF, Vaddeswaram, Guntur, Andhra Pradesh, India

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Abstract

The MLF-CNN includes a proposition production phase and also a diagnosis stage. In the first stage, they develop an MLF area proposal system and also pop the question to utilize a summation fusion strategy for integration of the two convolution layers. Intelligent video-surveillance is currently an active research industry in pc sight as well as artificial intelligence techniques. It delivers helpful resources for monitoring operators and forensic video private detectives. Individual re-identification (PReID) is one with these tools. Several approaches have been proposed to raise the functionality of PReID. One of the systems, a lot of scientists, made use of deep semantic networks (DNNs) as a result of their far better efficiency and fast completion at exam opportunity. Our objective is to offer potential researchers the job being done on PReID today. © 2019 Elsevier Ltd. All rights reserved. Selection and peer-review under responsibility of the scientific committee of the International Conference on Nanotechnology: Ideas, Innovation and Industries.

Author keywords

CNN Deep neural networks DNN Gait abnormalities K fold cross recognition MLF Physical challenge persons PReID physically disabled individuals Wearable sensors

Indexed keywords

Engineering controlled terms: Nanotechnology Security systems Semantics Wearable sensors

Engineering uncontrolled terms: Deep semantic network Disabled individuals Fusion strategies Gait abnormalities K fold cross recognition MLF Physical challenge person PReID physically disabled individual Production phase Semantics networks

Engineering main heading: Deep neural networks

ISSN: 22147853
 Source Type: Journal
 Original language: English

DOI: 10.1016/j.matpr.2020.07.447
 Document Type: Conference Paper
 Volume Editors: Sakthivel S.,Karthikeyan S.,Palani A.
 Publisher: Elsevier Ltd

Cited by 14 documents

Özkan, E.Y., Hazarika, B.
 Approximation results by fuzzy Bernstein type rational functions via interval-valued fuzzy number

(2023) *Soft Computing*

Qi, Y., Zhou, C., Chen, Y.
 NA-Resnet: neighbor block and optimized attention module for global-local feature extraction in facial expression recognition

(2023) *Multimedia Tools and Applications*

Kar, T., Kanungo, P.
 A gradient based dual detection model for shot boundary detection

(2023) *Multimedia Tools and Applications*

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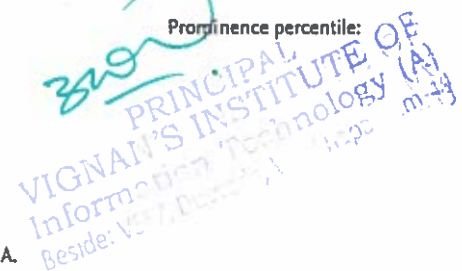
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Volume 12, Issue 7, 2020, Pages 686-696

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^aDepartment of Management Studies, Department of Management Studies, Vignans Institute of Information Technology, Vizag, India

^bDepartment of Sciences & Humanities, Department of Management Studies, Lendi Institute of Engineering & Technology, India

^cDepartment of Sciences & Humanities, Department of Management Studies, CVR College of Engineering, Mangalpally, India

View additional affiliations v

Abstract

The "Human Resource Development (HRD)" will be developing perception today that no organization with long term objectives might give to ignore in instance it requires to attain the principles of quality. The HRD will be a significant element for achievement of any organization. The effective organization of human assets behaves an important part in "management of sound" is a central sub framework of modern management framework. The HRD in banks, under current situation in country will be significant to know bank's contemporary HRD philosophy, preparation and result with a view to provide ideas for formulation of right viewpoint and HRD practices in Banks. The current survey is undertaken considering the nonappearance of organized studied on subject. The nationalization has transformed dimensions & complexion have located the changing responsibilities on shoulders of commercial banks like development branch offices to unbanked and remote rural regions on a enormous scale so as to cover artisans, self-employed persons, small scale sector, cottage and rural industries, weaker sections of the society, small traders and other persons of small means. This manuscript covers all significant regions of HRD in banks. These regions incorporate theoretical explanation about Human Resource and HRD in Banks, fundamentals of HRD, the sub-system of HRD such as Training & Development, Organization Development, Performance Appraisal, Career Planning and Development, Participative Management, Quality Circles etc. It also efforts to know the observation of employees to HRD Climate and how is a bank faring in OCTAPACE culture regarding experience & age. These main regions of HRD are surveyed systematically to most amounts through means of accounts, discussions, reports, and observations etc.

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Author keywords

Banks Human Resource Development Managers OCTAPAC Women Employees

ISSN: 1943023X

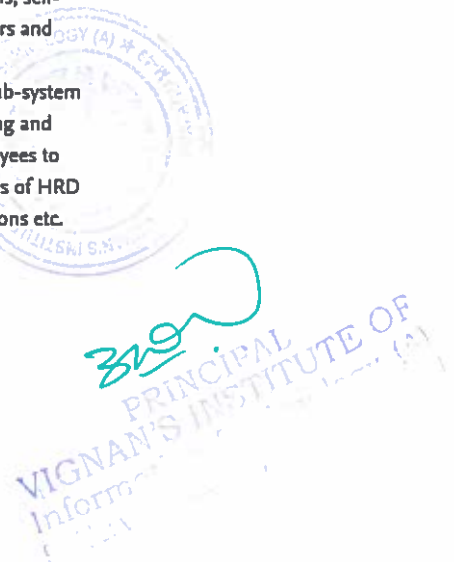
Source Type: Journal

Original language: English

DOI: 10.5373/JARDCS/V12I7/20202051

Document Type: Article

Publisher: Institute of Advanced Scientific Research, Inc.





Document details - Performance Analysis of DYMO and LAR in Grid and Random Environments

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Advances in Intelligent Systems and Computing
Volume 1076, 2020, Pages 255-268
1st International Conference on Embedded Systems and Artificial Intelligence, ESAI 2019; Fez; Morocco; 2 May 2019 through 3 May 2019; Code 239769

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Performance Analysis of DYMO and LAR in Grid and Random Environments(Conference Paper)

Narasimha Raju, K., Satish Kumar, B., Hima Bindu, G., Sharma, S.K.

