National Level Conference on Innovative Trends in Engineering and Technology 2018

JEPPIAAR INSTITUTE OF TECHNOLOGY

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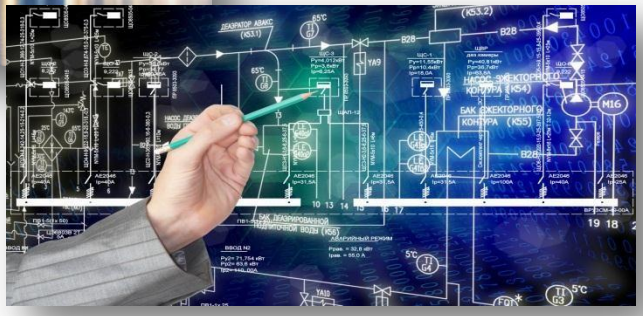
Kunnam, Sunguvarchatram, Sriperumpudur, Chennai 631604

Abstracts of National Level Conferenceon

Innovative Trends in Engineering andTechnology

NCITET

March 7,2018



Proceedings of the National Conference on
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Mr. F. Max Savio, EEE, Jeppiaar Institute of Technology

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"National Conference on Innovative Trends in Engineering &Technology" (NCITET 2018).

Jeppiaar Institute of Technology,
Kunnam, Sunguvarchatram, Sriperumbudur (Tk)
Chennai-631604
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DIRECTOR'S MESSAGE

I am delighted to welcome all the delegates to the National Conference on **"National Conference on Innovative Trends in Engineering &Technology" (NCITET 2018).**

The scope of this Conference is to share and broaden the knowledge on Innovative trends in Engineering and Technology. I strongly believe that this conference provides inspiring platform for the enthusiastic researchers.

A conference such as this does not happen by itself, but draws upon time, efforts and skills of a wide range of people. I am confident that you will enrich your knowledge in the course of this conference. I hope useful deliberations may lead to the joy of learning in this conference! I wish to express my appreciation to all the participants who have taken time to join us in the conference.

The program committee spent time and effort in reviewing the submissions and bring out the publication of this volume to a great extent. I would like to extend my appreciation to all the members for their efforts and support in organizing the conference.

Dr. N. Marie Wilson, B.Tech., M.B.A., Ph.D

Director

PRINCIPAL'S MESSAGE

It is indeed a happy occasion to greet you all during this National Conference on Innovative Trends in Engineering &Technology '**NCITET 2018'** being organized at Jeppiaar Institute of Technology. Occasion like this will be of immense help to the researchers and the student community to enrich their knowledge in horizon. I hope this conference offers a premise for global experts and researchers in the various topics on the Innovative Trends in Engineering &Technology. This will be a forum where the participants can discuss the practical challenges encountered and the solutions they had adopted.

I would like to express my gratitude to our respected Director **Dr. N. Marie Wilson,** B.Tech., M.B.A., Ph.D for providing us a great opportunity to conduct this national conference.

I take this opportunity to appreciate the efforts of the reviewers who worked diligently to lend their constructive support in the evaluation and selection of papers appropriate for this volume. I congratulate the organizers for their efforts in conducting this conference in a grand manner. I wish to express my appreciation to all the participants of the conference and wish the conference a grand success.

Dr. L.M. Merlin Livingston

Principal

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JEPPIAAR INSTITUTE OF TECHNOLOGY

Kunnam, Sunguvarchatram, Sriperumbudur, Chennai-631604

Jeppiaar Institute of Technology was established in 2011, to provide futuristic technical education with the perspective of innovative social and industrial application for the betterment ofhumanity.

Since the launch, Jeppiaar Institute of Technology propels relentlessly towards fulfilling its vision. Jeppiaar Institute of Technology is the first institution in India to establish a laboratory with the incorporation of 'Innovative Cloud Computing Technology'. All the class rooms are CAI (computer Aided Instruction) enabled with wall mount Multimedia LCD Projectors, to make full use of the modern teaching aids. Presently, the college offers five popular professional under-graduate engineering programs namely B.E. Computer Science and Engineering, B.E. Electronics and Communication Engineering, B.E. Electrical and Electronics Engineering, B.Tech Information Technology and B.E. Mechanical Engineering.

Computer Society of India (CSI), one of the professional societies in our college shares knowledge and exchange the ideas in the ever progressive world of technology. ASME, SAE and the Big-Data Research Center of the college support the career needs of the students. The IEEE students' chapter and IEEE Women in engineering in the campus are vibrant in connecting to breakthrough technical information and put them in an open platform for regular updates. Students' passion in robotics is commendable. National Cadet Corps (NCC), National Service Scheme (NSS) and Youth Red Cross (YRC) are also offered for the holistic development of thestudents.

Our college offers value added courses like JAVA,PCB Design, Robotics and Embedded system interfacing with Arduino, Rapid prototyping – 3D printing, Drone, Machine learning, Android applications development, Internet of Things and Robotics to make the students technically and practically strong.

In the field of sports and games the college ranks among the top ten in the state. The college organizes Jeppiaar Trophy, a national level basketball tournament every year in which all the potential basketball teams in the country take part. The standard of the tournament is obvious and it is recognized by Doordarshan with its live telecast. About 75% of students of the 2011 batch have been placed in the reputed Multi- National Companies like Wipro, Infosys, IBM, Cognizant, InfoView, Mindtree, and Mphasis which are the premier recruiting partners of the institution. In the same way, in the following next two years, 82% of the students have been placed and the count is expected to increase in the years tocome.

To make the students involved in industrial relationship and development, our college has signed MOU with leading international and National companies like COMSTAR, Infosys Campus Connect, JIT Global Info System Pvt. Ltd. and for students higher education in abroad, the institution has signed MOU with Life Abroad Consulting Service (p) ltd, Singapore to link more than 40universities in abroad. Every year , the academic toppers will get the fully funded scholarship for International Immersion Programme. Another creative embodiment is the 'Design Thinking Club' which nurtures the culture of design thinking in all aspects of life focussing on preparing the design mind in association with School of Design Thinking,Intellect.

Website: www.jeppiaarinstitute.org

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01. DRAINAGE MONITORING SYSTEM USING RASPBERRYPI

N.Leela[1], S.Ananthi[2], V.S.Divya[3], G.Gurubala[4]
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Many cities across the world are facing drainage system problems. Heavy rain falls causing damaged roads and loss of valuable human hours affecting in one or other ways the country economy. The drainage system is the action of draining waste water and sticky liquid components towards the rivers using particular patterns, drainage channels and streams. Drainage system basically refers to all the piping within the private and public premises which conveys sewage, rainwater and other liquid waste to a point of disposal. The various sensors will make the drainage system more comfortable to operate, monitor, control with less resources and to take necessary actions. Remote sensing is a powerful technology for Earth observation (EO), and it plays an essential role in many applications, including environmental monitoring, precision agriculture, resource managing, urban characterization, disaster and emergency response, etc. However, due to limitations in the spectral, spatial, and temporal resolution of EO sensors, there are many situations in which remote sensing data cannot be fully exploited, particularly in the context of emergency response (i.e., applications in which real/near-real-time response isneeded).

02. IOT BASED SMART HELMET FOR UNSAFE EVENT DETECTION FOR MININGINDUSTRY

K.Poojaa[1], S.Princy[2] Shakila[3] Roshini[4] P.Sangeetha[5]
Pre-Final Year Students
Sri Venkateswara College Of Engineering

A classic model of the smart helmet has been developed for the mining industry in order to detect hazardous events in the mining environment. The developed prototype is able to sense the quality of air, humidity, removing the helmet by miner, and crash of an object on head. The air quality is determined by thesaturationlevelofthedangerousgassuch as carbon monoxide. The removal of helmet by miner is also considered as one of the unsafe event and it is detected by using Infrared (IR) sensor. The crash of an object on head is determined using pressure sensor. According to head and neck injury criteria, if the force excreted on head exceeds 34 psi, it is considered to be a hazardous. Implementation consists of two modules- the helmet module and reporting (or monitoring) module. The helmet module includes ARM7 microcontroller in conjunction with various sensors and ZigBee, while reporting module includes ZigBee at the receiving end and raspberry pi controller. An automated e-mail alert generation system is also developed in a reporting module of proposed system, it generates and delivers an automated alert e-mail to authorized personnel, if a miner has experienced hazardousevent.

03. INTELLIGENT DRONE FORINDUSTRY INSPECTION(UAV)

Dr.S.PadmaPriya[1], Ms.ShaikSalma[2], Ms. P.Nivedha[3], Ms. R.Nithya[4]
Associate Professor[1], UG Scholar[2,3,4]
Department of CSE Engineering, PEC, Chennai,India

Our paper is subjected to Real-Time Monitoring System for preventing the calamities in Industries using UAV (Unmanned Aerial Vehicle). Now-a-days, Industries are prone to calamities. Even if any explosion occurs due to leakages, it can‟t be easily known to the manual workers and it may cause explosions. So in order to avoid this, we have developed a mobility assistive drone. Drone is allowed to monitor the ambient situations using surveillance Pi camera and exact location of leakages is also detected.Toxic gas like CO is sensed using the MQ-7 sensor and the sensed data are transmitted from Raspberry Pi 3 to Monitor through Wi-Fi.If any gas leakage is detected, then two levels of alert will be given. By this the human intervention can be avoided inside the industry and the calamities can be prevented.

04. SURVEY ON WIRELESS COMMUNICATION USING LIGHTFIDELITY

M. Soniya [1], M. Ishwariya [2], G.Akshaya [3], J.Faritha Banu[4]
[1,2,3] UG Scholar,CSE, Jeppiaar Institute of Technology
[4] Professor, Jeppiaar Institute of Technology

The efficiency, durability, and lifetime of light-emitting diodes (LEDs) have led to their use in a variety of applications, including general illumination, vehicle lights, displays, and soon replace all traditional incandescent bulbs. LEDs used in such systems can be simultaneously modulated to provide a new approach in terms of security, speed, usability, bandwidth and flexibility fordata communication as Li-Fi. LiFi stands for Light-Fidelity. Li-Fi technology provides transmission of data through illumination by sending data through an LED light bulb that varies in intensity faster than the human eye can follow. Wi- Fi is great for general wireless coverage within buildings, whereas Li-Fi is ideal for high density wireless data coverage in confined area and for relieving radio interference issues. The low-cost nature of LEDs and lighting units, there are many opportunities to exploit this medium, from public internet access through street lamps to auto-piloted cars that communicate through their headlights. In future where data for laptops, smart phones, and tablets will be transmitted through the light in a room. Hence, this paper proposes a survey on Wireless Communication Using Light Fidelity.

05. AN IMPACT OF GRID COMPUTING INE LEARNING AND ITSAPPLICATIONS

S.Muthukumaran[1], AlokMishra[2], C V Pawan sashank[3], N.Gokula Krishnan[4]
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Grid Computing delivers on the potential in the growth and abundance of network connected systems and bandwidth: computation, collaboration and communication over the Advanced Web. At the heart of Grid Computing is a computing infrastructure that provides dependable, consistent, pervasiveand Inexpensive access to computational capabilities. The use of grid computing in the context of e-learning shows, what advantages a utilization of grid computing may have to offer and which applications could benefit from it. In capturing knowledge and heuristics about how to select application components and computing resources, and using that knowledge to generate automatically executable job workflows for the Grid. Scientists and engineers are building more and more complex applications to manage and process large data sets, and execute scientific experiments on distributed resources. Such application scenarios require means for composing and executing complex workflows. Therefore, many efforts have been made towards the development of workflow management systems for Gridcomputing.

06. A TRIBAND SWASTIKA PATCH SHAPED ANTENNA USING WIRELESS MIMOAPPLICATION

Madu Brahmani[1], G.R. Meena[2], Muniship Prathusha[3]
Ug Scholar, Prathyusha Engineering College

This paper represents the design of Swastika shaped Microstrip patch antenna for Industrial Scientific and Medical (ISM) band application. The design has four slots as same as Swastika Shape into it and it resonates at 2.416 GHZ frequency. Feeding method used for this design is Inset Feed. Gain=4.947db, Bandwidth=7.89%, Return loss=-25.049, Resonant frequency=2.416 GHZ and Directivity=7.597dbi are investigated. ADS (2009) Simulation tool is used for Design and Stimulation. This will reduce the Size of the Antenna and used to increase the Impedance Bandwidth. This antenna is very attractive because of their Low Weight and for EasyProduction.

07. THE THOUGHT-TRANSLATIONDEVICE

P.Praveen Raju [1], A.Sivasubramanian [2], S. Bala Krishnan [3], R.Dayana [4]
[1,2,3] UG Scholar, [4] Assistant Professor
Department of Computer Science Engineering
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The thought-translation device (TTD) consists of a training device and

spelling program for the completely paralyzed using slow-cortical brain potentials (SCP). During the training phase, the self-regulation of SCPs is learned through visual-auditory feedback and positive reinforcement of SCPs; during the spelling phase, patients select letters or words with their SCPs. A psychophysiological system for detection of cognitive functioning in completely paralyzed patients is an integral part of the TTD. The neurophysiological and anatomical basis of SCP-regulation was investigated by recording of BOLD-response in functional magnetic resonance imaging. Results showed involvement of basal ganglia and premotor cortex for required SCP positivity. The clinical outcome of 11 paralyzed patients using the TTD and quality of life of severely paralyzed patients is described. First attempts to improve learning of brain regulation with transracial magnetic stimulation weresuccessful.

