(ICRRAEMMS -2017) Date- 29th April 2017

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(ICRRAEMMS -2017) Date- 29th April 2017

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(ICRRAEMMS -2017) Date- 29th April 2017

MESSAGE

"Heights by great men reached and kept were not attained by a sudden flight, but they while their companions slept were toiling upward in the night".

The meaning of the above stanza is self-evident, nothing comes from nothing, and nothing ever could. Success and achievements are commensurate with will power, hard work, grit, resourcefulness and single-minded approach.

Anveshana Educational and Research Foundation understand the social relevance of research and its contribution in developing a body of knowledge and therefore gives immense importance to the research output. In order to encourage the researchers in various fields relating International Conference On Recent Research Approaches In Engineering, Management. **Anveshana Educational and Research Foundation** and **Sana Engineering College** has been organizing conferences with different contemporary themes on a regular basis. The focus here is on blend of academics & cutting edge research and innovation through inter-disciplinary activities.

A saying goes like this "Ordinary things done in an extraordinary way make people great".

I hope that the deliberations in the Conference will help researchers from academia and industry and the Conference will provide a platform for initiating collaborative research projects.

I wish the Conference a fabulous success.

Sri. Md. Nazeeruddin Chairman, Sana Engineering College,Kodad.

(ICRRAEMMS -2017) Date- 29th April 2017

MESSAGE



It is a great honour for me to act as a guest in the INTERNATIONAL CONFERENCE ON RECENT RESEARCH APPROACHES IN ENGINEERING, MANAGEMENT AND MULTIDISCIPLINARY STUDIES (ICRRAEMMS) on 29th April 2017. It gives immense pleasure for me as a guest in the International Conference aimed to share the knowledge on Engineering, Management and Social Sciences in the current scenario. The title of the conference is unique, which creates a good platform, and an opportunity to interact and exchange the views of the various intellectuals on various disciplines.

I hope that all the participants will be benefited by participating in the conference by enhancing their knowledge and creativity. At this juncture I would like to appreciate the efforts of Anveshana Educational and Research Foundation team for organizing this kind of programmes that promotes research activities among various professionals which in turn leads to the development of the economy and living standards of the people as a whole. I strongly believe that the deliberations of the conference will come-up with appropriate implications and I also wish the conference a grand success.

Dr. B. Ravi Kumar
Professor – MBA
Amrita Sai Institute of Science & Technology, Paritala.

(ICRRAEMMS -2017) Date- 29th April 2017

MESSAGE



AERF aims to educate researchers for the future to build and maintain quality oriented research related to Engineering, Management, Pharmacy and other domains as well. We believe these researchers' contribute to make a difference to their Colleges and Universities and to the world around them. In our endeavour, we draw upon reserves of goodwill among the quality oriented research, its reputation among researchers' and potential students, commitment is the key strength to AERF.

The future holds tremendous promise for our organization we look forward to being recognized as one of the premier research organization which meets the quality standards across the globe. To achieve this goal, the organization is following a three-pronged approach: connect, nurture, and grow. We will:

- CONNECT proactively with the worlds of practice and policy, with academic work nationally and globally, with our research work, and with the local community.
- NURTURE a high performance work environment by emphasizing and supporting a climate of autonomy, stretch, and team work.
- GROW our capacity, but do so in a thoughtful and strategic manner, aiming to have an impact commensurate with our ambitions, and ensuring that we maintain and upgrade the quality of our people and our experience.

Dr. D. Sucharitha Director – AERF

Date- 29th April 2017

MESSAGE



It gives me an immense pleasure that Anveshana Educational and Research Foundation is organizing INTERNATIONAL CONFERENCE ON RECENT RESEARCH **APPROACHES** IN ENGINEERING, **MANAGEMENT AND** MULTIDISCIPLINARY STUDIES(ICRRAEMMS) on 29th April 2017. I hope the International Conference would be a platform for Academicians, Professors and Students related to Engineering, Basic Sciences and Management from different places to exchange and experience new ideas and applications and provides an opportunity to establish educational, business and research relations among themselves. I wish the conference a grand success and hope that Anveshana Educational and Research Foundation would conduct many more programs of this kind in the future

> Dr.S. Chakradhara Goud **Principal** Sana Enginnering College, kodada.

(ICRRAEMMS -2017)

Date- 29th April 2017

MESSAGE

Research development is a global phenomenon that needs serious attention from all its stakeholders. Understanding the present scenario and pro-acting on constant improvements in procedures and processes, can lead to commendable improvements in the future methods of execution. Conferences and seminars lay a platform for such discussions and deliberations on innovative and creative ideas.

It gives me immense pleasure to learn that Anveshana Educational and Research Foundation is organizing —INTERNATIONAL CONFERENCE ON RECENT RESEARCH APPROACHES IN ENGINEERING, MANAGEMENT AND MULTIDISCIPLINARY STUDIES(ICRRAEMMS) on 29th April 2017. to present the latest Technological innovations to the Academicians and Research Students.

This conference would bring together academicians, practitioners and researchers from various universities and disciplines to share their experiences and support a cohesive growth. Today the world demands a multi-disciplinary approach in every area of research and such conferences act as the back bone for researchers to identify progress in their respective areas as well as gain insight into an array of related topics.

I congratulate Anveshana Educational and Research Foundation for organizing this conference and wish all the participants an enriched experience.

Dr. P. S. Moorthy
Professor of CSE.
CMR College of Engineering And Technology, Hyderabad.

INTERNATIONAL CONFERENCE ON RECENT RESEARCH APPROACHES IN ENGINEERING, MANAGEMENT AND MULTIDISCIPLINARY STUDIES (ICRRAEMMS -2017) Date- 29th April 2017

MESSAGE



I am delighted to know that Anveshana Educational and Research Foundation is organizing INTERNATIONAL CONFERENCE ON RECENT RESEARCH APPROACHES IN ENGINEERING, MANAGEMENT AND MULTIDISCIPLINARY STUDIES (ICRRAEMMS) on 29th April 2017. to present the latest technological innovations to the Academicians and Research Students. This conference will bring the talents of the students in to glare of publicity of the Society. I strongly believe that Education is fundamental for the steady growth of economy and improvement of standards of living. This International Conference is creating a platform for academicians and researchers from different organizations to exchange their views and gain knowledge. It enables the researchers to get to know their progress in respective areas of research and will build confidence to face the global competition. This conference provides an opportunity to share ones experience and expertise with fellow delegates. I congratulate Anveshana Educational and Research Foundation for organizing this conference and wish them success in their endeavors.

Prof. Dr. Venkata Sai Vara Prasad Palla,
Professor Civil Dept.

INTERNATIONAL CONFERENCE ON RECENT RESEARCH APPROACHES IN ENGINEERING, MANAGEMENT AND MULTIDISCIPLINARY STUDIES (ICRRAEMMS -2017) Date- 29th April 2017

MESSAGE



INTERNATIONAL CONFERENCE ON RECENT RESEARCH APPROACHES IN ENGINEERING, MANAGEMENT AND MULTIDISCIPLINARY STUDIES (ICRRAEMMS) on 29th April 2017. addresses these issues through the seminar and exhibitions, bringing together representatives of all those involved at every fields of business, industry, academic, government and civil.

The International Conference facilitates ideas, information and program possibly to solve. The conference focuses on **International Conference On Recent Research Approaches In Engineering, Management And Multidisciplinary Studies**. This conference is going to address many issues. I am confident that your deliberations and the outcome of your efforts will raise public awareness about the role and value technology as a tool to promote economic, social and cultural development while addressing the complex issues on your agenda.

I wish all the delegates a successful techno career and take the privilege to welcome you all to this International Conference **ICRRAEMMS** -2017.

We look forward for your participation.

With best wishes.

Dr. BH. Varaprasad Professor of MECH, Ramachandra College of Engineering, Elluru.

(ICRRAEMMS -2017) Date- 29th April 2017

MESSAGE



It gives me great pleasure to participate in INTERNATIONAL CONFERENCE ON RECENT RESEARCH APPROACHES IN ENGINEERING, MANAGEMENT AND MULTIDISCIPLINARY STUDIES (ICRRAEMMS) on 29th April 2017. conducted by the Anveshana Educational And Research Foundation in association with Sana Engineering College Kodad.

The conference in 2017 would therefore be organized in a manner that would empower the research development in the electrical, Electric and mechanical field and would play a leading role in that engineering field.

We welcome all of you to the conference of **ICRRAEMMS**. We look forward to the active participation of your association in the conference.

I look forward to welcoming you in Vijayawada.

Dr. M. Vinay Babu Associate Professor Of CSE Chalapathi Institute Of Engineering And Technology, Guntur.

(ICRRAEMMS -2017) Date- 29th April 2017

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(ICRRAEMMS -2017) Date- 29th April 2017

A REVIEW ON LIFE CYCLE ASSESSMENT MODEL FOR INTEGRATED SOLID WASTE MANAGEMENT

Paper ID-MECH1001

<u>A Paper Presented by:</u> ¹G.Balamurali Krishna & ²Dr.V.V.S.Kesava Rao ¹Associate Professor & HOD, Dept of Mechanical Engineering, Avanthi Institute of Engineering & Research (JNTU-K)

²Professor Dept. of Mechanical Engineering, Andhra University, Vishakapatnam, AP.