^aDepartment of CSE, Lendi Institute of Engineering & Technology, Vizianagaram, India

^bDepartment of MCA, Vignani's Institute of Information Technology, Visakhapatnam, India

Abstract

The network formed randomly with moving wireless links in MANETs. Establishing routes to deliver the packets in this kind of network is really a difficult task due to different deployment patterns and mobility of the nodes. The analysis of the protocols helps to test its suitability due to cost aspect before deploying the network in real time. In this paper, the two popular protocols namely DYMO and LAR are analyzed in grid and random environments. Qualnet simulator is used to conduct the experiments. The result states that each protocol has its significance depending on the situation.

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Author keywords

[DYMO](#) [LAR](#) [MANET](#) [Performance](#)

Indexed keywords

Engineering controlled terms:

[Artificial intelligence](#) [Mobile ad hoc networks](#)

Engineering uncontrolled terms

[Performance analysis](#) [Qualnet simulators](#) [Random environment](#) [Real time](#) [Wireless link](#)

Engineering main heading:

[Embedded systems](#)

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Publisher: Springer

Narasimha Raju, K.; Department of CSE, Lendi Institute of Engineering & Technology, Vizianagaram, India;
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SciVal Topic Prominence

Topic:

Prominence percentile: 1



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Document details - Contingency Management of a Power System Using Rapid Contingency Management Technique and Harmony Search Algorithm

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Contingency Management of a Power System Using Rapid Contingency Management Technique and Harmony Search Algorithm(Conference Paper)

Pravan Kumar, B., Uma Maheswari, R., Sateesh, B., Venkateswara Rao, B., Nagesh Kumar, G.V.

^aGITAM University, Visakhapatnam, India

^bVignans Institute of Information Technology, Visakhapatnam, India

^cV R Siddhartha Engineering College, Vijayawada, India

View additional affiliations v

Abstract

Optimal power flow (OPF) is an ideal method of optimally utilizing power system resources. Its effect further enhances the presence of FACTS devices. Performing OPF in combination with a FACTS device may also be helpful for the improvement of power system stability during outage conditions. In the present work, a combined index-based strategy for the optimal placement of Thyristor-Controlled Series Compensator (TCSC) and optimal tuning of generators using the harmony search algorithm is proposed for improving the system stability. The projected technique is verified and implemented on IEEE 30 bus system. The system is tested at both normal and contingency conditions. The contingency analysis is done using a new method, namely rapid contingency ranking technique (RCRT). The TCSC has been placed on the basis of an index which is a combination of line utilization factor (LUF) and fast voltage stability index (FVSI). A multi-objective function has been chosen for tuning the generators. The multi-dimensional function includes deviation in voltage, cost of power generation, and loss of transmission line. The outcomes of the proposed method are also compared to a method, i.e., genetic algorithm. © 2020, Springer Nature Singapore Pte Ltd.

Author keywords

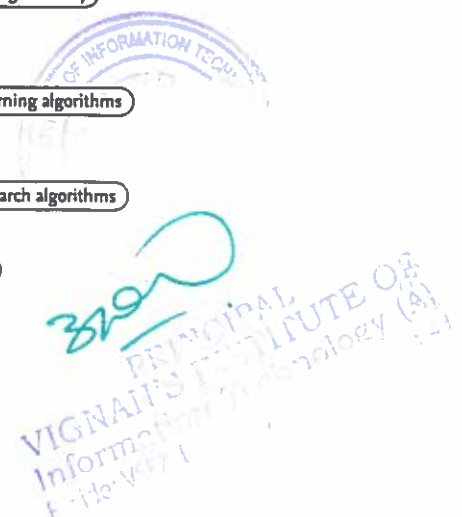
Harmony search algorithm Optimal reallocation Rapid contingency ranking technique TCSC Voltage stability

Indexed keywords

Engineering controlled terms: Electric load flow Electric power system stability Genetic algorithms Learning algorithms

Engineering uncontrolled terms: Condition Contingency management Contingency ranking Harmony search algorithms Optimal power flows Optimal reallocation Power Ranking technique Rapid contingency ranking technique Thyristor controlled series compensator

Engineering main heading: Flexible AC transmission systems





Document details - Design and Fabrication of Small-Scale Automatic Stamping Machine

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Lecture Notes in Mechanical Engineering
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Design and Fabrication of Small-Scale Automatic Stamping Machine(Conference Paper)

Sundara Ramam, R., Harisankar, B.

Department of Mechanical Engineering, Vignans Institute of Information Technology, Visakhapatnam, India

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Abstract

Stamping is one of the important processes that are to be performed in the packaging of industrial products. Stamping is the process used to print the text or symbol or trademark of companies' products on the paper or packaging boxes. As stamping is a manual process from its beginning till now, it takes more time and labor charges, we thought to automate the stamping process to reduce the time taken for the stamping process and to reduce the cost involved in labor. This leads to the invention of the automatic stamping machine. This works on the principle of rack and pinion mechanism and worm and worm wheel drive mechanism. The present work deals with the automatic stamping machine combined with the indexing table which automatically feeds the jobs for stamping. The main objective of this work is to help small-scale packaging industries which in turn reduce the time taken for stamping, reduce machinery cost, and increase productivity. © 2020, Springer Nature Singapore Pte Ltd.

Author keywords

- Rack and pinion
- Stamping
- Trademark
- Worm and worm drive

Indexed keywords

- Engineering controlled terms:
- Cost reduction
 - Machinery
 - Stamping
 - Trademarks

- Engineering uncontrolled terms:
- Company products
 - Industrial product
 - Labor charges
 - Manual process
 - Rack and pinions
 - Small scale
 - Stamping process
 - Stampings
 - Worm and worm drive
 - Worm drive

- Engineering main heading:
- Commerce

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Sundara Ramam, R.; Department of Mechanical Engineering, Vignans Institute of Information Technology, Visakhapatnam, India;

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Document details - Design Optimization of Slag Pot Transfer Car

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Lecture Notes in Mechanical Engineering
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Naga Sudha, V., Raghuram, K.S., Savitri, V., Shanthi Swaroopini, A.