08. AUTHENTICATED AUTOMATED TELLER MACHINE USING RASPBERRYPI

P. Jegadeeshwari[1], K.M. Haripriya[2], P. Kalpana[3] , K. Santhini[4]
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In recent days fraud attaching in ATM is a major issue which tremendously affect the social and mental well being of a person. Our proposed paper is a key idea to reduce the crime activites and usage of ATM by irrelevant people to handle one‟s account. We use biometric identifications such as face and iris recognition implemented using Raspberry pi, which are more secured when compared to other physical recognition methods. When the user fails to pass the verification process twice, the ATM door will be locked automatically. The user can only leave the ATM when the security enters the OTP send to his mobile throughGSM.

09. POST QUANTUMCRYPTOGRAPHY

V. Arun Victor[1], D. Jai Prasannna[2], B. Manivanna Pabhu[3] , Gladissmerlin[4]
Department of CSE, Jeppiaar Institute of Technology

Quantum cryptography uses quantum mechanics to guarantee secure communication. It enables two parties to produce a shared random bit string known only to them, which can be used as a key to encrypt and decrypt messages. An important and unique property of quantum cryptography is the ability of the two communicating users to detect the presence of any third party trying to gain knowledge of the key. This results from a fundamental part of quantum mechanics: the process of measuring a quantum system in general disturbs the system. A third party trying to eavesdrop on the key must in some way measure it, thus introducing detectable anomalies. By using quantum superpositions or quantum entanglement and transmitting information in quantum states, a communication system can be implemented which detects eavesdropping. If the level of eavesdropping is below a certain threshold a key can be produced which is guaranteed as secure, otherwise no secure key is possible and communication is aborted. The security of quantum cryptography relies on the foundations ofquantum mechanics, in contrast to traditional public key cryptography which relies on the computational difficulty of certait mathematical functions, and cannot provide any indication of eavesdropping or guarantee of key security. Quantum cryptography is only used to produce and distribute a key, not to transmit any message data. This key can then be used with any chosen encryption algorithm to encrypt and decrypt a message, which can then be transmitted over a standard communication channel. The algorithm most commonly associated with QIW is the one-time pad, as it is provably secure when used with a secret, randomkey.

10. ROADSAFETY

Bandi Priyanka[1], Gopirengaraj C[2], Lavanya D[3], Lokesh R[4], Manoj Chandran R[5]
UG Scholar, Prathyusha Engineering College

Road Traffic Accidents are one of the leading causes of morbidity &mortality in the world. The present study was based on the autopsy records of unnatural deaths occurred in aleading

tertiary health care center of North West India. The adult road traffic fatalities constituted 41% of all unnatural deaths with male preponderance (89.6%) throughout the study period. People in the age group 21-30 years (32%) particularly from rural areas (57%) were most affected. The pedestrians and two wheeler users formed the majority of fatalities (78%). Collision between two wheeler and light motor vehicle was the most common crash pattern and injury to head & neck region was the most common cause of death. Maximum number of accidents occurred between 4pm to 8pm (28%) and in the month of November (11%). Unskilled workers, agricultural workers and government employees constituted a larger proportion of fatalities (45%).

11. SMART BIN WITH MONITORING AND SEGREGATIONSYSTEM

Muthuvel S[1],Banu S[2] Elamathi kamali T[3],Nishanthini M[4]
Assistant Professor[1] , UG Scholar[2,3,4]
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Waste Management and Pollution are the major issues in cities. The System is used to keep the environment clean and hygienic. The System consists of ultrasonic sensor to detect level of waste in the bin and a microcontroller to intimate the vehicle to clear the bin before it overflows. The special feature of the system is that a circular saw is introduced inside the bin to remove the bags containing waste, a sensor to sense organic and inorganic waste and a conveyor is used to separate the waste into organic and inorganic waste. The bin opens automatically when it detects a man with waste to dispose and closes after disposing this is achieved through sensor. A DC-motor is used to run the conveyor and a circularsaw.

12. SECURED ANALYSIS OF IATRIC DATAUSING HOMOMORPHICENCRYPTION

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Recent advancements in technology has brought many changes in safeguarding, computing and storing of data. The questionable factors in the context of data privacy that is computing and sharing enormous sets of data have also augmented. Homomorphic encryption is one such technique which guarantees franchise in safeguarding information under cryptographic domain .Wise use of four familiar arithmetic operators in a diverse way en routes a powerful homomorphic tool. The paper illuminates the usage of this selfsame tool to provide an efficacious strategy in bringing all security concerns of cloud under check and also analyze these secured datum using big data analytics. Index terms: homomorphic encryption, secured analysis, medical data, ROW‟salgorithm.

13. SILENT-SOUNDTECHNOLOGY

Yamini.A, Ug Scholar, R.M.D Engineering College

SST is a technology for devices that helps for communication purpose in the nasty environment. The uses of this technology are immense for people who are vocally challenged or have been rendered mute due to some accidents or others. Lip detection is a complex problem because of high variability range of lip shapes & colour. Lip-reading is an inference and inspired guesswork because of fast speech, poor pronunciation, bad lighting, faces turning away, hands over mouths, moustaches and beards etc. Lip Tracking is one of the biometric systems based on which a genuine system can be developed. With multiple levels of video processing, it‟s possible to obtain lip contour and location of key points in the subsequentframes.

14. VOICE BASED E-MAIL SYSTEM FORBLINDS

Pacha Shobha Rani[1], Maddireddy Venkatasai Likhitha[2],
Borra Sneha Latha[3]
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Currently, visually challenged people are not able to use computers on their own mainly because keyboardsare

user-friendly to them. With advancement in technology, these people find themselves technologically more challenged. This is true especially in thecase of social networking, which these people cannot do without external help. Voice-Mail architecture helps blind people to access e-mail and other multimedia functions. Nowadays, advancement made in computer technology has opened platforms for visually impaired people across the world .Here, we describe the voice based e-mail architecture which can be used by the blind people to access E-mail and multimedia functions easily and efficiently. It will help to reduce the cognitive load taken by the blind to remember and type characters using the keyboard. In this context, we have proposed a voice based e-mail system which will definitely help them communicate over e-mails comfortably on their own, based on artificialintelligence.

15. GI-FITECHNOLOGY

K.Mohanasundaram[1] , Devisetty Gayathri Devi[2],
Assistant Professor[1], Ug Scholar[2],
R.M.D Engineering College

Gi-Fi will helps to push wireless communications to faster drive. For many years cables ruled the world. Optical fibers played a dominant role for its higher bit rates and faster transmission. But the installation of cables caused a greater difficulty and thus led to wireless access. The foremost of this is Bluetooth which can cover 9-10mts. Wi-Fi followed it having coverage area of 91mts. No doubt, introduction of Wi-Fi wireless networks has proved a revolutionary solution to "last mile" problem. However, the standard‟s original limitations for data exchange rate and range, number of channels, high cost of the infrastructure have not yet made it possible for Wi-Fi to become a total threat to cellular networks on the one hand, and hard-wire networks, on the other. But the man‟s continuous quest for even better technology despite the substantial advantages of present technologies led to the introduction of new, moreup-to-date standards for data exchange rate i.e., Gi-Fi. Gi-Fi or Gigabit Wireless is the world‟s first transceiver integrated on a single chip that operates at 60GHz on the CMOS process. It will allow wireless transfer of audio and video data up to 5gigabits per second, ten times the current maximum wireless transfer rate, at one-tenth of the cost, usually within a range of 10 meters. It utilizes a 5mm square chip and a 1mm wide antenna burning less than 2watts of power to transmit data wirelessly over short distances, much like Bluetooth. The development will enable the truly wireless office and home of the future. As the integrated transceiver is extremely small, it can be embedded into devices. The breakthrough will mean the networking of office and home equipment without wires will finally become a reality. In this we present a low cost, low power and high broadband chip, which will be vital in enabling the digital economy of thefuture.

16. 5 PEN PCTECHNOLOGY

K.Dharani. Ug Scholar,
R.M.D Engineering College

P-ISM ("Pen-style Personal Networking Gadget Package"), which is the new discovery under developing stage by Japanese technology company NEC. 5 Pen PC Technology is a gadget package including five functions: a pen-style cellular phone with a handwriting data input function, virtual keyboard, a very small projector, camera scanner, and personal ID key with cashless pass function.P-ISM‟s are connected with one another through short-range wireless technology. The whole set is also connected to the Internet through the cellular phone function. This personal gadget in a minimalist pen style enables the ultimate ubiquitous computing. This pen sort of instrument produces both the monitor as well as the keyboard on any flat surfaces from where you can carry out functions you would normally do on your desktop.

17. SURVEY ON SECURING THE CLOUD DATA WITH EFFECTIVE ENCRYPTION KEY USINGAES

T,A,Mohanaprakash [1], K.Ebenezer Samraj Joseph [2], R.Kamesh [3], R.Arun Kumar[4]
Associate Professor[1], UG Scholar[2,3,4] , Department of Computer Science and Engineering
Panimalar Institute of Technology, Tamil Nadu,India

Key exposure is one serious security problem for cloud storage auditing. In order to deal with this problem, cloud storage auditing scheme with key-exposure resilience has been proposed. However, in such a scheme, the malicious cloud might still forge valid authenticators later than the key-exposure time period if it obtains the current secret key of data owner. In this project, we innovatively propose a paradigm named strong key exposure resilient auditing for secure cloud storage, in which the security of cloud storage auditing not only earlier than but also later than the key exposure can be preserved. We formalize thedefinition and the security model of this new kind of cloud storage auditing and design a concrete scheme. In our proposed scheme, the key exposure in one time period doesn‟t affect the security of cloud storage auditing in other time periods. The rigorous security proof and the experimental results demonstrate that our proposed scheme achieves desirable security andefficiency.

18. NEW GEN. BILLINGSYSTEM

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Goods and Service Tax(G.S.T) which was introduced on July 2017.After the introduction of G.S.T, the vendors who were using the outdated billing software were forced to update their software which brought a craze on billing software and the vendors started approaching the old professionals. But “NEW GEN Billing System” gives you an extra advantage of correcting/changing the software by the own vendors which is also cost efficient (1/5th less) when compared to other software. Most of the software available in the market requires renewal after a certain period of time where the “NEW GEN Billing System” breaks the flaw with no expiration date. The amount sold each month will be notified to the respective mail id and mobile number via SMS. Offers available in the store will be intimated to the dedicated clients via mail. This Software alerts the user if the product has less stocks and intimates the user to order the product.

19. A MACHINE LEARNING BASED MATCH PREDICTION

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Machine learning (ML) is one of the intelligent methodologies that have shown promising results in the domains of classification and prediction. One of the expanding areas necessitating good predictive accuracy is sport prediction, due to the large monetary amounts involved in betting. We apply a machine learning based approach to predict the win and lose of the team in a match. In addition, club managers and trainers of the team are striving for classification models so that they can understand and formulate strategies needed to win matches. These models are based on numerous factors involved in the games, such as the results of historical matches, player performance indicators, and opposition information. In doing so, we identify the learning methodologies utilised, data sources, appropriate means of model evaluation, and specific challenges of predicting sport results.

20. INTELLIGENT TRAFFIC CONTROL SYSTEMFOR EMERGENCYVEHICLE

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This paper presents the Inetelligent Traffic Control for Congestion, Ambulance clearance, and Stolen VehicleDetection.

This system was implemented based on the present criteria that tracking three conditions, in those one is heavy traffic control and another one is create a path for emergency vehicle like ambulance and VIP vehicle. In this paper we are going to implement a sensor network work which is used to detect the traffic density and also RFID reader and tags. We use ARM7 system-on-chip to read the RFID tags attached to the vehicle. It counts number of vehicles that passes on the way at specified duration. If the RFID tag read belongs to the stolen vehicle. GSMSIM300 used for send the message to the police control room. Also when an ambulance approaching to the junction, it will communicating with the traffic controller in the junction inorder to turn on the green light. This module uses the Zigbee module onCC2500.

21. D-STATCOM BASED FIVE LEVELCASCADE H-BRIDGE MULTILEVEL INVERTER FORPOWER QUALITY IMPROVEMENT

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The custom power device (i.e) Distribution Static Compensator (D-STATCOM) is used to reduce harmonics in distribution system. The shunt type active power filter the VSC is developed with multi level cascade H-Bridge inverter is a cascaded multilevel inverter consists of a series of single phase full bridge inverter units. The general function of this multilevel inverter is to synthesize a desired voltage from several separate DC sources, which may be obtained from batteries, fuel cells or solar cells. Each separate DC source is connected to a full bridge inverter. The cascaded multilevel inverter does not require any voltage clamping diodes or voltage balancing capacitors like other twotopologies.