ABSTRACT

Solid waste management is an important issue in today's world as it deals with (i) budget allocations of local municipality (ii) public acceptance and (iii) adverse impacts on environment. A careful observation of the material flow in a Solid waste management facility reveals a few interconnected activities. They are (i) waste treatment and disposal results in transfer of material flow from one source to another or one phase to another (ii) material flow is continuous (iii) the environmental burdens (or impacts) associated with material transfer should be accounted for (iv) a close loop exists among the interconnected activities in the material transfer.

The present study focuses on these aspects and revealed an interrelation ship among the activities that can be understood using system's approach. Landfilling of solid waste is a waste management option triggering a series of actions. The impacts of this activity are analyzed using Life Cycle Assessment (LCA) approach. A methodology for allocating of environmental loads among different functions within a system boundary is proposed using the example of landfilling of solid waste.

Keywords: LCA, material, SWM, Waste, Environment.

(ICRRAEMMS -2017) Date- 29th April 2017

INTEGRATIVE SPECTRUM SENSING IN COGNITIVE RADIO USING WIRELESS NETWORKS

Paper ID-ECE1002

A Paper Presented by: ¹Dharavat Ravinayak, ²Dr.K. Chandra BhushanaRao, ³S.Bosubabu ¹Assistant Professor, Dept. of ECE, Avanthi's Research and Technological Academy, Jawaharlal Nehru Technological University-Kakinada

²Sr.Professor & Head, Dept. of ECE, Jawaharlal Nehru Technological University-Vizianagaram
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Email:bosukalam@gmail.com

ABSTRACT

The entire operation of cognitive radio completely depends on the spectrum sensing technology in various areas. The main function of cognitive radio is to detect unused or unchecked spectrum and sharing it to other user without causing harmful interference to the primary user induced by reporting phase. Initially it requires different phases such as detection phase and reporting phase. In detection phase cognitive users detects the presence of primary users (Authenticated user).

In reporting phase cognitive user forward their detection report to fusion center on existing system. In this, we proposed to analyze the effect of ROC (Receiver Operating Characteristics) with and without dedicated reporting channel in various specifications.

Keywords— Network Management, cooperative spectrum sensing, Cognitive radio, ROC, Spectrum, Network, WLAN, fusion center.

(ICRRAEMMS -2017) Date- 29th April 2017

GENDER AND DIVERSITY MANAGEMENT (Theoretical Concepts and Constructs used in Empirical Research and Current Literature)

Paper ID-MGMT1003

<u>A Paper Presented by-</u> Prof. A. Suryanarayana Dean (Academics), Department of Business Management ,R G Kedia College <u>Email: professorsuryanarayana@gmail.com</u>

ABSTRACT

Diversity is more than just a passing blip on the corporate conscience. Over the past two decades it has become a major competitive factor for many companies and even something they are proud of. Yet others remain to be convinced. They want the business justification for diversity to be sound and demonstrable. To do that, it's necessary to address at least five major issues. They are: how does diversity (i) help an organization expand into global markets, (ii) help build brand equity, (iii) support the organization's human asset/resource strategies, (iv) build corporate image among our consumers, and (iv) enhance operational efficiency? Of necessity, building the business case for diversity in any given company will vary, but in general it can be stated in two compelling arguments: (i) For both large and small companies these days, the neighborhood in which they sell is the entire world, so it is essential that their workforces look and think like the world, in all of its ethnic, racial, and behavioral variety. (2) The demographics of almost every nation are changing so dramatically that over the coming decades it will be impossible for employers to fill their ranks with members of the traditional workforce.

While we can make a persuasive business case for diversity, available research evidence also suggests that there are few direct positive or negative effects of diversity on business performance in terms of productivity, quality of work life, and bottom line. Some researchers even suggested that a more—nuanced view of the business case for diversity may be more appropriate. In this context, we need to examine more closely that nuanced view and its implications for managers. For this purpose, an attempt is made in this Paper to examine the various theoretical concepts and constructs used in diversity and diversity management from the good amount of literature base as well as empirical findings available from qualitative and quantitative research studies.

Key Words: Diversity, Diversity Management, Inclusion, _Field', and *emic (ex post)* vs. *etic approach* (ex-ante)

(ICRRAEMMS -2017) Date- 29th April 2017

METHODICAL STUDY ON WIDESPREAD PROJECT MANAGEMENT SOFTWARES

Paper ID-MGMT1004

<u>A Paper Presented by-</u> Ruqaiya A.R. Khan Research Scholar, Shri JJTU University Rajasthan, India <u>Email: ruqaiyamaqsood@gmail.com</u>

ABSTRACT

This research paper highlights various methodical studies which are carried out on the project management software and their outcomes which are present Software development project is often faced with unanticipated problems which pose any potential risks within the development environment. Controlling these risks arises from both the technical and non-technical development components already from the early stages of the development is crucial to arrive at a successful project. Therefore, software development risk management is becoming recognized as a best practice in the software industry for reducing these risks before they occur. This thesis contributes for a goaldriven software development risk management model to assess and manage software development risk within requirement engineering phase. Software risk management generally focuses on goals relating to schedule, cost, and quality. Nevertheless, certain goals such as offshore and co-ordination projects work within different cultures and locations, supporting critical business process, compliance with the demanded regulations, security and safety have gained importance recently. Though there are several contributions in the area of software risk management, still a lot need to be done for integrating in the development process. Risk management is usually performed during design or later development phase. But in that case, counter measures may introduce revision of the whole design or alteration of the elicited system requirements and related artifacts. These may lead unanticipated problems during the development and jeopardy to the project success. Considering risk management since the early phase can avoid such problems and contributes to mitigate these risks. However, comprehensive details are still missing in the literature regarding the integration of the risk management during requirement engineering phase.

Keywords: Software product line, software engineering, SME, software engineering, systems engineering.

(ICRRAEMMS -2017) Date- 29th April 2017

DEGRADATION OF DYE BY ADVANCED OXIDATION PROCESSES

Paper ID-CHEM1005

<u>A Paper Presented by-</u> Mrs. Pritiphalak Dr.D.Y. Patil Institute of Engineering Management and Research, Pune -1, Maharashtra, India **Email:** pritichaudhari65@gmail.com

ABSTRACT

The presence of extremely refractory organic matter, dyes and organic compounds in the wastewater stream, the use of conventional wastewater treatment methods are increasingly become challenged. Sonophotocatalysis can improve the performance of advance oxidation process based on the synergic effect of photocatalysis and sonolysis for the degradation of organic and inorganic contaminants in aqueous streams. The basic reaction mechanism for both sonolysis as well as photocatalysis is the generation of free radicals and subsequent attack by these on the pollutant organic species. If the UV light (Photocatalysis) and ultrasound (Sonolysis) are operated in combination, more number of free radicals will be available for the reaction thereby increasing the rates of reaction. The novel method developed in present work is useful for intensification of degradation of dye pollutant.

Keywords: Photocatalysis, Sonolysis, Sono-photo-catalysis, Synergy

(ICRRAEMMS -2017) Date- 29th April 2017

A CLASSICAL DC-DC CONVERTER BASED ON THE THREE-STATE SOFT SWITCHING CELL FOR HIGH CURRENT AND VOLTAGE STEP-DOWN APPLICATIONS

Paper ID-EEE1006

<u>A Paper Presented by-</u> ¹D.Chandrasekhar & ²K.Kumari. Gate College Of Engineering, Kodad. **Email:** ²kumarieee215@qmail.com

ABSTRACT

This paper presents a pulse width modulation dc-dc no isolated buck converter using the three-state switching cell, constituted by two active switches, two diodes, and two coupled inductors. Only part of the load power is processed by the active switches, reducing the peak current through the switches to half of the load current, as higher power levels can then be achieved by the proposed topology. The volume of reactive elements, i.e., inductors and capacitors, is also decreased since the ripple frequency of the output voltage is twice the switching frequency. Due to the intrinsic characteristics of the topology, total losses are distributed among all semiconductors. Another advantage of this converter is the reduced region for discontinuous conduction mode when compared to the conventional buck converter or, in other words, the operation range in continuous conduction mode is increased, as demonstrated by the static gain plot. The theoretical approach is detailed through qualitative and quantitative analyses by the application of the three-state switching cell to the buck converter operating in no overlapping mode (D < 0.5). Besides, the mathematical analysis and development of an experimental prototype rated at 1 kW are carried out. The main simulation results are presented and adequately discussed to clearly identify its claimed advantages.

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ADVANCED VOLTAGE SUPPORT AND ACTIVE POWER FLOW CONTROL IN GRID-CONNECTED CONVERTERS UNDER UNBALANCED CONDITIONS

Paper ID-EEE1007

A Paper Presented byAssistant Professor Mits, Kodad

ABSTRACT

Supporting the grid and improving its reliability have recently become major requirements for large distributed generation units. Under most grid faults, the accuracy of the traditional voltage support schemes (VSSs) is dramatically affected due to the existence of the zero-sequence voltage. Also, the traditional VSSs have been used only in the STATCOM applications where the active power is zero. This paper proposes an advanced VSS in the converterinterfaced units, called zero sequence compensated voltage support (ZCVS), to accurately regulate the three-phase voltages of the connection point within the pre-set safety limits. The proposed scheme not only compensates the zerosequence component but also considers the active power injection. Unlike the traditional methods, the proposed VSS is adapted even in resistive distribution systems. The contribution of this paper is, however, ternate. As the second contribution, the limited active power oscillation (LAPO) is proposed to be augmented to the ZCVS. This feature limits the oscillation to a specified value which provides an adjustable dc-link voltage oscillation setting while simultaneously supporting the ac host grid, even under severe unbalanced faults. Third, the maximum active power delivery (MAPD) to the ac grid is also formulated for the ZCVS. The successful results of the proposed support scheme and complementary strategies are verified using selected simulation and experimental test cases.