Department of Mechanical Engineering, Vignan's Institute of Information Technology, Visakhapatnam, 530040, India

Related documents

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Abstract

A majority of the steel production industries rely on machinery or equipment for effective operation thereby avoiding or minimizing the accidents due to inevitable human errors. One such problem has been identified where the high temperature slag is damaging the power cables used to run the slag pot transfer car due to leakage or spillage. In order to overcome this, a new generation slag pot transfer car has been developed by incorporating modifications in the mast of the slag pot transfer car. A number of components such as canopy, mast, reeling drum, columns, and rollers are designed by assuming the dimensions based on existing industry requirements. The assembled components are then subjected to testing at full load conditions using a finite element analysis package where a suitable design or modification has been suggested taking factor of safety into consideration. This work is focused on indigenously designed and developed solutions for effective working of the industry. © 2020, Springer Nature Singapore Pte Ltd.

Author keywords

FEA Principal stress Von Mises stress

Indexed keywords

Engineering controlled terms: Finite element method Machinery Safety factor Steelmaking

Engineering uncontrolled terms: Design optimization Highest temperature Human errors Number of components Power cables Principal stress Production industries Steel production Transfer car VonMises stress

Engineering main heading: Slags



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Naga Sudha, V.; Department of Mechanical Engineering, Vignan's Institute of Information Technology, Visakhapatnam, India;
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Document details - Determination of Flow Characteristics in Fire-Tube Boiler by Numerical Simulation

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Determination of Flow Characteristics in Fire-Tube Boiler by Numerical Simulation(Conference Paper)

Hari Kishan, A., Chaitanya, M., Uma Maheswara Rao, P.

Vignan's Institute of Information Technology, Duvvada, Vizag, 530049, India

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Abstract

This research work provides the thermal analysis of fire-tube boilers used in thermal power plants. For simulation purpose, a small-scale prototype of the original fire-tube boiler is designed using SolidWorks. The numerical simulation of the designed model is carried out in ANSYS Fluent. The initial section of the project represents the pressure and temperature variations along the length of the boiler for different water velocities (25, 30, 35 and 40 m/s). The later section deals by changing the boiler casing material between steel, brass and stainless steel to study the pressure and temperature variations at a constant water velocity of 30 m/s. Based on the results, the best boiler shell material among these three has been identified. The results have been provided in the form of pressure and temperature contours as obtained from the CFD analysis. © 2020, Springer Nature Singapore Pte Ltd.

Author keywords

Boiler shell Fire-tube boiler

Indexed keywords

Engineering controlled terms:

Computational fluid dynamics Fires Numerical models Temperature distribution Thermoanalysis Thermolectric power plants

Engineering uncontrolled terms

Boiler shell Fire-tube boilers Flow characteristic Pressure and temperature Pressure variations Small scale SolidWorks Temperature variation Thermal-power plants Water velocities

Engineering main heading:

Boilers



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Hari Kishan, A.; Vignan's Institute of Information Technology, Duvvada, Vizag, India;
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Document details - Bending Stress Analysis of PM Composite Beam

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Ramakrishna, C.S., Subbarao, K.V., Arji, S., Harisankar, B.

Department of Mechanical Engineering, Vignan's Institute of Information Technology, Visakhapatnam, 530049, India

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Abstract

In the present work, the stress behavior of laminated composite plate under compressive loading using a four-node element with six degrees of freedom at each node and translations in the x and y directions is done. In the present study, the modeling is done in Abaqus. Investigations were carried on plates starting with three layers of the top location of 0° angle-ply laminated composite plates at clamped boundary condition. Similarly, with three layers of top location, 0°, 30° and -45° angle ply are laminated. By changing the location of ply orientations the bending stress may be improved. The effect of changing the ply orientation is to increase or decrease the stresses. The composite plate has been analyzed for various orientations and their effects on stresses so as to find the optimized conditions. © 2020, Springer Nature Singapore Pte Ltd.

Author keywords

[Abaqus](#) [Laminated composite plate](#) [Numerical method](#) [Ply orientation](#)

Indexed keywords

Engineering controlled terms:

[Degrees of freedom \(mechanics\)](#) [Laminated composites](#) [Laminating](#) [Numerical methods](#)
[Stress analysis](#)

Engineering uncontrolled terms

[Abaqus](#) [Bending stress analysis](#) [Composite beam](#) [Compressive loading](#)
[Four-node element](#) [Laminated composite plates](#) [Ply orientation](#) [Six degrees of freedom](#)
[Stress behavior](#) [Three-layer](#)

Engineering main heading:

[Location](#)

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Document details - Analysis on Inverse Kinematics of Redundant Robots

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Lecture Notes in Mechanical Engineering

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Analysis on Inverse Kinematics of Redundant Robots(Conference Paper)

Bhavani, G., Harish Kumar, K., Raghuram, K.S., Bendu, H.S.

Department of Mechanical Engineering, Vignan's Institute of Information Technology, Visakhapatnam, India

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Abstract

The objective of the present work is to finalize a numerical solution that operates on the inverse kinematic mechanism of redundant robots leading to a robust method. After considering the consequences of all numerical ways of solving the inverse kinematics problem with their limitations and difficulties, it aimed to receive the best one of them and find a final effective solution. Now, the results obtained till now are implemented to the task space trajectory planning and redundancy resolution. © 2020, Springer Nature Singapore Pte Ltd.

Author keywords

Difficulties Inverse kinematic mechanism Limitations Redundant robots

Indexed keywords

Engineering controlled terms:

Inverse problems Numerical methods Redundant manipulators Robots Space flight

Engineering uncontrolled terms

Difficulty Effective solution Inverse kinematic mechanism Inverse kinematic problems Kinematic mechanism Limitation Numerical solution Redundant robot Robust methods Task space

Engineering main heading:

Inverse kinematics

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Original language: English

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Publisher: Springer Science and Business Media Deutschland GmbH



Raghuram, K.S.; Department of Mechanical Engineering, Vignan's Institute of Information Technology, Visakhapatnam, India;

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SciVal Topic Prominence ①

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Document details - Enhancement of Line-Based Voltage Stability of Energy System with Thyristor Controlled Series Capacitor Using Cuckoo Search Algorithm

1 of 1

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Enhancement of Line-Based Voltage Stability of Energy System with Thyristor Controlled Series Capacitor Using Cuckoo Search Algorithm(Conference Paper)

Venkateswara Rao, B., Sateesh, B., Uma Maheswari, R., Nagesh Kumar, G.V., Sobhan, P.V.S.