22. LOCATE MISPLACED OBJECTS! GPS-GSM-BLUETOOTH ENABLEDTRACKING

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Every house has had a history of searching for keys, pen-drives, wallets and hand-purses and it is such a tedious job, especially, when they are of utmost need. To reduce the hectic searching effort and time spent, a system is proposed, with the lost items connected to wireless sensors (Bluetooth). A mobile application (the tracking device) is created as an interface between the wireless sensors and the user. The transmitter end sends a signal to the receiver sensor, which after being traced will start ringing, to notify the user as to where the lost item is. A GPS-GSM system is integrated with the proposed system to navigate and locate the lost item if it is out of a specified range. Being at a plethora of availability the user will be able to combine task and view the required output as mobile alerts. The system acts as a multipurpose device, which besides discovering lost items also prevents theft and tracks the stolenobjects.

23. VOLTAGE FLICKER MITIGATIONUSING DSTATCOM

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Voltage Flicker is a low frequency modulation of the supply voltage. Voltage Flicker is characterized by a slow change in the Voltage magnitude with frequencies between 0.5 Hz to 30 Hz, which appears as a super imposed signal on the fundamental signal. The super imposed signal that is generated due to the voltage flicker appears as a change in the fundamental signal envelope. The major source of voltage flicker is due to Arc Furnaces. In thispaperanArcFurnaceLABmodelis

developed and implemented in a MATLAB/Simulink Power System Blockset (PSB). The fast response of the DSTATCOM makes it the efficient solution for compensating Voltage Flicker. A new control algorithm is introduced to mitigate the Voltage Flicker. The main objective of the new control algorithm is to restore the voltage to its normal value. Two sequential control steps achieve this objective. In the first step, the control technique depends mainly on restoring the voltage by injecting reactive power. In the second step, amplitude modulation, k, varies to alter the injected voltage according to the instantaneous load voltage variation, after the voltage level is raised. The voltage at PCC is compared before and aftercompensation.

24. CONGESTION MANAGEMENT INDEREGULATED POWER SYSTEMS USING GENERATOR RESCHEDULING AND FACTSDEVICES

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The development of flexible alternative current transmission system (FACTS) has attracted UPFC for congestion management problem. Relieving congestion in transmission line is demanding task in the present scenario. This paper deals with reduction of congestion in fourteen bus system using PI and FOPID controlled UPFC. The modeling and simulation of UPFC in fourteen bus system is done using MAT LAB simulink Software. The open loop system with change in load is simulated. The closed loop PI and the FOPID controlled UPFC systems are modeled, simulated and the corresponding results are compared. This paper aims to present the improvement in dynamic response of UPFC in multi-bus system using FOPID controller.

25. REACTIVE POWER COMPENSATION IN A TRANSMISSION SYSTEM USINGFUZZY-PI CONTROLLED D-STATCOM

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Electronics equipment‟s are extremely sensitive to even slight variation in electric supply. Inductive loads are majorly used in electrical world, such as industries, home appliances etc. which consume a large amount of reactive power, hence transmitted active power is reduced. Increase in active power can overcome challenges and also can result in improving power quality by better voltage stability, reactive power compensation and operational reliability. In this paper, power factor is improved at the load end by using d-statcom (distributed statcom). The D-statcom incorporating Fuzzy controller along with the conventional PI controller helps to mitigate the voltage fluctuations more effectively compared to the other existing systems. Voltage source converter (VSC) with advanced control methodology is introduced in this paper to stabilize the local loads reactive power compensation. The control strategy of VSC is by two methods namely PI controller and FUZZY controller, which will improve voltage smoothness andstability.

26. MULTILEVEL INVERTER FOR REDUCTION OF HARMONICS WITH ZVS RESONANTCONVERTER

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In the last few decades, various research studies have been performed to improve the switch transition to overcome this problem of hard-switching PWM converters ZVS method is implemented with resonant converter. By solving these high voltage and current stress problems, energy conversions using resonant converters have been important in ensuring both high performance and supporting energy conservation applications in renewable energy generation systems. The purpose of this paper is to design and analysis of modular multilevel converter for solar PV based system. The modular concept the application to be extended for wide power range. This study makes an attempt and verifies that the MMC system with low total harmonic distortion, unity power factor and high efficiency using soft switching methodology.

27. DIFFERENT IRRADIATION OF PVCELL EMULATOR DEPLOYMENTTECHNIQUES

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This paper proposes how to develop PV cell emulator for different radiation techniques .The radiation of the solar energy is measured using a device called MPPT (maximum power point tracking)which will rotate the PV cell according to the radiation strength. Along with the DC buck converter this emulator is used, thus it is used for performing the preliminary optimization tests for Photovoltaic Cell Emulator (PVCE). This avoids wastage of photovoltaic cell damage and cost. Theproposed system is simulated using MATLAB\SIMULINK for changes in irradiations and Temperature. This concept has also been verifiedexperimentally.

28. A DC-AC CONVERTER FOR SOLAR CELL REFRIGERATION SYSTEM WITH BATTERYBACKUP

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The paper presents a dc-ac converter for solar Cell compressor for application in small refrigeration systems. The refrigerator is fed from a battery bench using two processing stages. The first one is a step-up push-pull converter that is responsible for stepping up the DC to required AC voltage and the second stage is a full-bridge voltage source inverter which feeds the load. The principle of operation, design procedure and experimental results are presented below. The Buck converter is followed by a Push-Pull converter, Rectifier and a Single Phase Inverter and finally fed to the load. The main features of this system are: simple control strategy, robustness, low harmonic distortion of the load voltage, and naturalisolation.

29. SIMULATION AND MODEL OF BRIDGELESS SEPIC CONVERTER FORSPEEDCONTROL OF PMDC MOTOR

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The bridgeless SEPIC converter design is used for the speed control of permanent magnet DC motor. This paper focuses theModel of Bridgeless SEPIC topology having reduced switching and conduction losses with improved power factor, It is designed to work in Discontinuous Conduction Mode (DCM) to achieve the speed control of DC motor by varying the input supply to the armature. This converter is investigated theoretically and the performance comparisons of this proposed converter is verified with MATLAB simulation. The design example of a low voltage and PMDC Motor is developed.

30. A NEW 27-LEVEL ASYMMETRICCASCADED MULTILEVEL INVERTERDESIGN

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This paper presents the asymmetric Cascaded multilevel inverter Design, with phase voltage of 27level to drive an induction motor of 500HP. Multilevel inverters have become more popular dueto low switching losses, low cost, low harmonic distortion & high voltage capability when compared to conventional inverters. A new family of multilevel inverters has decreased the number of separate dc sources has emerged named as hybrid multilevel inverter. Various topologies and modulation strategies have been reported for utility & drive applications. The feasibility of the proposed approach is verified by computer simulations.

31. THREE PHASE ACMLI USING PHASESHIFT PWMTECHNIQUE

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Multilevel inverters are suitable for high voltage & high power application due to reduced total harmonic distortion (THD). This paper is focused on asymmetric cascaded MLI usingtwo

unequal dc sources in order to produce a nine-level output. The proposed topology reduces the number of dc sources, switches and losses. Carrier based phase shifted PWM technique is implemented to generate switching signals and to improve the performance of output voltage in cascaded multilevel inverter (CMLI). A nine-level cascaded MLI system for 3ϕ induction motor drive is also presented in this paper. A detailed study of the technique was carried out through MATLAB/SIMULINK for THD.

32. REDUCED MATRIX CONVERTER FORHIGH FREQUENCY OPERATION USINGPWMTECHNIQUE

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Reduced matrix converter (RMC) is a convenient topology for high frequency application due to its potential to reduce the size and weight of the converter, to improve the reliability by removing the electrolytic capacitor, and to increase the efficiency inherent to less stages of conversion. This paper explains various modulation strategies applied to RMC for high frequency applications, focused on efficiency improvement of the entire convention system. Simulation results using a detailed loss model for high-power level are presented .The case is investigated according to the modulation strategy multiple pulse width modulation and the operation principle is current source converter or voltage source converter. Losses in the clamp circuit are also calculated .This operation is suitable for industrial applications that require high frequency.

33. VARIABLESPEEDWIND GENERATION SYSTEM BASED ON DOUBLY FEDINDUCTIONGENERATOR (DFIG) USING MATRIX CONVERTER

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The wind energy has become one of the most important andpromising sources of renewable energy, which demands additional transmission capacity and better means of maintaining system reliability. The evolution of technology related to wind systems industry leaded to the development of a generation of variable speed wind turbines that present many advantages compared to the fixed speed wind turbines. These wind energy conversion systems are connected to the grid through Voltage Source Converters (VSC) to make variable speed operation possible. It provides sinusoidal input and output waveforms, with minimal higher order harmonics and no sub harmonics; it has inherent bi-directional energy flow capability; the input power factor can be fully controlled. The proposed converter is capable of direct ac/ac power conversion and, except for a few small snubber elements; it does not require the use of any input inductors or a dc-link capacitor. Here DFIG introduction and AC-AC converter control and finally the SIMULINK/MATLAB simulation for Matrix Converter as well as for grid connected doubly Fed Induction Generator and corresponding waveforms are discussed.

34. BIDIRECTIONAL DC-DC CONVERTER FOR MICRO WIND TURBINE USING LOWCOSTRECTIFIER TOPOLOGY

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The paper presents the application of low cost boost rectifier for microwind turbine generator using Bidirectional dc-dc converter. The proposed system with battery storage and microwind generating system provides energy saving and uninterruptable power within distribution network. Hardware can be implemented using a low cost microcontroller.

35. HYBRID MUTILEVEL INVERTER FOR SOLAR ENERGYAPPLICATIONS

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Synthesizing the AC output terminal voltage from several levels of voltages, staircase waveforms can be produced, which approach the sinusoidal waveform with low harmonic distortion, thus reducing the filter requirements. By increasing the level of the inverter we can get several advantages like good voltage wave form, Very low THD, reduced volume and cost. The need of several sources on the DC side of the converter makes multilevel technology attractive for photovoltaic applications. This paper provides an overview of a multilevel inverter topology and investigates their suitability for single-phase photovoltaic systems.

36. SIMULATION OF POWER MARKETANALYSIS

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In this paper, a Newton-based optimal power flow (OPF) is used for power market analysis. The OPF has features of line overload removal, enforce the constraints, bus marginal control, transmission line marginal control, super area control. The main purpose of using optimal power flow (OPF) in this paper is to determine the "best" way to instantaneously operate a power system, and also discussed the various ways to reduce the marginal cost of both buses and lines with constraints. Power world simulator employs linear programming method for finding optimal solution.

37. STABILITY IMPROVEMENT USING LQR CONTROLLER OF A DFIG-BASED OFFSHORE WIND FARM CONNECTED TO A POWER GRIDTHROUGHAN HVDC LINK

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This paper presents the stability improvement analysed results of an 80-MW offshore wind farm (OWF) connected to a power grid through a line-commutated high-voltage direct-current (HVDC) link. The studied OWF is simulated by an equivalent 80-MW doubly-fed induction generator (DFIG) driven by an equivalent wind turbine through an equivalent gearbox. The damping controller of the rectifier current regulator (RCR) of the proposed HVDC link is designed based on the combination of Linear Quadratic Regulator (LQR) control and the Genetic Algorithm (GA) to contribute adequate damping to the studied OWF under various wind speeds and different disturbance conditions. Genetic algorithm is employed to find the best values for gains of the controller in a very short time with an effective performance. The MATLAB simulations are carried out to demonstrate the effectiveness of the designed damping controller under various disturbance conditions. It can be concluded from the simulation results that the proposed line-commutated HVDC link joined with the designed damping controller not only can render adequate damping characteristics to the studied DFIG-based OWF under various wind speeds but also effectively mitigate the fluctuations of the OWF under disturbance conditions.

38. OPTIMAL SITING AND SIZING OFCAPACITOR IN DISTRIBUTIONNETWORK

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A power distribution network can provide cost effective and good platform for supporting the present and future smart distribution system if it operates efficiently. Optimal siting and sizing of capacitor in the distribution network will enhance Energy efficiency in distribution systems. The objective of this paper is to find the maximum load ability margin in distribution systems for the siting and sizing of capacitor. This work also looking to obtain reduced system power loss and improved voltage profile. Theoptimal site for the capacitor is determined based on Power Loss Index (PLI). Matlab Simulation programs for this work have been determined. It improves theload

ability limit and it reduces the power loss to enhance energy efficiency in the distribution network by satisfying the power demand and feedercapacity.

39. STUDIES OF CORROSION ON AA6061 AND AZ61 FRICTION STIR WELDEDPLATES

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Friction Stir Welding (FSW) is remarkably new joining process with solidus state. This joining technique is environment friendly, energy efficient, and versatile. In particular, FSW can be utilized to join the high strength aluminium alloys and other dissimilar alloys that are difficult to weld by conventional fusion welding. The process parameters have a key role in determining the characteristics of the joint. In this work, three parameters of the weld namely, axial load (kN), rotational speed (rpm) and weld speed (mm/min) are considered. Three pairs of AA6061 and AZ61 plates were welded with three different sets of these parameters. After six months, the welded zone was immersed in corrosive solution of NaOH for different time periods. The corrosion was studied with the help of SEM andEDAX.