Keywords: Grid, reliability, three-phase, voltage

Date- 29th April 2017

STRUCTURAL ANALYSIS OF CRANKSHAFT OF DIESEL ENGINE

Paper ID-EEE1008

A Paper Presented by- Rajhans ¹, Md. Firoj Ansari ², Khalid Anwar ³ & M. Ravindra ⁴ ¹²³Final Year Students of Sana Engineering College, Kodad. ⁴Associate Professor, Sana Engineering, College, kodad. **Email:** 4ravindramarkapudi.330@gmail.com

ABSTRACT

The stress analysis and modal analysis of a single-cylinder crankshaft are discussed using finite element method in this paper. Three-dimension models of 480 diesel engine crankshaft and crank throw were created using CATIA software The finite element analysis (FEM) software ANSYS was used to analyze the vibration modal and the distortion and stress status of the crank throw. The maximum deformation, maximum stress point and dangerous areas are found by the stress analysis of crank throw. The relationship between the frequency and the vibration modal is explained by the modal analysis of crankshaft. The results would provide a valuable theoretical foundation for the optimization and improvement of engine design.

Keyword: crankshaft, crank throw, stress

INTERNATIONAL CONFERENCE ON RECENT RESEARCH APPROACHES IN ENGINEERING, MANAGEMENT AND MULTIDISCIPLINARY STUDIES (ICRRAEMMS -2017) Date- 29th April 2017

ANALYSIS OF PROBLEMS IN EMBEDDED SYSTEMS

Paper ID-EEE1009

A Paper Presented byAssistant Professor MITS, Kodad

ABSTRACT

Embedded systems are everywhere in our life and are supposed to make our lives more comfortable. In industry, embedded systems are used to manage and control complex systems (e.g. nuclear power plants, telecommunications and flight control) and they are also taking an important place in our daily activities (e.g. smart phones, security alarms and traffic lights, Digital cameras, washing machines). This paper explains the optimization techniques for memory management because in the design of embedded systems, memory allocation and data assignment are the main challenges that electronic designers have to face. In fact, they impact heavily on the main cost metrics (power consumption, performance and area) in electronic devices. Thus designers of embedded systems have to pay careful attention in order to minimize memory requirements, thus improving memory throughput and limiting the power consumption by the system's memory. Electronic designers attempt to minimize memory requirements with the aim of lowering the overall system costs.

Keywords: Memory allocation, power consumption, cost

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STRESS ANALYSIS OF HORIZENTAL PRESSURE VESSEL WITH DIFFERENT DISHED END USING FEM

Paper ID-EEE1010

A Paper Presented by-Sahidul Islam³ & M.Ravindra⁴

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ABSTRACT

Pressure vessels have been manufactured by filament winding for a long time. Although they appear to be simple structures, pressure vessels are among the most difficult to design. Filament-wound composite pressure vessels have found wide spread use not only for military use but also for civilian applications. Applications include breathing device, such as self-contained breathing apparatus used by fire-fighters and other emergency personnel, scuba tanks for divers, oxygen cylinders for medical and aviation cylinders for emergency slide inflation, opening doors or lowering of landing gear, mountaineering expedition equipment, paintball gas cylinders, etc. A potential widespread application for composite pressure vessels is the automotive industry.

In this project, at first Design calculations are done. Then based on design calculations 3d model is generated. In this project, pressure vessel is subjected to structural analysis to determine the deflections and stresses. In this project, pressure vessel is studied for steel and composite materials. CATIA is used for modeling and ANSYS software is used for analysis of pressure vessel.

Keywords: pressure vessels, composite pressure, paintball, gas cylinder

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DESIGN AND ANALYSIS OF A VERTICAL AXIS WIND TURBINE BLADE

Paper ID-EEE1011

<u>A Paper Presented by-</u> Sourabh kumar¹, Md. Irfan khan², Sohel rana³ & M.Ravindra⁴

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ABSTRACT

One of the most important design parameters for cost-effective SB-VAWT is selection of blade material. SB-VAWT blades must be produced at moderate cost for the resulting energy to be competitive in price and the blade should last during the predicted lifetime (usually between 20 and 30 years). At present, Aluminum blades fabricated by extrusion and bending are the most common type of VAWT materials. The major problem with Aluminum alloy for wind turbine application is its poor fatigue properties and its allowable stress levels in dynamic application decrease quite markedly at increasing numbers of cyclic stress applications. Under this backdrop, an attempt has been made in my project to investigate alternative materials as SB-VAWT blade material.

In my project, required properties of the SB-VAWT Blade Materials are first identified. Then available prospective materials are shortlisted and assessed. Subsequently, comparisons are made between the available materials based on their mechanical properties and costs. Finally, comparisons have been made between the design features of a SB-VAWT with Aluminum and the alternative material blades using one of the prospective airfoils. The results of the design analyses demonstrate the superiority of the alternative blade material over conventionally used Aluminum. Structural and modal analyses have been conducted using advanced finite element methods.

Keywords: Turbine, Blade material, Aluminum

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DESIGN AND FABRICATION OF POLLUTIONLESS MOSQUITO AND INSECT TRAP

Paper ID-EEE1012

A Paper Presented by- Gaddam Purna Chandra rao Assistant Professor, Dhanekula Institute of Engineering & Technology, Vijayawada.

ABSTRACT

Mosquitoes are the most important among all arthropod vectors that causes human disease in the tropical conditions. In order to reduce the mosquito nuisance and risk of diseases caused by them it is essential to reduce mosquito populations. The best way to control mosquitoes is to eliminate water resources that encourage breeding. A number of methods have been used to collect mosquitoes. Mosquito traps are the most useful means of collecting because of the propensity of Dies to be active at night and to be attracted to light. All insects including mosquitoes hover in air. Their movement can be influenced by air flow. When the fan runs it sucks air along with insects and mosquitoes and the air hits the wire mesh fixed to the front fan guard. All the insects including mosquitoes die due to mechanical impact, thereby reducing further breeding. Mosquito trap which was designed primarily to capture mosquitoes and other insects are attracted to a light source situated on top of the trap and are pulled through a rotating ran into a collapsible cage. The trap is lightweight and is suitable for field studies where electric power is unavailable since it operates on dry-cell batteries. Insects that enter may be mutilated by the fan blades. Hence the population in a house dwindles asymptotically with time.

Keywords: Mosquitoes, diseases, control, population

Date- 29th April 2017

DESIGN AND FINITE ELEMENT ANALYSIS OF PNEUMATIC LIFT

Paper ID-EEE1013

A Paper Presented by- Irshad Ansari¹ & M.Ravindra² ¹Btech final year students of Sana Engineering College, Kodad ²Assistant Professor, Sana Engineering College, Kodad.

ABSTRACT

The Pneumatic Lift is developed for the users to lift any weight using air pressure. High pressure air is stored in a tank. A cylinder with piston arrangement is connected with a zig-zag pattern. Two pipes connected with ball valves connect the air tank with the cylinder. When one valve is opened, the air rushes out into the cylinder. Therefore the piston moves in one direction. The rod connected with the piston pushes the zig-zag frame so that the lift moves up. When the other ball valve is opened, the air inside the cylinder is released. Therefore the lift comes down.

In the process of lifting, the total weight of car is subjected to the lifting plate and zig-zag pattern. So the static analysis carried pneumatic lift plate and zigzag links with the vehicle loads, and optimizing for more weight lift, and cost reduction of pneumatic lift.

The dynamic characteristics analysis of pneumatic lift is mainly involved in the calculation about natural frequency and mode shape. The objective is to calculate the natural frequency and mode shape of pneumatic lift modulating those frequencies and avoiding resonance, thus the vibrations of pneumatic lift may reduce.

In this project, the three-dimension model of pneumatic lift is modeled in CATIA and imported into ANSYS software to perform static and modal analysis to analyze strength and dynamic characteristics of pneumatic lift and optimize if required.

Keywords: pneumatic lift, air tank, pressure, frequency

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STATIC AND MODAL ANALYSIS OF IMPELLER OF A TURBOCHARGER

Paper ID-EEE1014

<u>A Paper Presented by-</u> ¹Md.Shadab Anjum, ²Md.Rustam Ali , & ³A.Kanthaiah ¹²Btech final year students of Sana Engineering College ,Kodad ³Assistant Professor, Sana Engineering College, Kodad.

ABSTRACT

Turbochargers are a class of turbo machinery intended to increase the power of internal Combustion engines. This is accomplished by increasing the pressure of intake air, allowing more fuel to be combusted.

Alloys are playing major role in many engineering applications. They offer outstanding mechanical properties, flexibility in design capabilities, and ease of fabrication. Additional advantages include light weight and corrosion resistance, impact resistance, and excellent fatigue strength. Today alloys are routinely used in such diverse applications as automobiles, aircraft, space vehicles, offshore structures, containers and piping, sporting goods, electronics, and appliances.