^aV R Siddhartha Engineering College, Vijayawada, India

^bVignan's Institute of Information Technology, Visakhapatnam, India

^cJNTUA College of Engineering, Pulivendula, India

View additional affiliations >

Abstract

Preserving stable conditions on encountering with small disturbances under normal or slightly overloaded conditions is termed as voltage stability. Maintaining voltage stability is one of the leading factors for energy system networks. In this paper, new line established voltage stability index entitled fast voltage stability index (FVSI) is proposed for optimal placement of Thyristor Controlled Series Capacitor (TCSC). Optimal tuning of TCSC is obtained using cuckoo search algorithm (CSA) to increase the voltage stability of the energy system established on minimization of total voltage deviation of the system. The CSA is coded in MATLAB and the performance is tested on IEEE 30 bus system with voltage deviation minimization as an objective function. TCSC is a series-connected device in the flexible alternating current transmission system (FACTS) family. It was capable of controlling the power flow through the line and also controls the line-based voltage stability. In this paper, TCSC is merged in CSA-based Power Flow to optimize the total voltage deviation. Results attained by CSA are related to that attained by genetic algorithm (GA) in both without and with TCSC conditions. These results show that CSA produces better results compared to GA for solving optimal tuning of TCSC. © 2020, Springer Nature Singapore Pte Ltd.

Author keywords

Cuckoo search algorithm FACTS device Optimal tuning TCSC

Indexed keywords

Engineering controlled terms:

Electric load flow Flexible AC transmission systems Learning algorithms Power control System stability Thyristors

Engineering uncontrolled terms

Condition Cuckoo search algorithms Energy systems Flexible alternating current transmission system device Flexible alternating current transmission systems Optimal tuning Power flows Small disturbances Thyristor controlled series capacitor Voltage deviations

Engineering main heading:

Genetic algorithms





Document details - Design and Simulation of Porous Ti-6Al-4V Alloy Structures for Additive Manufacturing of Bioimplants

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Department of Mechanical Engineering, Vignani's Institute of Information Technology, Visakhapatnam, Andhra Pradesh 500049, India

[Authors >](#) [Keywords >](#)

Abstract

This paper presents the efforts made in the design and finite element simulation of porous Ti-6Al-4V alloy structures to determine the elastic modulus of porous parts produced with the additive manufacturing technology for biomedical applications. The major problem concerning with the typically used metallic bioimplants is the mismatch of elastic modulus between the implant and the human bone, which resulted in the degradation of surrounding bone structure and disassociation of the implant. The present work is focused on designing the porous Ti-6Al-4V alloy structures and also on studying the influence of porosity on the elastic modulus of implants made of Ti-6Al-4V alloy material. The three-dimensional strut-based cellular structure is employed to build the porous structures ranging from 10 to 50% porosity volume. This work established the appropriate porosity to minimize the mismatch of elastic modulus between the implant and the bone by adding the porosity to the implant structure. It is found that the Ti-6Al-4V structure with the porosity of 40 vol.% possesses the elastic modulus about 74 GPa. These results demonstrate the proof of tailoring the elastic modulus of bioimplants. © 2020, Springer Nature Singapore Pte Ltd.

Author keywords

[Additive manufacturing](#) [Elastic modulus](#) [Porosity](#) [Ti-6Al-4V alloy](#)

Indexed keywords

Engineering controlled terms:

[3D printers](#) [Additives](#) [Bioinformatics](#) [Elastic moduli](#) [Medical applications](#)

Engineering uncontrolled terms:

[Additive manufacturing technology](#) [Bio implants](#) [Biomedical applications](#) [Bone structure](#)
[Cellular structure](#) [Design and simulation](#) [Finite elements simulation](#) [Human bones](#)
[Metallics](#) [Ti-6al-4v alloy](#)

Engineering main heading:

[Porosity](#)



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Volume Editors: Voruganti H.K., Kumar K.K., Krishna P.V., Jin X.
Publisher: Springer Science and Business Media Deutschland GmbH



Document details - Active Vibration Control in Turbocharger Rotor System with the Use of Electromagnetic Actuator

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Lecture Notes in Mechanical Engineering

2020, Pages 563-570

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Active Vibration Control in Turbocharger Rotor System with the Use of Electromagnetic Actuator(Conference Paper)

Mutra, R.R., Srinivas, J.

^aVignan's Institute of Information Technology, Visakhapatnam, Andhra Pradesh 530046, India
^bNational Institute of Technology, Rourkela, Odisha 769008, India

Abstract

This work presents an active vibration control scheme in high-speed turbocharger rotor system. The working speed of these rotors is very high so a small vibration may damage the system, so there is a requirement to control such unwanted vibrations. Most of the cases these rotors are supported on the floating ring bearings. Initially, the rotor model is developed with finite element method to get the dynamic response of the system due to unbalance and gravity forces. The nonlinear hydrodynamic bearing forces are computed and the equations of motion of multi-degree of freedom turbocharger model are solved with time integration scheme. After obtaining the parametric effects of the bearing on overall system response an electromagnetic actuator system is adopted to control the vibration amplitudes in the system. The methodology is found to be reliable and reduces the vibration amplitudes considerably. © 2020, Springer Nature Singapore Pte Ltd.

Author keywords

Active control Bearing forces Frequency response Turbocharger

Indexed keywords

Engineering controlled terms:

Actuators Degrees of freedom (mechanics) Electromagnets Equations of motion Gravitation Nonlinear equations Ultrasonic devices Vibration control

Engineering uncontrolled terms

Active control Active vibration controls Bearing forces Control schemes Electromagnetic actuators High-speed turbochargers Rotor systems Turbocharger Turbocharger rotors Vibration amplitude

Engineering main heading:

Frequency response



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Publisher: Springer Science and Business Media Deutschland GmbH

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Document details - An Effective and Economical Method to Improve Structural Homogeneity and Mechanical Properties of Al-Mg Alloy Processed by ECAE

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An Effective and Economical Method to Improve Structural Homogeneity and Mechanical Properties of Al-Mg Alloy Processed by ECAE(Conference Paper)

Varadala, A.B., Gurugubelli, S.N., Bandaru, S.