40. COMPUTER LANGUAGE ON FRICTION STIR WELDINGOFAA6061-AZ61

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The recent trend of research on joining of dissimilar alloys leads the interest towards the study and analysis of Friction Stir welding. Joining of different steel groups and Aluminium has been on the research interest on the previous decade. Recent innovative research and development area is on with Magnesium alloy groups. The Aluminium alloys and Magnesium alloys are investigated for the weld strength with respect to the change of welding parameters including tool geometry, the tool transverse speed, and the tool angular velocity.

41. PARAMETRIC OPTIMIZATION OF FRICTION WELDING FOR ALUMINIUM METALMATRIXCOMPOSITE

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Friction welding is a solid state joining process which is used to join metals and alloys having poor weldability. The aluminium alloys are the most preferred material for the aerospace and marine industries for its good strength to weight ratio. To improvise its properties aluminium alloys are added with abrasive particles in its matrix to produce aluminium metal matrix composite. This research work is focussed on conducting experimental analysis on Friction welded AA 7075 -10%vol SiC_p-T6 metal matrix composite. Effect of Friction welding parameters like Spindle speed, burn-off-length, friction pressure and upset pressure are investigated. The L_{27} orthogonal array is used based on the concepts of Taguchi"s design of experiment. Four process parameters were selected with three levels and 27 experiments were conducted to predict the ultimate tensile strength of the friction welded metal matrix composite. Analysis of variance (ANOVA) is adopted for the statistical analysis of the influence of friction welding process parameters on the ultimate tensile strength of the friction welded AA 7075 -10%vol SiC_p-T6. The optimum friction welding process parametersobtainedareSpindleSpeed =1800 rpm, Friction Pressure=100 MPa, Upset Pressure = 150 MPa and Burn-off-length= 2 mm. The fractography study on the fractured specimen obtained by friction welding using the optimised process parameters also supported the result.

42. ENERGY HARVESTING USING PIEZOELECTRIC EFFECT

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Piezoelectric materials (PZT) are being efficient to reduce dependence on conventional source of electricity in our day to day life. This kind of electricity is being non conventional and pollution free .The main requirement for this method electricity generation is pressure generation. The larger pressure generation can be yielded from the crowd farming technique. These flooring is to be placed under places where crowd farming occurs. By this implementation the footsteps of the passengers and pedestrians creates the pressure which in turn generate volts in fraction of seconds. The main source for this work is from crowd farming. The force applied by these footsteps is directly proportional to voltage being produced. This research can be implemented from micro level to macro level. The results thus obtained from our work are being discussed in thispaper.

43. EXISTENCE OF PRONOUNCED DUCTILITY IN $RH_3A_XB_{1-X}$ AND IN $RH_3B_XA_{1-X}$MATERIALS

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In the present work, the comparative study is made between $Rh_3A_xB_{1-x}$ and in $Rh_3B_xA_{1-x}$ (A=V,Nb,Ta; B=Ti) (where x= 0, 0.125, 0.25, 0.75, 0.875, 1)materials. Here, the Rh_3V, Rh_3Nb and Rh_3Ta are taken as parent compounds and the ternary alloy addition is made by titanium with vanadium, niobium and tantalum. Electronic, elastic and mechanical properties are calculated for these compounds and the ductile/brittle analysis are made by using G/B ratio, Cauchy pressure and Poisson‟s ratio. Resultshows that the following alloy combinations such that $Rh_3Ti_{0.875}V_{0.125}$, $Rh_3Ti_{0.25}Nb_{0.75}$ and $Rh_3Ti_{0.125}Ta_{0.875}$ are more ductile than their other respective combinations. All the calculated properties of $Rh_3Ti_x(V/Nb/Ta)_{1-x}$ compounds are compared with $Rh_3(V/Nb/Ta)_xTi_{1-x}$. By the way of detailed comparison we have entrenched that the existence of pronounced ductility in $Rh_3Ti_{0.875}V_{0.125}$, $Rh_3Ti_{0.25}Nb_{0.75}$and $Rh_3Ti_{0.125}Ta_{0.875}$ combinations. This study is extended with calculating thermal properties such as Debye temperature, melting temperature and Grüneisen parameter and anisotropy factor, cohesive energy

44. AUTOMOBILE PICKUP LIFT FOR MATERIAL HANDLING PURPOSE OF LIGHT MOTORVEHICLE

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Packing and logistics is major field of interest in automobile industries, concerning carriers. In the major concerns, keeping up with time is very difficult and loading & unloading time is the pivot to reduce the logistic time. The pick-up lift, which we have designed, will be useful to resolve the problem of loading and unloading of cargo from the vehicle without help of anyone.There are lot of load handing vehicle is available in the market, The Pick-up Lift is the ultimate in material handling. It eliminates manual loading and positioning of heavy and cumbersome cargo, reducing the chance of injuries, and pick-up lift can get the job done quickly, safely, and efficiently. Lift, load, and place cargo exactly where you want it, while standing back safely out of the way. The main aim of the project is to develop a handy pick up lifting equipment to reduce manpower and time to delivery.

45. DESIGN AND FABRICATION OF BIKECENTRE STAND USING COMPOSITEMATERIALS

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The importance of materials in modern world can be realized from the fact

that much of the research is being done to apply new materials to different components. This paper presents development the design and fabrication of bike Centre stand by using composite material. In this paper, the aim is to manufacture the composite Centre stand and compare the results with conventional steel stand under different mechanical testing with evaluating of different mechanical properties such as tensile strength, bending strength, impact strength, fatigue strength by using appropriate experimental technique. The present work is carried out on modelling, analysis and testing of Centre stand is to replace by different composite material for two wheeler vehicle. The stress and deflections of the Centre stand is going to be reduced by using the new composite material. The Centre stand was modelled in Pro/Engineer and the analysis was done using ANSYS workbench software. The fatigue life of both steel and composite material is compared using ANSYS software.

46. CAN HOVER-BIKES BE THE FUTURE OF TRANSPORTATION

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This design of hover bike can work more efficiently as it is easy to operate and can be applied to various purposes because it does not need a runaway and is capable of hovering from any terrain. Thrust vectoring can be done by special design and technique so it can able to fly at almost all directions. It is designed with a ducted fan, so that the slip of air is less. Hence its aerodynamic efficiency is high. Moreover, it can able to take off and land vertically from any terrain. Our Hover Bike .It will be based on present motorcycle technology. We will use the chopper as the basis for our Hover Bike. Current motorcycles have two wheels. Our Hover Bike will change that because it will havethrusterstohover.Aductedfanbike is mobile and can be deployed rapidly, which makes it well suited for a variety of missions such as reconnaissance and surveillance performed by soldiers at the platoon or squad level.

Also, it is aerodynamically efficient because the lift generated by the duct can create a thrust force that is higher than the other VTOL vehicles, which have no duct and therefore no hovering flight mode. In the case of the ducted fan type flying bike, its rotor is covered with duct, which lowers the risks of rotor damage caused by tiny bugs and foreign object. Finally, the duct fan type bike was developed under an innovative operational concept of landing on small areas such as the roof of a building, and of preventing excessive fuel consumption during hoverflight.

47. STANDALONE ROBOT FOR AVALANCHEVICTIM LOCATION INDICATION AND LIFESUPPORT

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Many people die in avalanches every year. Although search and rescue teams are equipped with sophisticated instruments the probability of survival of the victim remains low due to high time consumption in locating and due to less or no life support to the victim. This paper focuses on a robot that automatically senses avalanches and drills out of the snow to transmit emergency signals using laser beams, transmitter and a smoke bomb to enable spotting the victim from long distances and in all weathers. Further this device provides a pathway for the victim to breathe through an air tube attached to it.

48. FREQUENCY CONTROL IN DEREGULATEDGRID WITH RENEWABLE ENERGY INTEGRATIONUSING EV PARTICIPATION

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Nowadays, Electric Vehicles has started replacing the conventional ones due

to the increased price of fossil fuels, its decreasing availability and its environmental impacts. At the same time, charging stations set up for these electric vehicles are additional loads on the grid. Utilizing these Electric Vehicles efficiently would ease out this problem. Addition of renewable energy sources into the Grid creates uncertainities and frequency stability problems. These electric vehicles can be used as moving batteries which would help to stabilize the frequency problems created during renewable energy integration to the grid. In this paper, this vehicle to grid concept is tested with IEEE 39-bus system in the presence of renewable energy sources. An optimized form of fuzzy logic controller is used to control the state and performance of Electric Vehicles. For performing frequency analysis, it is treated as a three area system and simulations are carried out using MATLAB/SIMULINK and the results are analysed. The results shows that the electric vehicles help in frequency stabilization of grid with renewable energy integration.

49. A SINGLE STAGE SOFTSWITCHING-PWM INVERTERWITHCF TO HF AC POWER APPLICATIONS

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A Single phase half bridge inverter is used to provide continuous sinusoidal input current with nearly unity power factor at the source side with extremely low distortion. In this paper a single phase AC/DC/AC soft switching utility frequency AC to high frequency AC converter. The proposed converter can operate with zero-voltage switching during both switch-on and switch-off transitions. Moreover, this topology doubles theoutput voltage, and therefore, the current in the load is reduced for the same output power. The working of the highfrequency inverter using the latest MOSFETs are illustrated, which includes high frequency AC power regulation ranges based on zero voltage soft switching (ZVS) operation ranges are compared with those of the previously developed high frequency inverter.

50. TASI ==> TRAIN AUTOSENSING INSTRUMENT

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The major problem we have in the railway system is four , one is garbage in the station , and waiting of train in the junction un till other train cross and we had over come the disadvantage of all by connecting a VR glass and the protective layer for this and the will be at a 36 0 to send the air into the turbine and to rotate will convert mechnaical energy to electrical energy as the use of turbine and the energy are sent to the Robot and the robot is for cleaning the between the track. We can prevent the human life with this project

51. PRESERVINGSOURCELOCATIONPRIVACY THROUGH REDUNDANT FOGLOOP

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A redundant fog loop-based scheme is proposed to preserve the source node-location privacy and achieve energy efficiency through two important mechanisms in wireless sensor networks (WSNs). The first mechanism is to create fogs with loop paths. The second mechanism creates fogs in the real source node region as well as many interference fogs in other regions of the network. In addition, the fogs are dynamically changing, and the communication among fogs also forms the loop path. The simulation results show that for mediumscale networks, our scheme can improve the privacy security by 8 fold comparedtothephantomroutingscheme,

whereas the energy efficiency can be improved by 4 fold.

52. DECOUPLING THE MEMORY BUS FROM VOICE-OVER-IP IN VON NEUMANNMACHINES

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Recent advances in real-time models and pseudorandom symmetries offer a viable al- ternative to hierarchical databases. Given the current status of client-server epistemolo- gies, hackers worldwide obviously desire the simulation of IPv6, which embodies the con- firmed principles of software engineering. In our research, our efforts on showing that e-business and the partition table can collude to surmount this grand challenge.

53. ANDROID PHONE BASED ASSISTANT SYSTEMFORHANDICAPPED/DISABLED/AGEDPEOPLE

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This paper Intelligent Assistant System is a system which provides functionality for disabled people to live independently in today‟s world. This project increases the ease of mobility fordisabled/injured people. We have resolved the disabled problems by implementing voice control, and accelerometer based interfacing with the wheelchair. In this project, the wheelchair has been modified so the motions of the wheelchair are controlled by the instructions of the user. It also provides an opportunity for visually or physically disabled persons to move from one place to another. Intelligent assistant system serves as a boon for those who have lost their mobility. The development of Intelligent Assistant System for the basic purposeofsafety,mobilityofuser, human interface with wheelchair. The necessities of numerous people with incapacities can be happy with wheelchairs; a few individuals from the impaired group discover it is troublesome or difficult to work a wheelchair. This project could be a piece of an assistiveinnovation. It is for more free, profitable and agreeable living for disabled, injured persons. Many disabled people require help in order to overcome physical challenges. Thus this project will provide an alternative to the disabled in controlling the motion of the wheelchair using their voices andAccelerometer.

54. IOT RELATED TO WEARABLEDEVICES

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Internet of Things (IoT) is a collection of physical items which are embedded with sensors, network etc. which provide these physical objects to collect and exchange data over the internet without human interaction. According to the survey, 96 percentages of people across the globe are keen interested to integrate with Internet of Things and 67 percent are done so far. Wearable devices can gather data with help of IoT and makes analysis and conclude based on the particular data. These wearable devices have laid its applications in numerous areas like Smart Homes. With IoT creating the buzz, “Smart Homes” is the most searched one. IoT associated features on Google connected Cars, Wearable, Industrial Internet, Smart Cities, IoT in Agriculture, Smart Retail, Energy engagement. This paper makes an overview of IoT relatedWearable.