This project deals with the static and dynamic analysis of a turbo charger impeller which is made of two different alloy materials (Wrought aluminum alloy 909 and Inconel alloy 625) to estimate its performance. The project has been carried out using CATIA and ANSYS software. ANSYS is dedicated finite element package used for determining the variation of stresses, strains and deformation across profile of the impeller. A structural analysis has been carried out to investigate the stresses, strains and displacements of the impeller and modal analysis has been carried out to investigate the natural frequencies of the impeller. An attempt is also made to suggest the best alloy for an impeller of a turbocharger by comparing the results obtained for two different alloys

Keywords: Turbocharger, internal combustion engines, pressure, intake air, flexibility, dynamic analysis.

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DESIGN OPTIMIZATION OF COVER PLATE BY USING ANSYS SOFTWARE

Paper ID-EEE1015

A Paper Presented by- ¹Md.Rakibun Nobi & ²Salar baig ¹Btech final year student of Sana Engineering College, Kodad. ²Assistant Professor, Sana Engineering College, Kodad.

ABSTRACT

Cover plate is used to hold the amplifiers, resistors and other circuit parts in electrical circuit box. It is clamped to entire circuit box like cap. The amplifiers are used in army vehicle to amplify the signals. The box on which the cover plate is mounted consists of the processors and electronic chips. These electronic components generate a maximum heat of 2watts. So the cover plate should dissipate the heat generation as much as possible. So a thermal analysis is done the cover plate to find the temperature distribution due to the thermal body loads. Commercially available ANSYS software is used to perfume the analysis.

In this project, 3d modeling of cover plate is modeled using CAD software. The 3d model of cover plate is subjected to thermal analysis for thermal loads. In this project, the temperature distribution on the cover plate is documented. Optimization is done on the cover plate to increase the temperature distribution on the cover plate i.e. the max temperature distribution is below the threshold temperature. CATIA software is used for 3d modeling of cover plate and ANSYS software is used for thermal analysis.

Keywords: Cover plate, amplifiers, signals, electronic chip, Thermal analysis

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DESIGN AND STRUCTURAL ANALYSIS OF HIGH SPEED HELICAL GEAR USING ANSYS SOFTWARE

Paper ID-EEE1016

<u>A Paper Presented by</u> ¹Md. Matin Alam & ²A. Kanthaiah ¹Btech final year student of Sana Engineering College ,Kodad ²Assistant Professor, Sana Engineering College, Kodad.

ABSTRACT

Marine engines are among heavy-duty machineries, which need to be taken care of in the best way during prototype development stages. These engines are operated at very high speeds which induce large stresses and deflections in the gears as well as in other rotating components. For the safe functioning of the engine, these stresses and deflections have to be minimized.

Gears are one of the most critical components in mechanical power transmission systems. Today's competitive business in the global market has brought increasing awareness to optimize the gear design. The gears are generally used to transmit power or torque and the efficiency of transmission is very high when compared to other kind of transmissions. The helical gear offers high contact and more friction which avoids slippage when compared to spur gear. To estimate the bending stress, three dimensional solid models for different number of teeth are generated by CATIA that is powerful and modern modeling software and the numerical solution is done by ANSYS, which is a finite element analysis package. The analytical investigation is based on Lewis stress formula. The aim of the present study is to focus on reduction of weight and thereby reducing the unbalance forces setup in the system.

In this project, static-structural analysis on a high speed helical gear used in marine engines, have been performed. The dimensions of the model have been arrived at by theoretical methods. The stresses generated and the deflections of the tooth have been analyzed for different materials. Finally the results obtained by theoretical analysis and Finite Element Analysis are compared to check the correctness. A conclusion has been arrived on the material which is best suited for the marine engines based on the results.

Keywords: Marine Engine, large stress, weight, helical gear, deflection

INTERNATIONAL CONFERENCE ON RECENT RESEARCH APPROACHES IN ENGINEERING, MANAGEMENT AND MULTIDISCIPLINARY STUDIES (ICRRAEMMS -2017) Date- 29th April 2017

MODELING &STATIC ANALYSIS OF STRETCHER ASSEMBLY

Paper ID-EEE1017

<u>A Paper Presented by</u> ¹Diwakar Kumar ,² Qamar Alam & ³Abdul Wahhab Umar & ⁴M.Ravindra ¹²³Btech final year students of Sana Engineering College ,Kodad ⁴Assistant Professor, Sana Engineering College, Kodad.

ABSTRACT

A **stretcher** is an apparatus used for moving patients who require medical care. A basic type (cot or litter) must be carried by two or more people. Whereas a wheeled stretcher (known as a gurney, trolley, bed or cart) is often equipped with variable height frames containing wheels, tracks, or skids. Stretchers are primarily used in acute out-of-hospital care situations by EMS, military, and Search and rescue personnel. However they are also used to hold prisoners during lethal injections in the United States.

The aim of this project is to know the weight bearing capacity of sketcher assembly. To know the weight bearing capacity of sketcher assembly CAE package is used. Sketcher assembly is subjected to static analysis to weight bearing capacity of sketcher. At first, 3d model of the stretcher assembly is modeled in CAD software. Then sketcher assembly is subjected to static analysis in CAE software. In this sketcher is studied for three iterations. Deflections and stresses are documented.

Keyword: stretcher, weight, static analysis, Deflection

Date- 29th April 2017

STRUCTURAL ANALYSIS OF MONO LEAF SPRING FOR **DIFFERENT MATERIALS**

Paper ID-EEE1018

A Paper Presented by- ¹Bilal Ahmed Chowdhury, ²Shahidul Islam, ³Abdullah Khalid, ⁴Abdul Ahad Chowdhury, ⁵Raj Kumar Mahto & ⁶M.Ravindra. ¹²³⁴⁵Btech final year students of Sana Engineering College ,Kodad ⁶Assistant Professor, Sana Engineering College, Kodad.

ABSTRACT

Leaf springs are one of the oldest suspension components they are still frequently used, especially in commercial vehicles. The past literature survey shows that leaf springs are designed as generalized force elements where the position, velocity and orientation of the axle mounting gives the reaction forces in the chassis attachment positions. Another part has to be focused, is the automobile industry has shown increased interest in the replacement of steel spring with composite leaf spring due to high strength to weight ratio. Therefore, analysis of the composite material becomes equally important to study the behavior of Composite Leaf Spring.

The objective of my project is to present modeling and analysis of composite mono leaf spring (GFRP) and compare its results. Modeling is done using CATIA and analysis is carried out by using ANSYS software for better understanding.

Keywords: leaf spring, composite material, modeling and analysis

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COUPLE FIELD ANALYSIS OF CYLINDER HEAD OF TWO-STROKE ENGINE

Paper ID-EEE1019

<u>A Paper Presented by-</u> ¹M.Bharadwaza & ²M.Ravindra ¹Btech final year student of Sana Engineering College ,Kodad ² Assistant Professor , Sana Engineering College, Kodad.

ABSTRACT

The importance of heat transfer in design of two stroke engine is important to make sure the engine will perform to expectation during actual working conditions. For this a prediction is done on the various heat distributions that might occur during a normal operation of the engine. The finite element model was evolved with many boundary conditions that are predicted from theoretical studies. This is to see the general heat transfer of the engine and whether or not the engine will withstand the thermal loads occurring during the theoretical operation. Assumptions are made by approximating temperature to the actual operating condition of the engine. Heat transfer was modeled with conduction and convection as the main source of heat transfer and neglecting radiation. The values are to be verified when the actual engine is operating with correct boundary conditions. It is hoped that the engine will not come to the boundary applied as it is assumed very high compared to actual condition. The study is a transient study with assumption that the engine is running at 6000 rpm for 60 seconds and generating the boundary heat from theoretical calculations.

First thermal analysis was done and analyzed the temperature distribution over the fin area. In the second stage structural analysis was carried out using the thermal loads obtained in the first stage. Three different types of materials were taken for analysis. Modeling of cylinder head is done using CATIA software and thermal and structural analysis is done by using ANSYS software.

Keywords: Two-stroke engine, Boundary conditions, thermal loads, conduction, heat transfer

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DESIGN AND COUPLE FIELD ANALYSIS OF INTERNAL COMBUSTION PISTON

Paper ID-EEE1020

<u>A Paper Presented by-</u> ¹Abdul khaleque ,² Minhazur Rahman & 3M.Ravindra ¹²Btech final year student of Sana Engineering College ,Kodad ³Assistant Professor ,Sana Engineering College, Kodad.

ABSTRACT

Automobile components are in great demand these days because of increased use of automobiles. The increased demand is due to improved performance and reduced cost of these components. R&D and testing engineers should develop critical components in shortest possible time to minimize launch time for new products. This necessitates understanding of new technologies and quick absorption in the development of new products. A piston is a moving component that is contained by a cylinder and is made gas-tight by piston rings. In an engine its purpose is to transfer from expanding gas in the cylinder to the crank shaft via piston rod and or connecting rod. As an important part in an engine piston endures the cyclic gas pressure and inertia forces at work and this working condition may cause the fatigue damage of the piston. The investigations indicate that greatest stress appears on the upper end of the piston and stress concentration is one of the mainly reason for fatigue failure.