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^bMetallurgical Engineering, JNTUK-UCEV, Vizianagaram, Andhra Pradesh 535003, India

^cMechanical Engineering, Vignan's Institute of Information Technology, Visakhapatnam, Andhra Pradesh 530049, India

Abstract

The formation of the dead metal zone (DMZ) in equal channel angular extrusion (ECAE) process significantly affects the deformation uniformity and mechanical properties of work material. The aim of the present study is to investigate the effect of the dead metal zone on structural homogeneity and hardness of Al 5083 alloy processed by ECAE and suggest the way to minimize that adverse effect. In this work, the rectangular billets with 1-mm-thick copper casing on two longitudinal faces and square billets with no casing are processed by ECAE up to four passes in route A. It was observed that the soft and ductile nature of the copper casing allows smooth flow of the work material at low pressing loads as compared to the alloy ECAE'd without a casing. Field emission scanning electron microscope (FESEM) images of the processed material with casing show the noteworthy improvement in structural homogeneity and grain refinement than another set of billets. The obtained structural homogeneity indicates the uniform strain distribution in the processed material is achieved by minimizing the formation of the dead metal zone at the intersection of ECAE die channels. The higher hardness and tensile strength measurements of the processed materials indicate the significance of grain refinement and uniform strain distribution. The variations in the test results confirm the non-homogeneous strain distribution caused by the dead metal zone is high for the billets processed with no copper casing. © 2020, Springer Nature Singapore Pte Ltd.

Author keywords

Casing DMZ ECAE Hardness Strength Structural homogeneity

Indexed keywords

Engineering controlled terms:

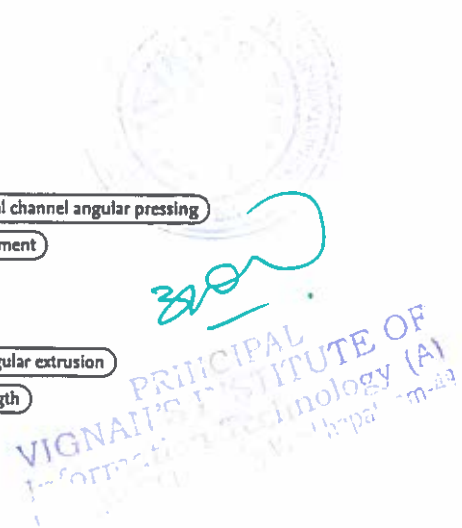
Aluminum alloys Billets (metal bars) Copper Dead zones Equal channel angular pressing
 Extrusion Grain refinement Grain size and shape Image enhancement
 Magnesium alloys Scanning electron microscopy Tensile strength

Engineering uncontrolled terms

Casing Dead metal zone Economical methods Equal-channel angular extrusion
 Grains refinement Processed materials Strain distributions Strength
 Structural homogeneity Work material

Engineering main heading:

Hardness





Document details - Heat Transfer Enhancement Using Overlapped Dual Twisted Tape Inserts with Nanofluids

1 of 1

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1st International Conference on Applied Mechanical Engineering Research, ICAMER 2019; Warangal; India; 2 May 2019 through 4 May 2019; Code 236949

Heat Transfer Enhancement Using Overlapped Dual Twisted Tape Inserts with Nanofluids(Conference Paper)

Rudrabhiramu, R., Harish Kumar, K., Kiran Kumar, K., Mallikarjuna Rao, K.

^aVignan's Institute of Information Technology, Visakhapatnam, Andhra Pradesh, India

^bNational Institute of Technology, Warangal, Warangal, Telangana, India

^cJawaharlal Nehru Technological University, Kakinada, Andhra Pradesh, India

Abstract

The thermal performance of a heat exchanger can be improved by various techniques. It is a major concern when coming to industries as the heat losses play a major role in efficiency of the overall plant. The present work is carried out to enhance the heat transfer rate of a tubular heat exchanger by incorporating overlapped dual twisted tapes (ODTTs) or inserts into a tube and carrying out the numerical simulation for different twisting ratios of ODTTs. In addition to this, Al₂O₃ nanoparticles are used as additives to increase the value of heat transfer coefficient (h), thereby improving the Nusselt number (Nu) and overall thermal performance. The addition of ODTTs resulted in improved residence time, more contact surface area and improved fluid mixing and swirling for effective heat transfer to take place. The numerical simulation is repeated for nanofluid concentrations of 1% and 2% and also for varying twisting ratios of $Y_o/Y = 1.5, 2$ and 2.5 . The tube with 1% nanofluid concentration and twisting ratio $Y_o/Y = 2$ yielded better results in comparison with all other combinations. © 2020, Springer Nature Singapore Pte Ltd.

Author keywords

Al₂O₃ nanoparticles Nanofluids Overlapped dual twisted tapes (ODTTs)

Indexed keywords

Engineering controlled terms: Additives Alumina Aluminum oxide Heat exchangers Heat transfer coefficients Nanofluidics Numerical models

Engineering uncontrolled terms: Al₂O₃ nanoparticle Heat transfer co-efficients Heat Transfer enhancement Heat transfer rate Nanofluids Overlapped dual twisted tape Thermal Performance Tubular heat exchangers Twisted tape insert Twisted tapes

Engineering main heading: Nanoparticles

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Document Type: Conference Paper
Volume Editors: Voruganti H.K.,Kumar K.K.,Krishna P.V,Jin X.
Publisher: Springer Science and Business Media Deutschland GmbH

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Ghalambaz, M., Mashayekhi, R., Arasteh, H.

Thermo-hydraulic performance analysis on the effects of truncated twisted tape inserts in a tube heat exchanger

(2020) *Symmetry*

Ghalambaz, M., Arasteh, H., Mashayekhi, R.

Investigation of overlapped twisted tapes inserted in a double-pipe heat exchanger using two-phase nanofluid

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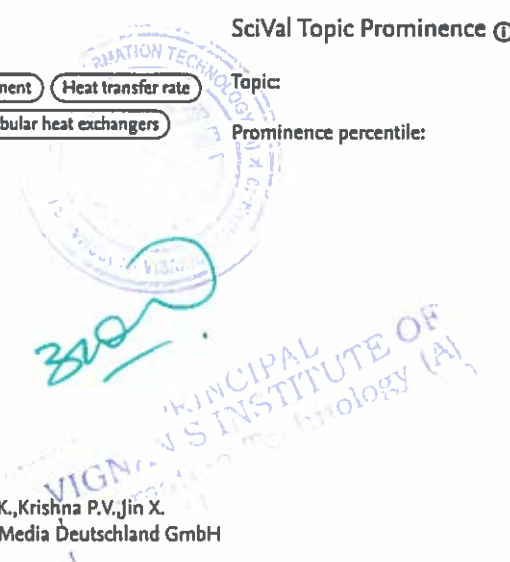
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Bhujange, K. , Chandavarkar, B.R. , Nazareth, P.