55. EFFICIENT SPATIAL FILTERING FOR INDEXINGHIGH DIMENSIONALDATA

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We consider approaches for similarity search in correlated, high-dimensional data sets, which are derived within a clustering framework. Indexing by "vector approximation" (VA-File), which was proposed as a technique to combat the "Curse of Dimensionality," employs scalar quantization. It ignores dependencies across dimensions, which represents a source of sub optimality. Clustering, on the other hand, exploits interdimensional correlations and is thus a more compact representation of the data set. We developed cluster distance bounds based on separating hyper plane boundaries and our search index, complemented by these bounds, is applicable to Euclidean and Mahalanobis distance metrics. It obtained significant reductions in number of random IOs over several recently proposed indexes, when allowed (roughly) the same number of sequential pages, has a low computational cost and scales well with dimensions and size of the data-set. We note that while the hyper plane bounds are better than MBR and MBS bounds, they are still loose compared with the true query-cluster distance.

56. IMPLEMENTATION OF MOVINGOBJECT DETECTION USINGSENSORS

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The aspect of study is to check the level of acceptance of the system by the user. This contains the process of training the one of the user to use the system well organized. The user must not feel threatened by the system, instead must accept it as a fact of being required. The level of acceptance by the users merely depends on the methods that are employed to educate the user about the system and to make him well known with it. The Author"slevel of confidence must be raised so that he is also able to make some constructive criticism, which is welcomed, as he is the final user of the system. Moving Object detection is the process of detecting a change in the position of an object with respect to its surroundings or the change in the surroundings in relation with an object. Motion detection can be achieved by both mechanical and electronic methods. When motion detection is accomplished by natural organisms, it is called motionperception.

57. IMPLEMENTATION OF MEDICALKNOWLEDGE EXTRACTION FROM TRUTH DISCOVERYANDSUPERVISED METHODS

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The medical question and answer website plays a vital role in today"s fast world because everything is becoming digital .When the world is stepping forward to become digital, then storage of data becomes a complex task .If a Question and Answer website is considered for extracting medical data ,it is observed that each and every data that is generated becomes valuable. Thus, storing all these data by filtering out the unwanted data is a challenge .This is not possible when gathered information from the patients in a detailed manner and then separating it into useful information .When proposed a system to avoid the time taken, cost of extraction of the useful information from unwanted sentences .Moreover, our main aim is to reduce the volume of the data that is stored in the back end for faster retrieval of data. Here proposing an additional feature of leaving a message in chat to the doctors and whenever the registered users login to the account they can see details about any camp .This project has another advantage to give the patients some first aid related videos according to their wish .The implement thisprojectinthenameof,EasyMed

which can automatically give you suggestions.

58. A BIG DATA APPROACH FOR ENTIRE ACCESS TO DOLE OUTSCALABLEDEBASEMENT

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In our day-day life, the tenders and geographies of information technology have been advanced in Big data. As big data and machine learning gross hold, storage technology frequently becomes automated, virtualized and more complex. Dimensionality reduction of big data wrenches in a lot of attention as of late as an operative policy to detach the center evidence which is slighter to store and speedier to grip. With the exponential enhancement of data volume, huge data has put a wonderful weight on current groundwork. Dimensionality reduction of big data fascinates a great deal of kindness in fresh centuries as an efficient approach to abstract the core data that is minor to store and sooner to process. To tackling the three fundamental complications closely related to distributed dimensionality reduction of big data, i.e. big data fusion, dimensionality reduction algorithm and construction of distributed computing platform. A chunk tensor method is offered to passion the unstructured, semi-structured and structured data as a unified model in which all appearances of the assorted data are appropriately agreed along the tensor orders. A Lanczos based High Order Singular Value Decomposition procedure is proposed to reduce dimensionality of the unified model. Hypothetical analyses of the procedure are provided in terms of storage scheme, convergence property and computation cost. To execute the dimensionality reduction task, employs the Transparent computing paradigm to paradigm a distributed computing stage as well as utilizes the linear predictivemodel to partition the data blocks. Final results establish that the planned holistic approach is proficient.

59. A STUDY - IBMWATSON

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The objective of this review is to promote the integration of AI, cybersecurity, and quantum computing. In the future there is an increase in the amount of cyber threats hence this. integration is very important. AI or artificial intelligence is the intelligence expressed by the machines, in other words the gather the data around them through symbolic learning , machine learning and process the data themselves similar to humans. Quantum computing is computation done using the qubits .the qubits can be 0,1or both simultaneously, Hence huge amount of data could be read parallel by the quantum computer. they are based on the quantum mechanical phenomena superposition and entanglement. Cybersecurity is the field of computer science that deals with the protection of electronic data from unauthorized access. elements of cybersecurity includes application security, information security, network security, disaster recovery, operational security and end user education. application security is the use of hardware, software to protect the application from external threats. disaster recovery aims to protect an organization from the effects of negative events by quickly resuming mission critical functions following a disaster. mission critical functions means functions whose loss would cause business operations to fail. cyberattack means the attempt by a acker to destroy a computer network or system. Cybersecurity, in todays world, there are lots of cyberthreats ranging from those of bank websites to wannacry ransomware hence, there is a lot of necessity for this integration. Weare

going to see the integration of ai, quantum computing and cybersecurity.

60. STUDY OF NEURAL NETWORKS FOR OPTIMIZATIONPROBLEMS

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This paper studies the use of neural networks for solving different optimization problems and proposes research ideas for further advancements. Several kinds of optimization problems (linear, non-linear, constrained, stochastic, etc..) are suggested with different architectures like sequence problems with recurrent networks. Other kinds of solutions like deep reinforcement, memory augmented neural networks are studied. The neural network solutions are compared with traditional techniques using solvers and model builders and solutions are checked for convergence. With increasing computation and algorithmic power, this paper is built on the deep belief of effectively tackling most of the real world optimization using current state of the art neural networks and techniques.

61. VEHICLE CHASSIS ANALYSIS: LOADCASES

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The current work contains the load cases & boundary conditions for the stress analysis of chassis using finite element analysis over ANSYS. Shell elements have been used for the longitudinal members &cross members of the chassis. The advantage of using shell element is that the stress details can be obtained over the subsections of the chassis as well as over the complete section of the chassis. Beam elements have been used to simulate various attachments over the chassis, like fuel tank mountings, engine mountings, etc. Spring elements have been used for suspension & wheel stiffness of the vehicle.

62. PRENGANCY MONITORING USINGBODY SENSORNETWORK

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Maternal disorders are most common during pregnancy. They cause about 10% of the maternal deaths. The mortality rate is comparatively decreasing over years, but many women are still suffering from pregnancy complications. Mobile devices with internet access have great potential to expand the action of health professionals. They facilitate care with people living in remote areas, assisting in patient monitoring. This paper presents a mobile monitoring solution using body sensor network to identify worsens in physiological status of pregnant women suffering from disorders. This system uses the body sensors which monitors the blood pressure, heartrate, temperature and vibrations, a gsm module to efficiently transfer the data. The system can detect abnormal conditions of the patient and send SMS to the physician. The proposed system is promising for monitoring and also improves the quality of mobile health caresystem.

63. TRI-BAND ANTENNAS FOR SATELLITE COMMUNICATION AT C-, X- ANDKU-BAND

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A compact and high gain micro strip patch antenna is proposed for satellite communication. The antenna covers the frequency of C-band, X-band and Ku-band. The proposed antenna having the maximum reflection coefficient of -28.076 at 13.13GHz. This antenna achieves high gain and directivity. Four circular slots are inserted into the rectangular patch of the antenna. Low cost FR4 dielectric is used as a substrate material. The antenna provides the bandwidth of 14GHz. The gain achieved by the antenna is 3.04dBi at 4GHz, 4.90dBi at 8GHz, 1.88dBi at 12GHz and 8.29dBi at 18GHz. Thedesign

and simulation of the Microstrip antenna is done by Advanced Design System(ADS) software 2016 version.

64. AUTOMATION IN RESTROOM USINGSPEECH RECOGNITION

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The objective of this paper is to conserve the water. Nearly 95% of water goes as waste in home. Country has able to manage only 4 percent of fresh water available. The water shortage problem is not due to insufficiency of water but due to excessive wastage of fresh water. About 50% of fresh water is wasted in the country as a result of leakage of fresh water and due to improper water management system. There are different causes of wastage of water, human being are the major cause for wastage. This leads to serious cause for existence of life. To overcome the problem there are many measures .This paper is about to start the management from our restroom itself by limiting the water quantity and to control by speech recognizer along with the sensor. This will be the cost efficient method to conserve the water wastage and it is a reliablemethod.

65. VOICE CONTROLLED ROBOT FORDISABLED PEOPLE

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The proposed system demonstrates a unique idea of a voice-controlled robot for physically challenged people with the correlation between Bluetooth application, Geeetech voice recognition module, Keypad and IR Proximity sensor. Several disabled people rely on others for their routine tasks particularly to move around. This robot aims at helping the locomotion of disabled people independently. Though several technologies are available, this idea of voice-controlled robot offersan advantage over existing systems. Voice commands are given via two methods Android Bluetooth application and Geeetech voice recognition module. The Android platform is utilized in view of its recent popularity. Android app will receive the commands and sends to the robot via Bluetooth. In case of Geeetech voice recognition module, voice commands are given to a microphone attached to the module. 4x4 matrix keypad is used as another input to control the movements of the robot. An IR Proximity sensor is also used, as it helps to detect obstacles lying ahead in the way of the robot that can hinder its passage. This system is designed and developed to save cost, time and energy of the patient.

66. VERICHIP

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Verichip is an injectable identification chip that can be inserted under the skin of a human being to provide biometric verification. Verichip is about the size of a grain of rice. It holds an identification number, an electromagnetic coil for transmitting data, and a tuning capacitor the components are enclosed inside a silicon and glass container that is compatible with human tissue. The chip which uses an RFID (wireless transmission) technology similar to the injectable ID chips or microchip implant .A human microchip implant is typically an identifying integratedcircuitdeviceorRFIDtransponder encased in a silicate glass and implanted in the body of a human being. This type of Sub dermal implantusually contains a unique ID number that can be linked to information contained in an external database, such as personal identification, law enforcement, medical history, medications, allergies, andcontact

information. The device was typically implanted between the shoulder and elbow area of an individual‟s right arm. Once scanned at the proper frequency, the chip responded with a unique 16-digit number which could be then linked with information about the user held on a database for identity verification medical records access and other uses and even the tracing of kidnapping victims.

67. CLASSIFICATION OF BREASTTHERMOGRAPHY USING MACHINE LEARNING FOREARLY DETECTION OF MALIGNANCY

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Uncontrolled growth of cells in the breast tissue causes Breast Cancer and it has been the major cause of fatality in thedeveloping countries. Although the existing methods of detection have been efficient, they largely focus on women above the age of 40. Early detection in a stage 1 mutation would be helpful in better diagnosis and treatment protocol thus ensuring longerlifespans.

Therefore the thermography method proposes to take thermal images of the breast, highlighting the areas with extra growth. A pattern recognition technique that has been most effective in classifying tumours as benign or malignant – Fast support vector machine (FSVM) is used on the Thermo-gram. It is a three-step approach. The first step, thermal image pre-processing and segmentation. Second step, Textural Features Extraction using Curvelet transform. The percentage of area occupied by pixels with the higher temperatures of the image is calculated. In the third step, is used to extract classification of the tumour and highlight a boundary with the affected cells. Using this screening technique, will pave way for a non-invasive, highly efficient, early detection method for women of all age groups.

68. HYDRO CARBON DETECTION FROM EARTH SURFACE USING SATELLITE IMAGEPROCESSING

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Hydrocarbon seepages are effective indicators of oil and gas presence in the underground. They may alter the rocks and cause mineral alterations at the surface. Through detecting the changes of minerals in the surface seeps can be identified by remote sensing technology. In this project Advance Space borne Thermal Emission and Reflection Radiometer (ASTER) and WorldView-2 (WV-2) data were used to detect gas-induced alteration in the marly limestone formation in the World. In this project first a knowledge-based approach (band ratio and relative absorption band depth) was applied to detect alterations. Box plots were made for selecting mineral indexes that could be used for detecting alterations. In the second part of this work, a data driven approach was introduced to classify altered and unaltered areas.

Three classifiers, the Supported Vector Machine (SVM), Random Forest (RF) and Gradient Boosted Regression Trees (GBRT), were trained by two training sets of different sizes. The training sets were selected by the spatial–spectral endmember extraction tool (SSEE) with the help of alteration maps produced by knowledge-based approach applied in the first part of the research. However, the altered areas are obviously bright in ASTER data. To eliminate the influence of image intensity, the ASTER data was transformed to Principle component analysis (PCA) image. The new imagery was converted back by PCA image without first component which contained the intensity information. The performance of these classifiers was compared by testing the two different training sets and images. With the significant learning ability using small training sets and a good stability, the SVM method is observed to be the most suitable classifier for detecting hydrocarbon seepagealteration.