An internal combustion engine includes a piston adapted to reciprocate in a cylinder. This piston includes a first portion, a second portion, and a third portion. The first portion of the piston forms a crown surface of the piston, the second portion of the piston forms a piston ring groove of the piston with the piston ring groove arranged and configured to receive a piston ring, and the third portion of the piston forms a crankcase side surface of the piston with the crankcase side surface facing a crankcase of the engine. The second portion of the piston is formed of a material having a higher thermal conductivity than a material forming the first portion of the piston and a material forming a third portion of the piston.

This paper describes the stress distribution on the piston four stroke engines by using FEA. The finite element analysis is performed by using computer aided design (CAD) software. The main objective is to investigate and analyze the stress distribution and deflections of piston at the real engine condition

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during combustion process. The piston is designed according to the forces acting on it from the gases, which are released during the combustion. The piston head acts as a particular case and hence the piston is analyzed for the stresses developed due to the conditions.

At first, the piston is designed according to the specifications. After the designing, the model is subjected to certain conditions. According to the conditions we have checked the stresses acting on it and checked the failures of the model. The optimization is carried out to reduce the stress concentration on the upper end of the piston i.e. (piston head/crown). With using computer aided design (CAD), CATIA software the structural model of a piston will be developed. Furthermore, the finite element analysis performed with using software ANSYS.

Keywords: Automobile components, crank shaft, piston, crown piston, reciprocate, thermal conductivity, piston ring

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DESIGN AND ANALYSIS OF A LIFTING BEAM FOR 350TONNES

Paper ID-EEE1021

<u>A Paper Presented by</u> ¹Zayad Ansari & ²Salar Baig ¹Btech final year student of Sana Engineering College ,Kodad ² Assistant Professor , Sana Engineering College, Kodad.

ABSTRACT

A lifting beam is a solid or fabricated metal beam, suspended from a hoist/crane or from forks of a forklift, designed to provide multiple lifting points. The lifting beam enables the user to attach the load at more than one point therein securing and controlling the load's movement.

This is important to minimize unwanted erection stresses or to prevent reversal of stress in certain portions of the lifted object. So the design of lifting beam plays a crucial role in the wellness of the lifted object.

The present Lifting beam designed in my project is designed for BHEL for lifting of a material of 350 Tonnes.

The objective of my project is

- ➤ To perform the design calculations for the lifting beam for a capacity of 350 Tonnes as per the specifications.
- Create 3D model as per the design calculations in CATIA.
- ➤ Perform Structural analysis on the 3D model with Symmetric Loading of 350 Tonnes using Ansys.

Keywords: lifting beam, stresses, lifting points

INVESTIGATION OF POWDER ADDED ELECTRICAL DISCHARGE MACHINING OF HASTELLOY

Paper ID-EEE1022

<u>A Paper Presented by-</u> Nandeti Praveen MIC College of Technology, Kanchikacharla ,AP

ABSTRACT

In the present paper, the investigation has been made to optimize the process parameters of powder added EDM of HASTELLOY. Taguchi technique has been used to plan and analyze the experiments. Experiments are conducted on newly designed experimental setup developed on the laboratory. Discharge current, pulse on time, pulse off time and powder concentration added into the dielectric fluid of EDM were chosen as variable to study the output parameters such as material removal rate(MRR) and tool wear rate (TWR). Experimental results revealed that, MRR at optimum condition $A_3B_3C_3D_2$ and TWR is lower at optimum condition $A_1B_1C_3D_3$.

Keywords--- Material Removal Rate, Tool Wear Rate, Taguchi Technique, Powder Mixed EDM, Hastelloy

A STUDY ON CUSTOMER PERCEPTION REGARDING REFRIGERATORS

Paper ID-EEE1023

<u>A Paper Presented by-</u> ¹Y. Jagadish, ²R. Mahesh, ³Ch. Sirisha ¹²³Assistant Professors in Amrita Sai Institute of Science & Technology, Paritala. Email: ¹y.jagadish87@gmail.com, ²Rammahesh333@gmail.com, ³sirishatf@gmail.com

ABSTRACT

In recent days India is endorse a change in consumerism. The market is now primarily customer driver. Refrigerator segment is no peculiarity to this general trend. The purchase of refrigerators is now a common phenomenon among middle class and customer wants with various admirable features and new brands. The decision to purchase refrigerator is not a one man decision. Though the financial decision is taken by the main source of income of the family usually men is main source of income in Indian middle class families the decision regarding colour, brands and the like are taken by women i.e., wife. The present study is an attempt to study the perception of the customers towards refrigerators. The data has been collected through a structured questionnaire and the sample size of the present study is 200. The current study was conducted in Vijayawada.

Keywords: Customer perception, Customer satisfaction, Factors, House holds, Refrigerators...

Date- 29th April 2017

PERFORMANCE OF THERMO -HYDRAULIC FOAM HEAT EXCHANGER

Paper ID-MECH1024

<u>A Paper Presented by-</u> Bhukya.Balu Gate College of Engineering , Dept of Mechanical Engineering Email: <u>bhukyabalu006@gmail.com</u>

ABSTRACT

This research investigates the implementation of porous metals particularly aluminium foam as an enhanced surface to improve heat transfer on the air side of air-cooled, tubular heat exchangers. The target application for these heat exchangers is the condensers for geothermal power plants in remote locations of Australia where water for wet cooling is scarce. Traditional practices for liquid-to-air or vapour to air heat exchangers rely predominantly on need surfaces to enhance heat transfer rate.

Heat transfer enhancement in these designs is achieved via an increased surface area of simple geometries. Recent advancement in manufacturing and availability of porous materials make them possible to be utilized in thermal exchange equipment to improve efficiency and compactness.

This work describes heat exchanger tubes based on circular cylinders with aluminium foam covering on the outer surface. Thermo-hydraulic performances are evaluated experimentally in a cross- flow using low-speed wind tunnel. The tests are performed on single cylinders, single row arrays, and multi-row tube bundles in both aligned and staggered conjurations' subjected to air flow of 0.5 to 5.0 m/s. This range of air velocities is chosen as it encompasses vertical flow regimes occur inside typical cooling towers.

The effects of foam layer thickness, transversal and longitudinal tube pitches, foam-to-tube bonding methods, and tube bank patterns, are collectively investigated. The results are compared to baseline data obtained from conventional, annular need tubes and tube bundles tested under the same conditions. The overall conclusions are drawn on heat transfer and pressure drop as two main comparison parameters. Experimental results on these parameters corm the trend of numerical readings of a previous in-house study, although with varying degrees of differences on their magnitude.

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In all need- versus foam-surface comparisons, under the same testing conditions and using specimens of similar dimensions, the latter shows convincing benefit on heat transfer/pressure drop ratios over the full range of chosen air flows. Within this range, the maximum relative advantage of the foam-covered heat exchangers over the need type is observed at the midrange of air flow between 2.0 and 2.5 m/s. This result is both desirable and opportune because these designated air flows coincide with the top end velocity found inside most natural-draft cooling towers. Beyond this range of air flow up to 5.0 m/s, a typical range at the lower end of induced- or forced-draft cooling towers, the relative merit of heat transfer/pressure drop is rapidly degraded.

However, in a situation where the increased heat transfer is under demand and compactness is not a critical factor, the pressure drop can be reduced satisfactorily by choosing a suitable transversal pitch within the tube bundle. Under this reduced blockage condition, metal foam heat exchanger bundles tend to behave as a group of an individual tube; therefore, retain higher relative benefit in terms of the sum of heat transfer/pressure drop ratio over their need-surface counterpart.

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COMBINED OPERATION OF UNIFIED POWER QUALITY CONDITIONER WITH DISTRIBUTED GENERATION ON POWER SYSTEM NETWORK

Paper ID-EEE1025

A Paper Presented by¹D.Jagan, ²Amararapu.Karunakar, ³Sathish Voggu
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ABSTRACT

In today's world, the demand for the electric power is growing rapidly; to overcome this, many power generation resources are constructing in all over the globe. But the problem arises when the new generation is integrated with the power network and distribution, as the existed power network was not designed by keeping in mind the new integration of generation in the future. So the design of combined operation of UPQC and PV array is proposed. The proposed system is composed of series and shunt inverters, PV array connected to DC link by boost converter which is able to compensate the voltage sag and swell and voltage interruption, harmonics and reactive power in both islanding and interconnected modes.

The proposed system is able to inject the active power to grid in addition to its ability in improvement of power quality in point of common coupling. Also it can provide a part of sensitive load power during voltage interruption. The results of simulation in MATLAB/SIMULINK software show that the mentioned system operates correctly.

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PERFORMANCE CHARACTERISTICS OF A DIESEL ENGINE USING MAHUA BIODIESEL AS ALTERNATE FUEL

Paper ID-MECH1026

A Paper Presented by – CH. Premalatha Research Scholar Shri JJT University, Rajasthan.

ABSTRACT

The aim of this study is to assess the performance, emission and combustion characteristics of diesel engine using mahua methyl esters. In the present work, mahua methyl esters and its blends with diesel were used as fuel. Various proportions of mahua methyl ester fuel blends (25% and 50%) were used for conducting the performance tests at varying load conditions. Various parameters such as thermal efficiency, specific fuel consumption, emission of carbon dioxide, carbon monoxide, hydrocarbons and oxides of nitrogen gases in exhaust were recorded. The important properties of mahua methyl esters are compared with diesel standards. The test results indicate that the fuel of B25 can be used in diesel engines without any engine modifications.