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(2023) Smart Innovation, Systems and Technologies

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Performance Analysis on IARP, IERP, and ZRP in Hybrid Routing Protocols in MANETS Using Energy Efficient and Mobility Variation in Minimum Speed(Conference Paper)

Kumar, C.R., Nanaji, U., Sharma, S.K., Murthy, M.R.

^aDepartment of Computer Science and Engineering, Vignan's Institute of Information Technology, Visakhapatnam, India

^bDepartment of Master of Computer Applications, Vignan's Institute of Information Technology, Visakhapatnam, India

^cDepartment of Computer Science and Engineering, Andhra University, Visakhapatnam, India

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Abstract

MANET represents its gadgets behavior in its network structure to relocate any movement of time without drawing near any topological approval in multilateral guidelines, which ensuing the runtime link status quo with different gadgets that belongs to the identical zone. The important problem with building the MANET is to keep runtime place facts of the participated gadgets for managing the routing facts to examine traffic. MANET has the possibility to preserve one or more than one nature of transceivers. Strength control in wi-fi networks deals with the technique of managing power resources through controlling the battery discharge, adjusting the transmission electricity, and scheduling of strength assets so that it will boom the life of the nodes of an advert hoc wi-fi network. Right here, in our recommend paintings area, Intra Sector Routing Protocol (IARP), Zone Routing Protocol (ZRP), and Inter Quarter Routing Protocol (IERP) are simulated with dedicated small networks with 90 nodes the usage of EXATA emulator to examine QOS for application and electricity efficiency. © Springer Nature Singapore Pte Ltd 2020.

Author keywords

Emulator EXATA IARP IERP MANETS ZRP

Indexed keywords

Engineering controlled terms: Energy efficiency Mobile ad hoc networks Routing protocols Wi-Fi Wireless local area networks (WLAN)

Engineering uncontrolled terms: Emulator EXATA IARP IERP MANETS

Engineering main heading: Power management (telecommunication)

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Source Type: Book Series
Original language: English

DOI: 10.1007/978-981-15-1097-7_68
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Volume Editors: Raju K.S., Senkerik R., Lanka S.P., Rajagopal V.
Publisher: Springer





Advances in Data Sciences, Security and Applications pp 181–196

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Distributed Authentication Security for IOT Using DASS and LOKI91

[Santosh Kumar Sharma](#) & [Bonomali Khuntia](#) 

Conference paper | [First Online: 03 December 2019](#)

492 Accesses

Part of the [Lecture Notes in Electrical Engineering](#) book series (LNEE, volume 612)

Abstract

With the massive expansion of computing technology, the distributed architecture has received wide acceptance for their services. Moreover, IOT technology is used to develop smart applications such as smart security system, health care, smart medicals and smart houses. Due to the vibrant character of access and connectivity in IOT environment, there is mounting of risks and genesis of enormous threat to IOT environment. In proposed system, we have study the fundamental concept behind DASS approach and how to ensure strong authentication services in a distributed





Document details - Driver Drowsiness Detection Using Viola Jones Algorithm

1 of 1

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Smart Innovation, Systems and Technologies

Volume 159, 2020, Pages 583-592

3rd International Conference on Smart Computing and Informatics, SCI 2018; Bhubaneswar, India; 21 December 2019 through 22 December 2019; Code 232679

Driver Drowsiness Detection Using Viola Jones Algorithm(Conference Paper)

Anitha, J., Mani, G., Venkata Rao, K.

Vignan's Institute of Information Technology, Visakhapatnam, India

Abstract

Monitoring a driver to detect his distraction is a complex problem that involves physiological and behavioral elements. In order to solve this problem a constant detection system for monitoring driver's eye movement is to be monitored. Initially, driver's face is first located in the input video sequence which is then tracked over the subsequent eye movements of the driver are constantly traced. Using Viola and Jones face detection algorithm the sequence of images are trained and classified in such a way that a warning alarm is buzzed if the eyes are constantly closed for a predetermined period amount of time. Hence this reduces the rate of traffic accidents occurring these days. Future work is on how to extend the system to determine the level of vigilance of the driver. © 2020, Springer Nature Singapore Pte Ltd.

Author keywords

Classification Haar Cascades Viola Jones

Indexed keywords

Engineering controlled terms: Classification (of information) Face recognition Intelligent computing

Engineering uncontrolled terms: Complex problems Detection system Driver drowsiness Face detection algorithm Input videos Sequence of images Viola - Jones algorithms Viola jones

Engineering main heading: Eye movements

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 Original language: English

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 Document Type: Conference Paper
 Volume Editors: Satapathy S.C., Bhateja V., Mohanty J.R., Udgata S.K.
 Publisher: Springer

Cited by 9 documents

Akrout, B. , Fakhfakh, S.
 How to Prevent Drivers before Their Sleepiness Using Deep Learning-Based Approach

(2023) *Electronics (Switzerland)*

Pulluri, R. , Ranjana, P.
 An Efficient Vision based Method for Detecting Drowsiness in Real-time

(2022) *Proceedings - 2022 6th International Conference on Intelligent Computing and Control Systems, ICICCS 2022*

Dewi, C. , Chen, R.-C. , Jiang, X.
 Adjusting eye aspect ratio for strong eye blink detection based on facial landmarks

(2022) *PeerJ Computer Science*

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Anitha, J.; Vignan's Institute of Information Technology, Visakhapatnam, India;

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Document details - Implementation of Secrete Message Communication in Server/Client Environment Using Splines Based on PKCS

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Smart Innovation, Systems and Technologies
Volume 159, 2020, Pages 571-582
3rd International Conference on Smart Computing and Informatics, SCI 2018; Bhubaneswar, India; 21 December 2019 through 22 December 2019; Code 232679

Implementation of Secrete Message Communication in Server/Client Environment Using Splines Based on PKCS(Conference Paper)

Rao, K.V., Prasanth Kumar, B., Viswanadh Sharma, C., Eluri, N.R., Kumar, B.K.