69. ADVANCED GUIDING TOOL FORTHE SELECTION OF CROPS

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Agriculture monitoring system and selection of crops has been facilitated by the recent developments in information technologies. Agriculture plays an important role in improving the economy and the employment opportunities in India. Mostly farmers face difficulties in the selection of crops. This can be overcome by using precision agriculture techniques that uses research data of soil characteristics, soil type, crop yield data collection and gives farmer the best suggestion in selecting the crops.

70. SURVEY ON WEARABLE ANTENNADESIGNS

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In recent years, wearable antenna design has become the developing research due to its applications in various fields. Recent research about wearable antenna provoked widespread concern for wireless body area network (WBAN) with operating frequency 2.45 GHz (ISMBand) .This paper reviews about the design results of wearable antennas and the further approach model to get the better results.

71. MICROSTRIP PATCH ANTENNA FORBRAIN TUMOURDETECTION.

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A compact wearable microstrip patch antenna is used for the determination of brain tumour. This antenna is designed at a lower frequency since it is used at a very sensitive part of the body. A microwave wearable antenna is made to analyse the radiation over the body in order to detect the tumor in that particular region. A multiband frequency antenna is designed so that two different applications can be used at two differentfrequencies. The proposed antenna is designed at a frequency of 2.7 GHZ. The dimension of the antenna is 25 × 25 × 10.5 mm3. The tumour is detected by determining the specific absorption rate. It is the power absorbed per mass of tissues and has units of watts per kilogram. The SAR for the head phantom with tumour and without tumour is determined and then the result is analysed.

72. DEPLOYMENT OF IOT BASED MODERN SECURITY AND SURVEILLANCING SYSTEMFOR FARMS

Prashanth

Agriculture sector being the backbone of the Indian Economy deserves security. Security not in terms of resources only but also agricultural products needs security and protection at very initial stage, like protection from attacks of rodents or insects, in fields or grain stores. Such challenges should also be taken into consideration. Security systems which are being used now a days are not smart enough to provide real time notification after sensing the problem. The integration of traditional methodology with latest technologies as Internet of Things and Wireless Sensor Networks can lead to agricultural modernization. Keeping this scenario in our mind we have designed, tested and analysed an "Internet of Things" based device which is capable of analysing the sensed information and then transmitting it to the user. This device can be controlled and monitored from remote location and it can be implemented in agricultural fields, grain stores and cold stores for security purpose. This paper is oriented to accentuate the methods to solve such problems like identification of rodents, threats to crops and delivering real time notification based on information analysis and processing without human intervention. In this device, mentioned sensors and electronic devices are integrated using Pythonscripts.

73. AR FIELD SOLDIER BODYCONDITION MONITORINGSYSTEM

Prashanth

Military is the backbone for the countries to restrict the entry of terrorists and maintain peace inside the country. They use plenty of electronic gadgets to fight the terrorists and protect the border. During critical conditions, they may get attacked. But due to lack of first aid during such time may cause them their life. Even though they have communication medium it is impossible to monitor their body condition. So some elder militants can get heart-attack during these conditions. So in such cases a continuous monitoring needs to be done to know the militants condition. It is not possible for the militants to continuously monitor the condition of the soldiers. In this project we are developing a modern wearable technologies have enabled continuous recording of condition of the militants with the help of a helmet with embedded sensors would provide maximum convenience and the opportunity to monitor both the vital signs and the electroencephalogram (EEG). To this end, we investigate the feasibility of recording the electrocardiogram (ECG), respiration and EEG from face-lead locations, achieved by embedding multiple electrodes within a standard helmet. The electrode positions are at the lower jaw, mastoids and forehead, while for validation purposes a respiration belt around the thorax and a reference ECG from the chest serve as ground truth to assess the performance. The within-helmet EEG is verified by exposing the subjects to periodic visual and auditory stimuli and screening the recordings for the steady state evoked potentials in response to these stimuli. Cycling and walking are chosen as real-world activities and our case studies illustrate how to deal with the so-induced irregular motion art facts which contaminate the recordings. We also propose a multivariate R-peak detection algorithm suitable for such noisy environments. Recordings inreal-world scenarios support a proof-of-concept of the feasibility of recording vital signs and EEG from the proposed smarthelmet.

74. AADHAR-PAYMENT SYSTEM: CASHLESS & CARDLESS TRANSACTION SYSTEMUSINGINTEGRATIVE QR BASED PAYMENT SYSTEM USING AADHAR

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An Android App in the Smartphone allows the user to browse through all receipts in an orderly manner. In our project deal with transaction, payment & ATM cash handling techniques with security. Using this system security digital transactions could be even more better than existing system. For all transaction are done through single card number which is interlinking all accounts with more security. We can analyze user behavior using Aadhar card. So that complete transactions are processed, through Aadharcard.

75. SMART MONITORING OF WIND MILLSYSTEM USING WIRELESSCOMMUNICATION

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The wind farm is located only in the areas of complex topography. Therefore, it has no proper access and communication to monitor and measure the wind mill parameters like voltage, current produced and also to find the speed of the wind mill when the direction of the blade changes. From the above measured parameters it is easy to determine power and power factor produced in the wind mill. These values can be obtained through smart monitoring techniques. Here, the parameters are automated for every 3 secs and the values are updated in the GSM module which is viewed through the mobile / laptop by the authorized person. The aim of the system is to measure average, minimum and maximum wind speedstorethedetailsandsendittothe

server along with other details, like graphicalrepresentations.

76. UNDERWATER CRAFT ARTICULATION SYSTEM USING VISIBLE LIGHT ELUCIDATIONTECHNIQUE

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An embedded system is a special-purpose computer system designed to perform a dedicated function. Unlike a general-purpose computer, such as a personal computer, an embedded system performs one or few pre-defined tasks, usually with very specific requirements. Since the system is dedicated to specific tasks, design engineers can optimize it, reducing the size and cost of the product. Visible Light Communication (VLC) system based on white LEDs has emerged as an eco-friendly IT green technology using THz visible light spectrum in provision of both lighting and wireless access. In underwater, sea divers can"table to communicate effectively which will be a major drawback in ocean researching. In this system, we are going to provide a novel method of communication between two sea divers using Li-Fi technology. The voice is going to be transferred by using voice playback. We are going to monitor the health of sea divers using temperature sensor and respiratory sensor and it will be displayed in the LCD screen, using these sensors information we can track the health of the sea divers and provide emergencysupport.

77. M-WALLET TICKETING USINGWI-FI

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In the current digital market scenario people are using handheld portable devices to satisfy their needs in every aspects such as online banking, e-commerce. In addition, the evolution of "SMART CITY" initiative all over the world, the need for enhancement in Transport and communication is much required.

Hence mobile ticketing service namely M-wallet ticketing system is made as a proposal through which travelers can get their tickets easily without waiting in the queue and also fair amount for the travelling can be reduced from the users M- wallet. In this proposed system each station has its own network with specific name and password. An android mobile application is developed through which the user has to register and login to the application. The system uses M-wallet thus user has to transfer some amount of money to the wallet in the application. User while boarding uses M-wallet application, where the source station has to be specified and the ticket has to be booked for journey, thus the ticket in the form of QR code will be generated which will have source station, time of journey and ticket ID details. The user will be permitted to enter into the platform only after scanning the QR code at entry check of AFC gate. The user after reaching the destination station user has to connect with the destination network by turning on Wi-Fi and have to scan the QR code at the exit check of AFC gate and then fair amount for travelling will be deduced from thewallet.

By doing this system queuing can be avoided, paper wastage can be reduced and also fair amount of travelling can be obtained from the traveler. This system would be very useful in the future since everything is being digitized.

78. DESIGN OF PREDEFINED TRAJECTORY AUTOMATION WITHANONYMOUSSURFACE WRECK TRACKING AND CONDITIONING

Ajay

It is known that the population is increasing at very peak ranges all over the world. But also the deaths are exponentially increasing. Among them most of the deaths occurs due to accidents and diseases. Since we are on the era of advanced technology, we can utilize these technological growths to enhance the safetyandsecuritytowardsdeathcausing

crisis like accidents and spreading of disease. These technologies also provide some aids to prevent us from experiencing major problems caused by accidents and diseases. So here we utilize the technological advancement to enable the immune system for us to survive any such scenarios. We can notice that most of the wall cracks are caused due to old age of the structure. And because of not conditioning these cracks, they tend to fall causing various issues. So we propose this system to detect and service thesecracks.

79. OFFLINE INTERNET SOLUTION THROUGHSHORT MESSAGESERVICE

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In Remote areas, situations might arise that there is no internet connectivity but an availability of telecom signal, this situation will create an inconvenience in this digital era. To solve this inconvenience we proposed a project that Internet can be accessed through telecom SMS. This can be done by using USB Modem which acts as an SMS server, PC connected to Internet will act as a Web server and Python is used to interface SMS Server and Web server and for HTML parsing and Android application in the mobile handset will act as a client through which we can make internet queries through SMS text format. In this the URL sent by the android application in the SMS format to the Server is recognized by python and it collects the information from the web server and performs HTML parsing and sends messages to the Mobile handset and the Android application in the handset will receive the SMS and converts the SMS to the HTML and open the web page in a webbrowser.

80. PORTABLE HEART DISEASESDETECTOR

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The word „Health‟ has paved its way into the minds of the masses. Issues related to health are increasing at an alarming rate. Cardiovascular diseases, once considered to be a malady for the middle aged, are now prevalent among young adults. It is said that heart diseases kills 1 person every 33 seconds in India. The proposed model aims at detecting the occurrence of heart diseases by diagnosing the ECG signal. The chances of death due to heart diseases can be greatly reduced by enabling access to immediate medical attention. This paper mainly emphasizes on collection and inspection of ECG signal for determination of a heart diseases condition. Here, the survey on various behaviors‟ and conditions observed in theECG during heart diseases would be discussed which is further processed and accordingly notified to the concerned individuals. The device aims to reduce the response time in case of occurrence of a heart disease which is crucial to prevent major damage to the distressed muscles in the heart.

81. THE DEVELOPMENT OF INTELLIGENTHOME SECURITY SYSTEM USING RASPBERRYPI3

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Nowadays, providing a security system for houses has become a vital research in which the latest technologies are being adopted to serve this purpose. Wireless network is one of the technologies that have been used to provide remote monitor and control for the home appliances. This paper aims to propose a surveillance camera based on Raspberry pi technology where cameras, Buzzer and GSM modules are being utilized to provide an alarming system that has the ability to notify the owner .The system works by taking snaps for the person through a code and USB camera positioned in somewhere then, such snaps will compared with library files, If there any unauthorized persons entered thesnap

will be sent to the owner. The proposed system can be extended to be used for different properties and facilities such as banks and office.

82. DIAGONIZING DISEASES BY RETINALIMAGES USING IMAGEPROCESSING

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Digital image processing plays a vital role in medical field for detecting and identifying various diseases through digital processing techniques. Retinal images areused to diagnose various diseases like cardiovascular, diabetes, hypertension, stroke, tumors. Retinal blood vessels are difficult to detect, so segmentation of retinal blood vessels is important. In this paper we proposed a K-Means Clustering algorithm for retinal blood vessels segmentation based on neural networks using DWT, GLCM as features. The proposed algorithm was tested on mat lab versions. Thus, from this the disease is identified with various retinal images.

83. CHARACTERISTICS OF I SHAPEFRACTAL ANTENNA FOR UWBAPPLICATIONS

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In this paper, I shaped fractal antenna is proposed which is operating in C band (4GHz to 8GHz) and X band (8GHz to 12 GHz) Ultra Wide Band (UWB) applications. The proposed antenna was designed using FR-4 Substrate in Computer Simulation Technology 2014 (CST) software. The simulation and parameters shows that the proposed antenna has better radiation characteristics such as Gain of the order of 4dB to 6dB, good return loss and VSWR of 1.41 to 1.47 is achieved when the I shaped antenna is iterated with 32 parts by the length and width which is more suitable for the UWBapplications.

84. MUTUAL COUPLING REDUCTION IN MIMO WIRELESS COMMUNICATION SYSTEM USINGS-SHAPED PERIODIC DGS

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The designed antenna is placed on a material called FR-4(flame retardant) whose dielectric constant ε_r equals to 4.4 and the size of the substrate is 50mm×68mm. This antenna is simulated, a return loss of -15 dB and a gain of 8dB is obtained. The antenna can be used for Wireless Local Area Network application. The S-shaped DGS units are etched away from ground plane between microstrip antenna elements to reduce mutual coupling between antenna elements which operates at a frequency of 5.2GHz. Addition of slit wall in the ground plane that acts as an filter sandwiched between microstrip antenna elements to diminish mutual coupling. This method has achieved a mutual coupling reduction of -20 dB at resonantfrequency.