Key words: Biodiesel Mahua methyl esters Performance Emission Combustion.

A REVIEW ON RFID SECURITY ACCESS CONTROL SYSTEM

Paper ID-ECE1027

A Paper Presented by: Afreen Research Scholar, Shri JJT University, Rajasthan.

ABSTRACT

The main objective of this project is to provide security in an organization by allowing only the authorized personnel to access the secure area. The security of any organization is a priority for the authorities.

The concern is for the physical property and also for the intellectual property. For this reason only the authorized person with a valid RFID tag is allowed into the secured premises. This tag contains an integrated circuit that is used for storing and processing information, modulating and demodulating the radio frequency signal that is being transmitted.

Thus, once the person shows the RFID tag to the card reader it scans the data present in the tag and compares it with the data present in the microcontroller. When the data matches with that in the microcontroller, the load will be turned ON which is operated by a relay being driven from the output of the microcontroller. If a valid tag is swiped then the system displays a message —AUTHORIZED else it states —UNAUTHORIZED and doesn't allow access.

A lamp is used as an indication besides the LCD display. This project can be further enhanced by interfacing it with GSM technology. Any attempt for unauthorized access can be intimated to the security personnel through an SMS. It can also be interfaced with a finger print module to reduce the drawback of RFID system i.e. exchanging RFID tags.

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PERFORMANCE ANALYSIS AND SIMULINK MODELING OF VERSATILE ADJUSTABLE SPEED TSCAOI INDUCTION GENERATOR

Paper ID-EEE1028

<u>A Paper Presented by-</u> ¹Sugunakar Mamidala ,²Naveen Kumar.D, ³Dr.Kwaja moinuddin Syed Department Of EEE, Sana Engineering College, Kodad.

ABSTRACT

Enormous advantages of induction motor (IM) like their relative cheapness, low maintenance and high reliability for industrial use has been simulated for over the years. This paper presents a novel fuzzy logic controller for cage induction generator (CIG) and presents a mathematical model, through which its behavior can be accurately predicted and performance can be improved with fuzzy controller. The inputs to the fuzzy logic controller are the linguistic variables of speed error and change of speed error, while the output is change in switching control frequency of the voltage source inverter. The two-seriesconnected-and-one isolated (TSCAOI) phase winding configuration magnetically decouples the two sets of windings, enabling independent control. The proposed generator system employs a three-phase cage induction machine and generates single-phase and constant-frequency electricity at varying rotor speeds without an intermediate inverter stage excitation to the isolated single winding at any frequency of generation. With low cost the proposed generator can be easily implemented. It can be used for both energy storage and retrieval through its excitation winding, and it is an ideal candidate for small-scale renewable energy applications. A dynamic mathematical model, which accurately predicts the improved behavior of the proposed generator from conventional PI controller, is also presented and implemented MATLAB/Simulink.

Keywords- Induction motor, Cage induction generator, Fuzzy controller, MATLAB/Simulink.

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DSP-BASED ELECTRIC POWER ASSISTED STEERING USING BLDC MOTOR

Paper ID-EEE1029

<u>A Paper Presented by-</u> ¹Samyuktha ,²Laxman Munjam & ³Dr.Venkateshwarlu Department Of EEE, Sana Engineering College, Kodad.

ABSTRACT

This paper introduces a design and implementation of electrically assisted power steering (EAS) using BLDC motor for a vehicle. The control architecture consists of two layers of control, namely the vehicle speed associated control and the torque assist control. In the higher level of control architecture, the vehicle speed controller works as an assistance level controller for the steering effort. In the lower level, the torque controller gives the effort level control. This has been realized by torque sensor and vehicle sensor interfaced in the DSP. For implementing in the system, a DSP-based BLDC motor controller with three-phase inverter module is specially designed using Hall-effect sensor feedback and a single dc-link current sensor. This work is implemented in a Light Commercial Vehicle having a recirculating ball type gear. This is for the first time (EAS) being implemented for this type of vehicle any where in the world. Generally, EAS having clutch to disconnect the motor in high speed or abnormal conditions from the gear box. In this implementation the motor is directly coupled to gearbox without clutch and all abnormalities are handled by the processor. This is implemented without modifying the vehicle supply system like changing the existing alternator or rating of the battery and using the existing sensors. The design is such a way that the feel of the driver assistance can be varied easily at any time. The performance of the control system is experimentally verified and it is tested in one of the Light Commercial Vehicle (LCV).

Keywords: BLDC motor, EAS, steering.

Date- 29th April 2017

NOVEL DESIGN AND IMPLEMENTATION OF DECENTRALIZED ACCESS CONTROL WITH ANONYMOUS AUTHENTICATION OF DATA STORED IN GRID EXTENDED CLOUDS

Paper ID-CSE1030

<u>A Paper Presented by-</u> ¹P.Nagamani , ²Dr.Y.Ramadevi & ³Dr.M. Upendra Kumari ¹Research Scholar , Computer Science, Rayalaseema University, Kurnool A.P. India. ²Professor and HOD CSE, C.B.I.T., Affiliated to O.U. Hyderabad, T.S. India. ³Associate Professor CSE ,MGIT JNTU H Hyderabad T.S. India Email: ¹nagamani.koli@gmail.com, ²yrdcse.cbit@gmail.com & ³uppi shravani@rediffmail.com

ABSTRACT

The novel research area of a middleware technology framework for data management and distribution in Grid Computing, had now evolved into niche integrated areas of Cloud Computing, Big Data and Internet of Things for Security and Privacy. This paper is a novel design and implementation of Decentralized access control with anonymous authentication of data stored in Grid extended Clouds.

Keywords: Grid Computing, Middle ware Framework, Data Management and Distribution, Security and Privacy, Cloud Computing

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A STRATEGY FOR GREATER ACCEPTANCE OF KHADI IN YOUTH

Paper ID-SOC1031

<u>A Paper Presented by-</u> ¹Mahaboob Fatima & ²Dr.B.K.Kiran Kumar ¹Research Scholar , Sociology
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ABSTRACT

Khadi or Khaddar as it is called commonly is a term used for hand spun and hand woven cloth. Khadi is mainly made out of cotton. The Fabric can also be woven from silk or wool as well, which are all spun into yarn on a spinning wheel called a Charkha.

Khadi is brand of India. The concept of adopting Khadi was started by Mahatma Gandhi during the Independence movement of India. Though even in the present time Khadi is promoted and supported by Government and also by Prime Minister Narendra Modi, Khadi is not a popular Fabric in the present younger Generation. There are still many inhibitions in the youth and they consider Khadi as Traditional and simple wear. To break this Jinx on Khadi and to make it presentable to youth we have to promote khadi in a contemporary fashionable way of dressing.

Hence Khadi and Village Industries Commission (KVIC), had undertaken programme named as _Product development design intervention and packaging' to enlighten the weavers with the contemporary market demand. All over India the KVIC has appointed designers in their respective states to fulfil the norms of project. Through PRODIP the Institutions recognised by KVIC/KVIB have been benefitted by capturing market with more innovative design interventions not only in fabricGarments and accessories but also in other small scale industries of packaging.

The PRODIP has been implemented to increase the market sales of the products of institutions recognized by KVIC/ KVIB by putting up the innovative designers. The projects were taken up to capture market by more innovative ways and to meet the demands of contemporary market. Through PRODIP the

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designs have been changed. The presentation of Khadi Fabric has been elaborated to the fashion field. The motivation behind PRODIP was to enhance the marketability of Khadi Fabric and make it available and relatable to all age groups by design intervention and innovative marketing.

After all these programmes and desire to change the outlook of Khadi, the market popularity has not increased. Though a few Designers are trying to modernize Khadi, still a lot of innovation and popularizing Khadi is needed. Hence Government through its Institutions like KVIC/ KVIB has to take up more new and innovative methods to brand and popularize Khadi. More Khadi display shows and Road Shows and participation of Khadi institutes in fashion Shows, Exhibitions etc. to introduce Khadi to the introduce Khadi to the Youth as a contemporary and modern fabric. More display counters in the Modern Shopping Malls should be introduced by the weavers with the help of Government and Designers intervention.

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DYNAMICS OF EMPLOYEE MANAGEMENT IN THE DIGITAL EPOCH

Paper ID-MGMT1032

<u>A paper presented by</u>: ¹Bincy Sam, ²Dr.N. Sambasiva Rao & ³Dr.Buddha Murali Krishna ¹Assistant Professor, Alwar School of Business & Computers, Visakhapatnam. ²DCMS, Andhra University, Visakhapatnam. ³Director, Samta Degree and PG College, Visakhapatnam.

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ABSTRACT

The digital epoch is the times of net genres, shifting the conventional outlook of the business to a technology driven one. This era has evolved a diverse breed of employees; -digital natives | . The organizations are gearing their strategic procedures to pace with the times and retain the talent. The dynamics of managing employees or rather the natives is bestowed to Human Resource (HR) professionals. However, it requires the HR professionals to manage the people for the future. HR professionals have transformed with times. Their position has developed from being a department to a transformation catalyst; stimulating the technological changes in employees through effective employee management. They are the road to culture building process in the organizations. They have transformed the employees in this digital era, their workplace and the environment. An additional imperative facet the HR Professionals are fetching is the appropriate management of natives to this state-of-the-art technology of HR analytics, neuroscience and artificial intelligence in HR which is leading to a disruptive technology. However, this disruptive technology were further highlighted in these times. One more confront faced by HR is retaining right talent and developing the dormant potential of an employee. This paper attempts to converse these issues through the outlook of HR and the dynamics of managing the employees in this digital epoch.