^aDepartment of Computer Science and Engineering, Vignan's Institute of Information Technology, Visakhapatnam, India

^bDepartment of Computer Science and Engineering, Raghu Institute of Technology, Visakhapatnam, India

^cComputer Science Department, King Khalid University Abha, Abha, Saudi Arabia

Abstract

This paper presents an approach for a secret message communication among a client-server group. In order to increase security to distribute secret message (key), we introduce splines using these at a specific permutation. We generate the key and distribute this key. This is to maintain confidentiality. Confidentiality can be achieved through changing the key material, known as re-keying every time a new member joins the group or a existing member leaves the group. The new group key is computed guaranteeing the forward and backward secrecy. Whenever there is a membership change, group key must be changed to prevent a new use from reading past communication. In proposed work, we propose how group communication must establish registration of users, entry and exit of a user. The encryption and decryption algorithm is used between the sender and the receiver. In the process, a spline is installed in the server; the server will distribute or communicate the secret messages to client based on one-to-one mapping with the help of splines; message has been encrypted and distributed to respective clients. In the client side, the decryption batch files to be installed for the verification of secret message authentication. © 2020, Springer Nature Singapore Pte Ltd.

Author keywords

Decryption Encryption Group communication Server/client Spline key Splines Symmetric key

Indexed keywords

Engineering controlled terms:

Intelligent computing Splines

Engineering uncontrolled terms

Decryption Encryption and decryption Forward and backward secrecy Group communications One-to-one mappings Secret-message communications Secrete messages Symmetric keys

Engineering main heading:

Cryptography

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Integrated security for data transfer and access control using authentication and cryptography technique for Internet of things

Article type: Research Article

Authors: [Sharma, Santosh Kumar](https://content.iospress.com:443/search?q=author%3A%28%22Sharma, Santosh Kumar%22%29) (https://content.iospress.com:443/search?q=author%3A%28%22Sharma, Santosh Kumar%22%29)^a - | [Khuntia, Bonomali](https://content.iospress.com:443/search?q=author%3A%28%22Khuntia, Bonomali%22%29) (https://content.iospress.com:443/search?q=author%3A%28%22Khuntia, Bonomali%22%29)^b

Affiliations: [a] Department of MCA, Vignan's Institute of Information Technology, Visakhapatnam, AP, India | [b] Department of Computer Science, Berhampur University, Berhampur, Odisha, India

Correspondence: [*] Corresponding author: Santosh Kumar Sharma, Department of MCA, Vignan's Institute of Information Technology, Visakhapatnam, AP, India. %****_kes-24-kes190116_temp.tex_Line_25_**** E-mail: sharma.santosh83@gmail.com (mailto:sharma.santosh83@gmail.com).

Abstract: The entire world is running behind the smart technology to accomplish the daily needs in a smart way such as smart farming, smart irrigation system, smart transportation system, smart medical management, handling of smart home appliances, smart security, etc. Smart technology is the soul property of internet services and accessing data from virtual servers, which raises the alarm of security vulnerability and threats. In recommended system we have focused on application layer security which are concerned with application interface and queue manager for service exchange. As application layer is the closest to end user and produces the big threat to the application platform it motivates us to recommend strong multilevel security system to identify the different activity of handlers and identify their roles to enrout of accessing confidential data services. Subsequently, our work is to assure that every user should have an authentication key with specific privileges to get the desired information. In focus, we see the security management by integrating the Kerberos authentication protocol with honey encryption technique to provide strong multilevel security system.

Keywords: Internet of things, security, authentication protocol, honey encryption

DOI: 10.3233/KES-190116

Journal: [International Journal of Knowledge-based and Intelligent Engineering Systems](https://content.iospress.com:443/journals/international-journal-of-knowledge-based-and-intelligent-engineering-systems) (https://content.iospress.com:443/journals/international-journal-of-knowledge-based-and-intelligent-engineering-systems), vol. 24, no. 4, pp. 303-309, 2020

Published: 18 January 2021

Price: EUR 27.50



Dichotomy and well conditioning of two-point boundary value problems on time scale dynamical systems

Article type: Research Article

Authors: [Suryanarayana, R.](https://content.iospress.com:443/search?q=author%3A%28%22Suryanarayana,R.%22%29) (https://content.iospress.com:443/search?q=author%3A%28%22Suryanarayana,R.%22%29)^a - | [Chatikam, Rajkumar](https://content.iospress.com:443/search?q=author%3A%28%22Chatikam,Rajkumar%22%29) (https://content.iospress.com:443/search?q=author%3A%28%22Chatikam,Rajkumar%22%29)^b | [Sharma, Santosh Kumar](https://content.iospress.com:443/search?q=author%3A%28%22Sharma,Santosh%22%29) (https://content.iospress.com:443/search?q=author%3A%28%22Sharma,Santosh%22%29)^c

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Correspondence: [*] Corresponding author: R. Suryanarayana, Department of Mathematics, Vishnu Institute of Technology, Bhimavaram 534202, India. E-mail: bhavyarsn@gmail.com (mailto:bhavyarsn@gmail.com).

Abstract: In this paper, we establish close relationships between the stability constants on one hand and the global behaviour of fundamental matrices on the other hand to the two-point boundary value problems on time-scale dynamical systems. We introduce the concept of conditioning number k and show that conditioning number is the right criteria in estimating the global error due to small perturbations of two point boundary value problems on time scale dynamical systems. Further, the moderate stability constants imply a dichotomy with moderate k -bound will be developed. Further, the exponential behaviour of solutions of the Green's matrix will be investigated. We also investigate the conditions under which strong dichotomy exists for two-point boundary value problems when the boundary conditions are separable.