85. CONTROLLING AND MONITORINGELECTRICALS OVER INTERNET(IOT)

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G.Merline[31] Professor[2] Assistant Professor, [3] Associate
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In this paper presents low cost and flexible electricals and electronics control and monitoring system using an embedded micro-web server, with IP connectivity to access and controll devices and appliances remotely using Android based Smart phone app and HTML web page. The proposed system does not require a dedicated server PC with respect to similar systems and offers acommunication protocol to monitor and control the home environment with more than just the switching functionality. To demonstrate the feasibility and effectiveness of this system, devices such as light switches,

current sensor have been added with the proposed system. The proposed system controls the electricals and electronics through voice commands, this feature is mainly for half blinded people. It controls the electricals and electronics anywhere in the world throughInternet.

86. LINKED LISTS CONSIDEREDHARMFUL

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The implications of virtual theory have been far- reaching and continuous. In fact, few biologists would disagree with the visualization of spread- sheets, which uses the key principles of cryp- tography [1]. We concentrate our efforts on dis- proving that the well-known atomic algorithm for the evaluation of Internet QoS by White and Kobayashi is optimal.

87. LIFE DETECTION SYSTEM USING MICROWAVES

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The paper describes about Life Detection System Using Microwaves. A person‟s life is much more precious than anything. This paper aims at saving the mankind from a-natural disaster (earthquake). The main aim of this paper is to insist the importance of a newrevolutionary embedded system to detect human beings buried under earthquake rubble or debris. With the help of this system the death rate due to earthquake can be reduced to a great extent. This system uses microwave signals to detect the human beings with the help of their breathing and heartbeat. This paper explains in details about the present state of Life Detection System using microwaves and also suggests some effective ways of improving this infuture.

88. BIO-METRIC ATTENDANCE AND BILL GENERATOR

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Bio-Metrics have been the game changers over the past years; the proposed system is capable of efficiently performing dual role. This system can monitor student‟s attendance using Bio-metric verification for marking attendance and also eliminates the need for writing permission letters at schools and colleges, by generating a bill, that replaces the old fashioned letters used to get permission from the authorized personnel. The proposed system can perform two tasks - by default it marks present to the students if they access the system using their finger print before the stipulated time, the bill is generated only if requested by the ward for a specificreason.

89. AUTOMATEDHYDROPONICGREEN HOUSE

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India,,s major source of income is from agriculture sector and 70% of farmers and general people depend on the agriculture. Agriculture is considered as the basis of life for the human species as it is the main source of food grains and other raw materials. It plays vital role in the growth of country,,s economy. It also provides large ample employment opportunities to the people. Growth in agricultural sector is necessary for the development of economic condition of the country. Unfortunately, many farmers still use the traditional methods of farming which results in low yielding of crops and fruits. But wherever automation had been implemented and human beings had been replaced by automatic machineries, theyield has been improved. Hence there is needtoimplementmodernscienceand

technology in the agriculture sector for increasing the yield.

90. GSM BASED ENERGY METERREADINGS WITH AUTOMATED ENABLE ANDDISABLE SYSTEM

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Energy meter is a device that measures the amount of electric energy consumed by a residence, a business, or an electrically powered device. Electric use electric meters are installed at customers' premises to measure electric energy delivered to their customers for billing purposes. They are typically calibrated in billing units, the most common one being the kilowatt hour [kWh]. They are usually read once in each billing period. When energy savings during certain periods are desired, some meters may measure demand, the maximum use of power in some interval. "Time of day" metering allows electric rates to be changed during a day, to record. Also, in some areas meters have relays for demand response load shedding during peak load periods. This paper shows the consumption and electric bill upon request from the user viamessage. Finally, after processing, the collected data bill is generated using a web based system software and is send back to the customer as SMS (Short Messaging System). As it is web oriented, once the data is updated, the registered users and authority can monitor and analyze the generated bill of any month by sitting anywhere in the world.

91. LITERATURE SURVEY ON INVERTED FSHAPE MICRO STRIP PATCH ANTENNA DESIGN FOR5GAPPLICATIONS

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The new networking standard 5G brings a lot of challenges to the communication world. 5G technology is going to be a new revolution in wireless systems market. Micro strips patch antenna plays a vital role in emerging 5G Technology .The survey is about the overview of inverted F shaped antennas geometry and various parameters such as return loss plot, gain plot, radiation pattern plot. Thus, this manages in improving the gain value and it may satisfies the 5G communicating field.

92. AN OVERVIEW ON 5GTECHNOLOGY

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This paper presents the overview of 5G technology related with mobile Communication. This communication technology merges all enhanced benefits of mobile phones like dialling speed, MP3 recording, cloud storage, HD downloading in instant of seconds. Orthogonal frequency division multiplexing provides superior spectrum efficiency and it operates better with high data rate stream covering wide bandwidths. It performs well in situations where there is selective fading. One of the key requirements is the opportunity of processing power. 5G technology is developed to meet the requirement of processing power, Capable of handling high data rate wide bandwidth signals, Capable to provide low latency transmissions for long and short data bursts, fast switching between uplink and downlink. This technology will make a tremendous change in the communication field in terms of Internet of Things and cloudcomputing.

93. TECHNOLOGIES INAGRICULTURE

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As we all know agriculture is the backbone of our country. In recent years, the farmers and the technologies in developing agriculture are increasing linearly. Due to the technology advancement in all fields the experts try to implement their ideas in agriculture for the benefits of farmers as well as the economic growth of the country. This paper reviews about how the new technologies like robotics, augmented

reality and machine learning helped farmers to increase their field growth and the economic status of our country.

94. HYBRIDEPOWER

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Now a day we are using the output of a wind turbine depends on the turbine's size and the wind's speed through the rotor. An average onshore wind turbine with a capacity of 2.5–3 MW can produce more than 6 million kWh in a year – enough to supply 1,500 average EU households with electricity. A 10 kW wind turbine costs approximately $48,000 – 65,000 to install. The equipment cost is about $40,000 (see 10 kW GridTek System) and the rest is shipping and installation. Towers without guy wires are more expensive than guyed towers. That depends on your cost of electricity and average wind speed .In Alabama, we estimate you live in the 1600 area of the map below, and you pay$0.12 per kWh for electricity. Your roof can hold up to 30 solar panels, which equals 8.0-kW of generating power. Here's the best part: In one year, the panels can produce enough to reduce your energy bills by $1,198! That's 1 kWh (1,000 watts) in a day per 250-watt panel. If you multiply 1kWh per panel by 30 days in a month, you'll findthat each 250 watt rated panel will produce about 30 kWh in an average month .This is the average report till 7 th November 2017. This idea is to develop the hybrid system of smart solar panel and smart wind mills this will gives an effective GREEN POWER production for the future generation it is clear that the future life is going to be electrified .This system full the need of future generation and it is sure that this is going to be a game changer the average wind turbine costs approximately $48,000 – 65,000 to install we can reduce it half of the amount so that it is Economically beneficial .The maintenancecostisalsoattherightprice .Unlike common windmill and the solar panel this system can be place near to the consumer so we can avoid the transmission risk and the transmission loss.

95. IMPLEMENTATION OF STAND-ALONE HYBRID SYSTEMUSING SVPWM CONTROLLED IMPEDANCE SOURCE INVERTER

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In this paper, the interfacing of a Wind-Solar hybrid model is used for a Stand-Alone application. The hybrid model is mathematically modeled for Self Excited Induction Generator (SEIG) and Solar PV Panel. The hybrid system is used to drive an Induction Motor through an Impedance Source Inverter (ZSI) which is controlled using Space Vector Pulse Width Modulation (SVPWM). The SVPWM is also mathematically modeled to perform effectively. The hybrid modeled used is mathematically designed to provide an output power of 3kW. The Three Phase Induction Motor is mathematically modeled for a rated speed of 1500rpm. The Impedance Source Inverter is the most desired inverter which eliminates the shoot-through problem so used as a bridge between the Hybrid model and the Load. The effectiveness and the performance of the system are analyzed and the efficiency of the system obtained is close to 95%. The model has been coded and simulated through MATLAB/SIMULINK 7.10 for the various components and the results are discussed.

96.SPEED CONTROL OF ROAD VEHICLES USING INTERNET OF THINGS(IOT)

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ABSTRACT:
In our daily life,enchancement in work leads to travelling turns in lead to face traffic,which makes us to increase our speed and ends with an accident in some circumstances.This work helps the people to reduce speed,inorder to avoid accidents.This activity helps to ensure the safety of the people to free from accidents and been applied to many zones like schools,hospitals,dangerous zones etc.This paper aims at automatically controlling the speed of vehicles at speed restricted areas such as schools,hospitals and dangerous curves and accident zones etc.Nowdays,the drivers drives the vehicles at very high speed and traffic police are not able to control and moniter them throught.In this project,these road vehicles are controlled automatically using Internet Of Things(IOT).

97.SMART ENVIRONMENTAL MONITORING SYSTEM

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ABSTRACT:
Environmental pollution is a serious unpleasant,health and social problem.This project work is addressing one such issue that,Wireless Sensor Network and Internet Of Things(IOT)Which congregate Environmental datum from various harardous gas sensors as Methane,Benzene and CO-2 and in addition to that temperature,flame and pH sensors located in geographical region.The developed prototype includes in Arduino smart controller and ESP8266 module makes the entire collected sensor datum into the cloud and is monitored with a mobile application in real time.The systems indicate/warns about the polluted level in various it suits for all climatic conditions.

98.DETECTION OF ANOMALY USING WATERSHED ALGORITHM

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ABSTRACT:
Cancer disease begins in the cells of the human body ,which is generated by abnormal division of those cells. There are two types of cancer benign tumors are not cancerous and malignant tumors are cancerous. Breast cancer causes death among women in many part of the world most frequently diagnose cancer among women between 40 and 60 years of age. In recent years several technique have been applied for tumor detection from various modalities , namely X-ray Mammography, CT-scan and magnetic resonance, ultrasound Segmentation of image plays an key role in practical applications. Medical images are important role for object recognition of the human organs. The purpose of image segmentation is to partition images which have difficult characteristics of each region and extract interest objects. This paper describes a computer-aided detection and diagnosis system for breast cancer, the most common form of cancer among women, using mammography. The system relies on the Watershed Algorithm Learning paradigm, which has proven useful for medical decision support in previous works. The main role of Watershed transformation is to find the watershed lines in topographic surface. The region that the watershed separates called Catchment basins.

Index Terms— Watershed transformation, Mammography, Segmentation

99.BIOMETRIC AUTHENTICATION SYSTEM BY HISTOGRAM PROCESSING

[1]L.M.Merlin Livingston, [2]Dr.S.Arul
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ABSTRACT:
Biometrics is mainly used for human identification using different physical traits. The traits that can be used as biometrics are face, palm print, voice, signature, gait etc. But use of these traits in biometrics is not perfectly reliable or secure. So, in order to overcome the security issue, a non-forgeable pattern has to be used. In terms of security and convenience, the palm vein is a promising biometric pattern for human identification. The objective of the proposed system is to improve the safety of biometric palm vein recognition frameworks, by adding liveness assessment in a fast, user friendly, and non-disturbing manner, through the use of image histogram assessment. Thus we propose an secure authentication using the above biometric to identify the fake / real users. Also the paper propose the best advancement to existing biometric system by increasing the robustness of the system since histogram processing results in cleaner and faster image matching. Besides

histogram occupies much lesser space than conventional images. The objective of this paper was to produce a working prototype program that functions as an recognition tool using the algorithms of histogram processing along with basic palm vein processing. Only the authorized person who passes the authentication will be able to access the application/system.

Index Terms— Authentication, Histogram, Security

100.INTELLIGENT SECURITY SYSTEM FOR WOMEN SAFETY

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ABSTRACT:

This paper describes about an intelligent security system for women in terms of physical and health wise. Women all over the world are facing much unethical physical harassment. This acquires a fast pace due to lack of a suitable surveillance system. Our paper is a venture to resolve this problem. The systems mainly consist of a monitoring device, the output of which is processed to identify insecure environments. Initially this monitoring device will detect the abnormal condition of the person and sent data via RS-232 serial port, zigbee and Bluetooth. The measured abnormal data are sent to hand held Android Mobile and further sent to Cloud Server via Internet. The most advantageous feature of this paper is that we can automatically turn on video from the server side to view the present status of the person and locate them using GPS. We really believe that this endeavour will make a difference in the life of many and dream about seeing this world with individuals walking fearlessly.

Index Terms— Security system, GPS, Zigbee

101.WEB-SERVER BASED INDUSTRIAL CONTROL SYSTEM

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ABSTRACT:

The design of an embedded Web server system, where a web server in the device provides access to the user interface functions for the device through a device webpage. Web server can be embedded into any appliance and connected to the Internet so the appliance can be monitored and controlled from remote places through the browser in a desktop. The aim of the paper is to control the devices or equipment's from the remote place through a web page. The web-server circuit is connected to LAN or Internet. The client or a person on the PC is also connected to same LAN or Internet. By typing the IP-address of LAN on the web browser, the user gets a web page on screen; this page contains all the information about the status of the devices. The user can also control the devices interfaced to the web server by pressing a button provided in the web page.