Keywords: digital, HR neuroscience in HR, HR analytics, disruptive technology, Artificial Intelligence (AI) in HR, employee management.

MECHANICAL ANALYSIS OF STREAMLINED TUBES WITH NONUNIFORM WALL THICKNESS FOR HEAT EXCHANGERS

Paper ID-MECH1033

A Paper presented by: Barmavatu Praveen Research Scholar Shri JJTU University, Rajasthan.
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ABSTRACT

An approach to select the tube wall thickness distribution of streamlined tubes intended for use in heat exchangers is developed. The goal is to retain a streamlined outer profile (resist deformation) and prevent strain failure due to the applied internal pressure. The effect of the tube wall thickness distribution on heat transfer is also considered. The strain is calculated as a function of several dimensionless geometric ratios and the ratio of the internal pressure to material modulus. Using the finite element method, a set of dimensionless design curves is created for elliptical tube geometries. From these curves, a range of possible materials and tube geometries can be selected that meet a specific strain limit. To illustrate the approach, structure-satisfied elliptical designs are selected and their thermal performance is evaluated for an automotive radiator and an automotive charge air cooler made of polymeric materials. The same method can be extended to tubes of other shapes and materials.

RECENT DEVELOPMENTS IN THE AUTOMOBILE INDUSTRY

Paper ID-MECH1034

A paper presented by: Sakinala Kiran Kumar, Research Scholar, Shri JJT University, Rajasthan.

ABSTRACT

The automobile industry plays an important role in overall business cycle developments. Although the industry accounts for only a small share of industrial output in most OECD economies (around 5½ per cent in the median OECD economy), it is comparatively volatile and can thus, at times, make a large contribution to aggregate fluctuations in economy-wide activity. And with the location of final assembly and motor parts production having become increasingly internationalized over time, disruptions to supply in one country, as in the aftermath of the earthquake and tsunami in Japan this March, can potentially have adverse near-term effects in others. This note takes stock of recent developments in global car production and sales and explores the extent to which they are contributing to the softening of global activity.

A sharp downturn in motor vehicle and parts production accounts for a sizable proportion (well above the direct share of output in total production) of the observed slowing in the growth of economic activity since the early part of 2011. The direct impact of the decline in vehicle and parts production in the second quarter is equivalent to a reduction in the annualized rate of GDP growth of $2\frac{1}{2}$ percentage points in Japan, around $\frac{1}{2}$ percentage point in China and between 0.1 to 0.2 percentage points in the United States, the United Kingdom and France.

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STUDY OF OPTIMAL BODY STRUCTURAL DESIGN FOR COUPE-TYPE VEHICLES IN ROLLOVER EVENTS

Paper ID - MECH1035

A paper presented by: V .Santosh Kumar
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ABSTRACT

Many types of car crashes can occur on the road. One of the most critical crash types that can happen in the real world is rollover. Unfortunately, analyzing the exact fundamental principle of a rollover incident is difficult and complex. Despite its rise in severity as a serious injury collision, there have been few attempts made to analyze rollover. A stronger vehicle structure corresponds to more efficient protection for the passengers. A two-door coupe or a central pillarless body vehicle can be subject to more severe conditions in the event of a rollover.

All of these efforts are to protect occupants preserving space in the event of rollover. To ensure safety, adequate body stiffness is an essential condition in rollover accidents. There have been many efforts to make new advances in rollover testing modes. The repeatability and reliability are core aspects of inhouse modified tests. NHTSA, along with other organizations, makes great efforts to develop new modified rollover protocols. However, a number of problems remain to be explored because rollover accidents occur under many complex conditions, which are difficult to identify as the sole reason. Firstly, the typical main elements that cause a rollover accident should be carefully confirmed. Secondly, a reasonable and trustworthy testing facility that can represent rollover accidents should be constructed using the verified elements. Only after a vehicle's adequate stiffness is secured can other safety equipment be developed step by step. This paper lays the foundation for future work with regard to vehicle strength. Future research will involve the correlation between dynamic 0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 0 30 60 90 120 improved Vehicle Base Vehicle SWR Displacement (mm) Ryu 7 rollover tests and quasi-static roof crush tests in terms of stiffness. The occupant behavior in a vehicle when rollover happens will be a sequential task.

A REVIEW ON HYDRAULIC HYBRID VEHICLE Paper ID-MECH1036

<u>A Paper Presented by</u>: Salarbaig Research scholar, Shri JJT University, Rajasthan.

ABSTRACT

This paper presents a hydraulic hybrid vehicle drive train to improve the fuel efficiency of a passenger car. The hydro-mechanical system demonstrates excellent fuel economy potential, yet requires development work in the area of pump/motors with high efficiency at low displacement fractions. The fuel consumption of off-road machines is strongly reduced if part load operation of the engine and throttled control of the hydraulic implements are avoided. This is the aim of the Hydrid a full hybrid hydrostatic drive train and control system.

The Hydrid has hydraulic accumulators for energy storage and power management, hydraulic transformers for efficient power control, and highly efficient and compact in-wheel motors.

System behavior demonstrates that the new control strategy takes advantage of high power density and efficiency characteristics of hydraulic components, and minimizes disadvantages of low energy density, to achieve enhanced overall efficiency. EPA is leading the development of hydraulic hybrid vehicles. This breakthrough technology can cost-effectively reduce emissions and drastically reduce fuel consumption while maintaining or improving performance. A delivery vehicle is an excellent application for hybrid technology since its service cycles involve numerous braking events. Hydraulic hybrid technology has significant commercial potential for a wide range of medium-sized vehicles such as urban delivery trucks, shuttle/transit buses, and waste disposal vehicles.

PRESENT AND UPCOMING APPLICATION AREAS WITH RESPECT TO DATA MINING

Paper ID -CIVIL1037

<u>A paper presented by:</u> Er. Vikrant Malik System Engineer ,Infosys, Pune, Maharashtra **E-mail:** Vikrant Malik@outlook.com

ABSTRACT

Knowledge has played a significant role on human activities since his development. Data mining is the process of knowledge discovery where knowledge is gained by analyzing the data store in very large repositories, which are analyzed from various perspectives and the result is summarized it into useful information. Due to the importance of extracting knowledge/information from the large data repositories, data mining has become a very important and guaranteed branch of engineering affecting human life in various spheres directly or indirectly. Advancements in Statistics, Machine Learning, Artificial Intelligence, Pattern recognition and Computation capabilities have given present day's data mining functionality a new height. Data mining have various applications and these applications have enriched the various fields of human life including business, education, medical, scientific etc. Objective of this paper is to discuss various improvements and breakthroughs in the field of data mining from past to the present and also to explores the future trends.

Keywords: Current and Future of Data Mining, Data Mining, Data Mining Trends, Heterogeneous Data, KDD

Date- 29th April 2017

A REVIEW ON PERFORMANCE OF STEEL FIBER REINFORCED CONCRETE (SFRC) AND ITS APPLICATIONS IN CIVIL ENGINEERING

Paper ID-CIVIL1038

A Paper presented by: Vigar malik Research Scholar Shri JJT University, Rajasthan.

ABSTRACT

Steel fiber reinforced concrete (SFRC) is a new type of composite material developed Ordinary Concrete mixed with right amount of steel Fiber.

It is widely used in various types of engineering construction field with its good crack resistance, flexural toughness and impact resistance like roads, Airports, bridges, railways, mines, tunnels, military etc.. Meanwhile, Steel fiber reinforced concrete has high tensile strength and fracture toughness, fatigue resistance, and forming pouring easy for variety of complex stress position of the structure. This paper provides something for this new concrete materials in the project of the building structure design and construction, through the introduction of the main performance of steel fiber reinforced concrete.

Keywords: Civil Engineering Application, Performance, Steel Fiber Reinforced Concrete (SFRC)

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FEMINIST VOICE IN KAMALA MARKANDAYA NOVEL: A SILENCE OF DESIRE

Paper ID-LIT1039

A Paper Presented by: ¹Rajya Lakshmi , & ²DR .N. Aravinda ¹Research Scholar,²Research Guide Shri JJT University, Rajasthan.

ABSTRACT

In this paper made an attempt on A Silence of Desire novel which is an imaginative commentary on the psychological maladjustment of a middle-class woman, deeply religious and traditionalist. Kamala Markandaya focuses on the psychological torments of Sarojini, the heroine who is a God -fearing and religious and a very caring wife. Dandekar, her husband, a government servant with his modern and western attitude to life opposes her deep faith in a Swamy who, she believes, will cure her of a tumour in her womb. She has no faith in medical treatment of her malady. She undergoes great spiritual crisis when her westernized husband asks her to give up her faith in the spiritual powers of the Swamy.Kamala Markandaya portrays the assault of the views of western skepticism on the oriental faith of Sarojini, the female protagonist. The novel unfolds a family drama by studying the husband-wife relationship. It reveals how men and women torment themselves and each other by silence on many occasions when they actually require to unburden their hearts by giving vent to their feelings. The novel stresses mainly the internal conflicts of Sarojini, the female protagonist. In this paper made an attempt about Sarojini with her spiritual faith is firm and stable in her principles and thus she emerges a stronger person than her husband.