Keywords: Boundary value problems, time-scale dynamical systems

DOI: 10.3233/KES-200034

Journal: [International Journal of Knowledge-based and Intelligent Engineering Systems](https://content.iospress.com:443/journals/international-journal-of-knowledge-based-and-intelligent-engineering-systems) (https://content.iospress.com:443/journals/international-journal-of-knowledge-based-and-intelligent-engineering-systems), vol. 24, no. 2, pp. 107-115, 2020

Published: 20 July 2020

Price: EUR 27.50



Insights into the Mixed Oxide Thin Film Cathodes of LiCoO₂, LiMn₂O₄ and TiO₂ Deposited from Powder Target

[Journal of Nanoscience and Nanotechnology](#) ▫ [10.1166/jnn.2020.17678](#) ▫ 2020 ▫ Vol 20 (6) ▫ pp. 3762-3769

Author(s): K. Yellareswara Rao ▫ Habibuddin Shaik ▫ G. Mohan Rao

Keyword(s): [Thin Film](#) ▫ [Thin Films](#) ▫ [Discharge Capacity](#) ▫ [Mixed Oxide](#) ▫ [Good Choice](#) ▫ [Oxide Thin Film](#) ▫ [Potential Range](#) ▫ [Powder Target](#) ▫ [Solid State Batteries](#) ▫ [Electrochemical Characterisation](#)

The present work describes the preparation of mixed oxide powder target of LiCoO₂, LiMn₂O₄ and preparation of thin films. Electrochemical investigations have been carried out in the potential range 2.0–4.3 V with respect to Li. There after TiO₂ mesoporous (2–50 nm) powder was also added to the above composition and deposited thin films. XRD, XPS and electrochemical characterisation have been carried out for thin film cathodes. The potential window as well as discharge capacity enhanced after TiO₂ doping to the mixed oxide target of LiCoO₂ and LiMn₂O₄. Electrochemical characterization have been carried out in potential range 1.4–4.5 V, delivered a discharge capacity of 137 μAh μm⁻¹ cm⁻². The deposited cathode thin films will be a good choice as electrodes for high voltage solid state batteries.



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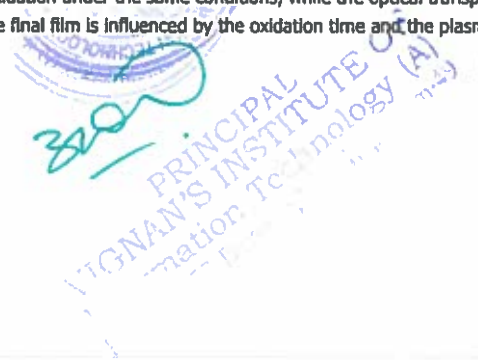
Optoelectronic properties of highly porous silver oxide thin film

[SN Applied Sciences](#) ▫ [10.1007/s42452-020-04091-1](#) ▫ 2021 ▫ Vol 3 (1) ▫

Author(s): Ahmad Al-Sarraj ▫ Khaled M. Saoud ▫ Abdelaziz Elmel ▫ Said Mansour ▫ Yousef Haik

Keyword(s): [Thin Film](#) ▫ [Thin Films](#) ▫ [Electron Microscope](#) ▫ [Plasma Etching](#) ▫ [Silver Oxide](#) ▫ [Oxidation Time](#) ▫ [Oxide Thin Film](#) ▫ [X Ray](#) ▫ [Porous Silver](#) ▫ [Highly Porous](#)


Abstract In this paper, we report oxidation time effect on highly porous silver oxide nanowires thin films fabricated using ultrasonic spray pyrolysis and oxygen plasma etching method. The NW's morphological, electrical, and optical properties were investigated under different plasma etching periods and the number of deposition cycles. The increase of plasma etching and oxidation time increases the surface roughness of the Ag NWs until it fused to form a porous thin film of silver oxide. AgNWs based thin films were characterized using X-ray diffraction, scanning electron microscope, transmission electron microscope, X-ray photoemission spectroscopy, and UV-Vis spectroscopy techniques. The obtained results indicate the formation of mixed mesoporous Ag₂O and AgO NW thin films. The Ag₂O phase of silver oxide appears after 300 s of oxidation under the same conditions, while the optical transparency of the thin film decreases as plasma etching time increases. The sheet resistance of the final film is influenced by the oxidation time and the plasma application periodicity. Graphic abstract



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NUCLEI/Experiment | [Published: 11 February 2021](#)

Precision Measurements of Internal Conversion Coefficients of Low Energy Transitions in ^{169}Tm for Efficiency Calibration of Electron Detectors

[K. Vijay Sai](#), [K. Madhusudhana Rao](#), [E. Rajasekhar](#), [Dwaraka Rani Rao](#), [Deepa Seetharaman](#) & [Venkataramaniah Kamiseti](#) 

Physics of Atomic Nuclei **83**, 796–801 (2020)

74 Accesses | 1 Citations | [Metrics](#)

Abstract

The 32.018 d beta decay of ^{169}Yb is studied with a high resolution precisely calibrated 8K PC based Multi-Channel Analyzer coupled HPGe gamma spectrometer system and liquid nitrogen cooled Si(Li) detector coupled to a well calibrated Mini-Orange magnetic spectrometer. Precise energies and relative intensities of gamma transitions and conversion electron intensities of gamma transitions have been determined for the first time with better accuracy. The experimental internal conversion coefficients of the gamma transitions in ^{169}Tm have been determined using Normalized Peak to Gamma method and compared with the theoretical values adopted by Nuclear Data Sheets to assign multiplicities of all the transitions. The



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Ferromagnetic Bismuth-Substituted CeO₂ Nanostructures and Prevalence of Antiferromagnetic Clusters

S. K. Alla, [Sher Singh Meena](#), [Nidhi Gupta](#), [R. K. Mandal](#) & [N. K. Prasad](#) *Journal of Superconductivity and Novel Magnetism* **33**, 3941–3947 (2020)227 Accesses | 5 Citations | [Metrics](#)

Abstract

Bismuth-substituted CeO₂ (Bi_{0.05}Ce_{0.95}O₂) nanostructured material have displayed room temperature ferromagnetic behavior. The substitution of Ce ions with Bi³⁺ ions decreased the saturation magnetization (M_S) value of CeO₂. UV-Vis and photoluminescence spectroscopic analyses revealed the occurrence of defect states i.e. surface oxygen vacancies in the sample, which facilitated ferromagnetic interactions in the Bi-substituted CeO₂ nanostructures. Further, the clusters in the sample could provide antiferromagnetic interaction amongst ions, which reduced the M_S value of CeO₂. The clusters in the annealed sample was substantiated from its ZFC/FC curve. X-ray photoelectron spectroscopy analysis revealed the presence of Bi³⁺, Ce³⁺, and Ce⁴⁺ ions in the sample.



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