Keywords: Kamala Markandaya, Silence Of Desire, & Feminist.

PATH FOLLOWING ROBOT USED TO ACQUIRE DIGITAL DATA FROM HAZARDOUS PLACE

Paper ID-ECE1040

A Paper Presented by-Shaik Kasim Research Scholar Shri JJT University, Rajasthan

ABSTRACT

The line following robot designed to acquire digital data of any heavy machinery located in Industries or power plants like Boilers, Furnaces, Ovens, Power transformers, etc, where human beings cannot stay there for long time to collect the data. At this point this Robot is quite helpful, which follows the line that is marked with black paint or tape and reaches to the destination for collecting the digital data.

In this the Robot is intended to move between two reference points, and to halt at these points to acquire data from one reference point and to display it at another point,. The electrical data that is to be produced and transmitted at other end of line is designed with another microcontroller unit. After collecting data through TSOP the vehicle displays this data through LCD panel and travels in reverse direction to reach other reference point to provide this data to the maintenance staff. Once the vehicle reaches to the other point, it remains there only until the start button of vehicle is pressed.

The type of robots that you will encounter most frequently are robots that do work that is too dangerous, boring, onerous, or just plain nasty. Most of the robots in the world are of this type. They can be found in auto, medical, manufacturing and space industries. In fact, there are over a million of these type of robots working for us today.

Sensing a line and maneuvering the robot to stay on course, while constantly correcting wrong moves using feedback mechanism forms a simple yet effective closed loop system. As a programmer you get an opportunity to _teach' the robot how to follow the line thus giving it a human-like property of responding to stimuli.

CONSEQUENCES OF JOB STRESS IN WORK PLACE

Paper ID-MGMT1041

A Paper Presented by- Mr. Dileep. Teru

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ABSTRACT

Life in the organisation is quite stressful. Work pressures, meetings that never seem to end on time, unhelpful colleagues, tight schedules, critical bosses, incompetent subordinates and all the factors may all have a cumulative effect in making the lives of modern-day executives quite miserable. As per the medical explanation of the term —stress is the body's general response to environmental situations . In simple words, stress refers to an individual's reaction to a disturbing factor in the environment Stress is the body's reaction to any demand made on it. Major stress comes from having too much work, not having enough work, doing work that is unfulfilling, fearing a job layoff or not getting along with boss. Perceptions of events, whether positive or negative, activate stress. Stress is always bad – mild stress may improve productivity, severe stress persists for long periods of time, and it can be harmful.

Key words: working condition, stress management, work pressure, reaction

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STRATEGIC HUMAN RESOURCE MANAGEMENT AND EMPLOYEES RELATIONS- A REVIEW

Paper ID -MGMT1042

<u>A paper presented by:</u> Venkat Rao Research Scholar Shri JJT University, Rajasthan

ABSTRACT

It has recently been suggested that the potentially dynamic and proactive role of employers in industrial relations be recognized (Kochan, McKersie, & Cappelli, 1984). Because incorporating the notion of strategic human resource management appears consistent with that suggestion, it is done here integrating frameworks of competitive strategy and human resource management practices using the rationale of needed employee behaviors and cost and market conditions. This is then merged with business life-cycles stages creating a contingency framework understanding the impact of strategic human resource management on industrial relations. This is done also using the rationale of cost and market conditions and needed employee role behaviors. The integrated competitive strategy-human resource management model is extended by inclusion of strategic targets and industry chain. The implications for industrial relations are laced throughout the discussion along with three sets of propositions. Implications for employers, employees, unions, government are presented in the summary and conclusions. Here, the dynamic and proactive role of employers is placed into perspective.

Date- 29th April 2017

EFFECT ON MULTIFUEL INJECTION SYSTEM ON ENGINE **PERFORMANCE**

Paper ID –MECH1043

A paper presented by- Mohammad Sazzad Research Scholar, Shri JJT University, Rajasthan **Email:** sazzadmoh@gmail.com

ABSTRACT

One dimensional air flow and wall fuel film flow and a two dimensional fuel droplet flow have been modelled and it includes the effects of in-cylinder mixture back flows into the port. As a result, predictions are obtained that provide detailed picture of the air-fuel mixture properties along the intake port. A comparison was made on injection characteristics of the multi-hole injectors and its effects on multi-phase flow property on various fuel pressures and temperatures. According to the present investigation, it was found that the injector produces a finer spray with a wide spray angle in higher fuel pressures and temperatures which refine fuel-air mixture characteristics in intake port. Higher values of fuel temperature also produce optimum conditions for both exhaust emission and performance. The mixture temperature significantly affects the volumetric efficiency and engine performance with changing fuel and air mixture density and amount of air which enter to the cylinder. The present paper discuss about the performance of engine by using multi-fuel injection system.

Key words: fuel injection systems, engine performance.

A STUDY ON STEAM TURBINE PERFORMANCE BASED ON NOZZLE OUTLET DESIGN

Paper ID -MECH1044

<u>A paper presented by-</u>B. Venkateshwar Reddy Research Scholar, Shri JJT University, Rajasthan **Email:** bvreddy01969@gmail.com

ABSTRACT

The present paper discusses the mode of operation of supersonic nozzles for such turbines, and describes a cascade experiment. Both theory and experiment demonstrate that the conditions imposed upon the supersonic flow immediately downstream of the nozzles (e.g., by a following row of rotor blades) exert an overriding influence upon the nozzle outlet flow angle, and hence upon the maximum pressure ratio obtainable across the nozzle--providing that the axial component of velocity is subsonic. The present paper discuss about the performance of turbine based on the outlet nozzle design. The performance study based on the design parameters variants of outlet nozzle.

Keywords: nozzle design, turbine performance, outlet nozzle flow

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A SURVEY ON NEAREST KEYWORD SEARCH IN MULTI-DIMENSIONAL DATASETS USING BIGDATA

Paper ID -MECH1045

A paper presented by- ¹Mothe Rakesh & ²Koona Hemanath, ³Chatakunta Praveen kumar. ¹Assistant professor, Dept.of computer science and engineering, Institute of Aeronautical Engineering,² Assistant professor, Dept.of Information technology, MLR Institute of Technology,³ Assistant Professor, Dept.of computer science and engineering, Institute of Aeronautical Engineering.

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ABSTRACTS

A survey on Nearest Keyword Search in Multi-Dimensional Datasets facilitates many novel applications and tools. In this survey, we consider objects that are tagged with keywords and are embedded in a vector space. For these datasets, we study queries that ask for the tightest groups of points satisfying a given set of keywords. We propose a novel method called ProMiSH (Projection and Multi Scale Hashing) that uses random projection and hash-based index structures, and achieves high scalability and speedup. We present an exact and an approximate version of the algorithm. Our experimental results on real and synthetic datasets show that ProMiSH has up to 60 times of speedup over state-of-the-art tree-based techniques.In this paper, we study nearest keyword set (referred to as NKS) queries on text-rich multi-dimensional datasets. An NKS query is a set of userprovided keywords, and the result of the query may include k sets of data points each of which contains all the query keywords and forms one of the top-k tightest clusters in the multi-dimensional space. NKS query over a set of two-dimensional data points. In tree-based indexes suggest possible solutions to NKS queries on multidimensional datasets, the performance of these algorithms deteriorates sharply with the increase of size or dimensionality in datasets.NKS queries are useful for graph pattern search, where labeled graphs are embedded in a high space.Nearest neighbor dimensional queries usually require information for queries, which makes it difficult to develop an efficient method to solve NKS queries by existing techniques for nearest neighbor search.In this paper, we propose ProMiSH (short for Projection and Multi-Scale Hashing) to enable fast processing for NKS queries. In particular, we develop an exact ProMiSH (referred to as ProMiSH-E) that always retrieves the optimal top-k results, and an approximate ProMiSH (referred to as ProMiSH-A) that is more efficient in terms of time and space, and is able to obtain near-optimal results in practice. ProMiSH-E uses a set of hash tables and inverted indexes to perform a

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localized search. Based on this index, we developed ProMiSH-E that finds an optimal subset of points and ProMiSH-A which searches near-optimal results with better efficiency. ProMiSH is faster than state-of-the-art tree-based techniques, with multiple orders of magnitude performance improvement. The performance of ProMiSH on both real and synthetic datasets. We develop efficient search algorithms that work with the multi-scale indexes for fast query processing.

Keywords: nks ,proMiSH,bigdata

AN EFFICIENT MATHEMATICS OF THE STRAW FLUTE THROUGH ELECTRONIC TUNER

Paper ID -MATH1046

<u>A paper presented by</u>- B Praveena, Assistant Professor, Department Of Freshman, Institute Of Aeronautical Engineering, Dundigal Hyderabad e-mails:bpraveenag@gmail.com

ABSTRACTS

Abstract: It is possible to make a simple flute-like instrument using a straw. I used an electronic tuner to determine reference tones, and then located the required positions to create finger holes to form a diatonic scale. Pythagoras created Pythagorean tuning as part of his research into the relationship between scales and the length of strings. The oscillations that represent a scale and the length of the strings creating it can be represented by a geometric series, showing us the close association between music and mathematics.

Keywords: scales, Pythagorean tuning, GS, modular arithmetic, ET