Index Terms—Web server,LAN, IP-address

102.SAFETY MONITORING IN COAL MINE TUNNELS USING ZIGBEE AND RFID TECHNOLOGY.

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[2] Assistant Professor, Department of ECE, Jeppiaar Institute of Technology

ABSTRACT:

Wireless Sensor Network (WSN) used under the coalmine tunnel is an emerging area of research that promises to provide reliable and flexible communication. The working frequency about the WSN in coalmine. Then, according to the actual circumstances of coal mine, the network structure should adopt cluster-tree topology. We also develop a multifunction communication wireless system using ZigBee and RFID technology, which can achieve the functions of gas monitoring, wireless communication, personnel management and video surveillance, etc. Practical applications showed that the multifunction communication system can satisfy the need of dispatch communication and safety monitor in the coal mine tunnel.

103.Implementation of Interleaver based UWB Transmitter to reduce the power consumption in Wireless System.

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[1]Assistant Professor, Department of ECE, S.K.P Engineering College
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ABSTRACT:

Wireless communications have grown tremendously over the last decade. The ever-growing demand for higher quality and faster multimedia content delivery over short distances drives the quest for higher data rates in wireless personal area networks (WPANs). IEEE 802.15.3a WPAN proposal support data rates up to 480 Mbps by using multi-band orthogonal frequency-division multiplexing (MB-OFDM)

system over ultra wideband (UWB) channels. Power consumption and decrease in chip size are main criteria of any wireless system. Reconfiguration allows efficient resource exploitation by configuring task on demand and decrease chip size which reduces the power consumption. Due to dynamic reconfiguration smaller FPGA's are used by outsourcing configuration data.UWB transmitter was designed withareprogrammable puncture to prove theefficiency of multirate MB-OFDM. Increasing in data rate increases burst error. To minimize burst error, error correction coding is introduced along with interleaver .To show reconfiguration latency is minimum, a reprogrammable interleaver is implemented in Xilinx virtex .

104.A Distributed Group Mobility Protocol scheme for 6LoWPAN-Based Wireless Body Area Networks

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ABSTRACT:
The IPv6 over low power wireless personal area network (6LoWPAN) has attracted lots of attention recently because it can be used for the communications of Internet of things. In this paper, the concept of group-based network roaming in proxy mobile IPv6 (PMIPv6) domain is considered in the 6LoWPAN-based wireless body area networks. PMIPv6 is a standard to manage the network-based mobility in all-IP wireless network. However, it does not perform well in group-based body area networks. To further reduce the handoff delay and signaling cost, an enhanced group mobility scheme is proposed in this paper to reduce the number of control messages, including router solicitation and router advertisement messages as opposed to the group-based PMIPv6 protocol. Simulation results illustrate that the proposed handoff scheme can reduce the handoff delay and signaling cost. The packet lossratio and the overhead can also be reduced.

105.OVERVIEW OF DIVERSITY COMBINING TECHNIQUES IN WIRELESS COMMUNICATION

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ABSTRACT:
Communication plays a essential role for transmitting a signal from one place to another, especially wireless communication is highly welcoming by an environment to passing the signals in air medium to replaces a copper cables, co-axial cables, etc., that also more challenging for high data capacity and more area coverage in wireless communication with requirement of power efficiency with proper bandwidth consuming. Diversity techniques are getting success through multi-antenna systems installed at TX/Rx that require multipath fading. So, diversity is a very influential communication receiver technique that provides a wireless connection improvement on a relatively low budget. Diversity-merging uses the fact that independent signal paths have less probability of experiencing deep fades simultaneously. The idea of overdue diversity is to send the same data over independent fading paths. This independent path is combined in some way such that the fading of the resultant signal is condensed. The work proposed here is to provide a complete overview on various diversity combining techniques & its challenges in time varying real environment channels.

Key words: Diversity, Wireless, Bandwidth, Combining Techniques

106.POWER MANAGEMENT USING ZIGBEE PROTOCOL

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ABSTRACT:
Growing populations are using increasing amounts of power, which is putting a strain on existing supplies. The increase in demand is growing at a faster rate than transmission capacity. The cost of providing power is also increasing due to higher fuel prices and increases in the cost of construction and capital expenses. In this paper, we are creating a wireless sensor network having number of nodes, which communicate with each other in full duplex mode. Mainly we are using the Zigbee protocol for wireless communication and embedded controller to control overall operation of the system. The Objective of the work is that the wireless sensor network will differentiate and control the devices in the network on the basis of power consumed by them to make the efficient use of power. Thereby the optimum power allocation can be done for the customers.

Keywords : Power, Zigbee, Embedded controller, Wireless Communication

107.RFID Based security system

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ABSTRACT:
This work is aimed to develop a wireless system to detect and allow only the authorized persons in any places which needs security. The system was based on Radio Frequency Identification (RFID) technology and consists of a passive RFID tag. The Base Station is built by using the Popular 8051 family Microcontroller. When the person with the Tag crosses the reader, it gets the tag ID and if the tag ID is stored in its memory then the micro controller will allow the person inside. If not it will give an alarm to alert the people around to show unauthorized access. The proposed concept can be used in different environments like open the door or open the disk drive, allow the user to go next process, etc. This paper comprises the entire principle & operation of RFID and a demo model is proposed which explain the working of RFID in the real world.
Keywords : Radio Frequency Identification (RFID), wireless Systems, Tag, Micro controller.

108.OUTLIERDETECTION USING KERNEL FUNCTIONS IN WIRELESS SENSOR NETWORKS

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ABSTRACT:
A wireless sensor network consists of spatially distributed autonomous sensor node to monitor physical or environmental conditions, and to cooperatively pass the data through the network to a base stationDue to the fact that outliers are one of the sources that greatly influence data quality. Outliers is defined as, "those measurements that significantly deviate from the normal pattern of sensed data". The quality of data set may be affected by noise and error In this paper we provide a comprehensive overview of the existing method in the field of outlier detection in WSNs. One of the existing methods for outlier detection is LOCI (local correlation integral) algorithm. Since this algorithm has computational complexities, a statistical method to detect the outlier is proposed. In this proposed method, Kernel density estimators use kernel functions to estimate the probability distribution function (pdf) for the normal instances. A new instance that lies in the low or high probability area of this pdf is declared as an outlier. In this paper, we propose an outlier detection approach that can be classified both into statistical and density based approaches, since it is based on local density estimation using kernel function.
Keywords-outlier detection, statistical distribution, kernel functions.

109.Hammerstein Type Decision Feedback Equalizer for Compensating Wiener Type Nonlinear Channels.

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ABSTRACT:
ROF, where an optical signal is modulated at radio frequencies & transmitted via an optical fiber, provides for an excellent link allowing for high band-width communication of several channels. In this scenario, there is an intermediate stage between the central base station and the mobile units. The intermediate stage is the optical fiber & the radio access point (RAP). The RAPs provide wireless access instead of the conventional base station and are connected to the central base station via the ROF links. Optical fiber based wireless access schemes have become very popular recently because of their potential to increase system capacity. A Fiber – Wireless uplink consists of a wireless channel followed by ROF link. Optical fiber has some advantageous properties such as low attenuation, longevity, and low maintenance costs which will eventually render fiber the medium of choice in wired first / last mile access networks.
Keywords-radio access point (RAP), ROF links, Hammerstein type decision feedback equalizer.

110.HUMAN HAND PROSTHESIS BASEDON ENHANCED

EMG SIGNAL

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ABSTRACT:
A microprocessor-based control system which processes a fixed set of programmed instructions to control electromechanical equipment which may be part of an even larger system and a way of working, organizing or performing one or many tasks according to a fixed set of rules, program or plan also an arrangement in which all units assemble and work together according to a program or plan with the help of this technology we are going to design prosthesis of human hand. EMG signal is the recording of spontaneous electrical activity of the brain over a small interval of time. Signals are produced by bombardment of neurons within the brains which are measured and evaluated by EMG. EMG signals are low voltage signals that are contaminated by various types of noises that are also called as artifacts. As these signals are used to diagnose various types of brain related diseases like narcolepsy, Sleep apnea syndrome, Insomnia and parasomnia it becomes necessary to make these signals free from noise for proper analysis and detection of the diseases. The main aim of the project is to create a cost effective prosthetic arm controlled by the surface EMG signals which would facilitate the differently-abled with arms that they would love to get. To serve differently abled fellow beings by harnessing technology is our motto. Discrete wavelet transform offers an effective solution for de-noising non-stationary signals such as EMG due to its shrinkage property. In this paper, we explored the application of wavelet de-noising method to EMG signals acquired during different sleep stages classified according to the RK rules, with the objective to identify suitable thresholding rules and threshold values.

Keywords- EMG signals, Insomnia and parasomnia, RK rules

111.Motion activated power saving system using MEMS Accelerometer and I^{2}C Network

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ABSTRACT:
Low power applications exploit utilizing MEMS accelerometer sensors for expanding battery life. Sensors are turning out to be less and less force hungry and install highlights that help diminishing generally speaking framework power utilization. For instance movement initiated wake up permits to keep the whole framework resting when client isn't using the gadget. In any case there are additionally different prospects how to utilize a MEMS accelerometer to diminish by and large force utilization. For high requesting applications working method of sensor can be changed on the fly, using higher goals and information rates just when it is truly required. A few sensors are even ready to play out this mode exchanging naturally. Client arranges goals and information rate required in dynamic state and characterizes a condition for empowering it. At that point sensor is exchanged into idle state where it despite everything estimates information, yet at low information rate and goals hanging tight for the condition (a movement occasion) to switch back to dynamic state.The paper targets building a compact temperature information lumberjack gear planned on the system of I2C arrange convention, using movement detecting capacities of MEMS accelerometer for low force operation.The I2C organize comprises of sequential yield (I2C) temperature sensor, MEMS accelerometer, LCD show, RTC constant clock, EEPROM stockpiling media and the PIC microcontroller. I2C convention is the core of this venture. PIC microcontroller has an inbuilt MSSP (ace coordinated sequential port) which must be designed for I2C activity. Temperature information lumberjack is an information procurement framework utilized widely for process checking in ventures for natural observing and so forth. The plan comprises of PIC microcontroller ,MEMS, temperature sensor, RTC ,EEPROM, UART,MSSP.The power gracefully is on MEMS distinguish the movement in the segment simultaneously LCD is show the temperature. On the off chance that there is No movement, the temperature isn't show in LCD around then the force is sparing.

112.ADOPTIVE CRUISE CONTROL SYSTEM USING FUZZY LOGIC AND

TTCAN

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ABSTRACT:
Versatile Cruise Control is the driver help framework; it permits you to set a period stretch from the vehicle in front of vehicle. ACC will hold it, tweaking the choke and applying moderate slowing down if fundamental. Electronic Control Unit utilizes a few sensors to figure out what the driver needs (input). Different sensors demonstrate the real condition of the vehicle (reaction). The fluffy control calculation thinks about the furious the vehicle in front of the vehicle with vehicle speed and chooses, when vital, to apply brakes and additionally lessen choke. Programmed journey control is likewise accessible to direct speed and upgrade driving solace, maintaining a strategic distance from the requirement for the driver to continue squeezing the oars. Journey control is disengaged when the driver brakes or Accelerates. This paper is a usage of expanded Adoptive Cruise Control (ACC) framework which permits the ACC vehicle to follow a forward vehicle at a proper separation there by embracing the vehicles speed to the traffic condition. The undertaking additionally gives an answer for stop and go capacity during overwhelming traffic conditions in urban zones. A SONAR framework is utilized to identify climate slow moving vehicles in will be in the ACC vehicles way. In the event that a vehicles is identified , the ACC framework will back the vehicle off and leeway, or delay, between the ACC vehicle and the forward vehicle. The driver works the framework through a lot of switches on instrument bunch board. The journey switches permit the driver to order the activity of ACC framework. It permits you to set a period stretch from the vehicle in front of you . Also of there are a progression of instant messages that can be shown on the instrument bunch to advise the driver regarding the condition of the ACC framework and to give important alerts. Fluffy voyage control ECU comprises of SONAR sensor that signal the Fuzzy journey control ECU, The fluffy control calculation registers the message from Acceleration and break position ECU, choke and wheel control ECU, Instrument Cluster ECU and Break light unit, it imparts the figured sign to fitting unit through TTCAN transport. Control calculation has the capacity of unpredictable execution. Increasing speed and Break position ECUconsists of break position sensor and Acceleration sensor that flags the Break position ECU, the sensor is generally a potentiometer, and in this manner gives a variable opposition subordinate upon the situation of the break petal and Acceleration. Choke and Wheel control ECU comprises of break position sensor and Acceleration sensor that flags the Break position ECU, the sensor is typically a potentiometer, and along these lines gives a variable obstruction subordinate upon the situation of the break petal and Acceleration.

113.SMART-EYE AN INTELLIGENT SECURITY SOLUTION WITH MMC,PIR AND GSM

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ABSTRACT:
A canny home security framework is the best approach in the event that you are keen on guarding your home and your things from the rage of criminals and other hazardous gatecrashers. With this security framework, in any case, you can monitor your possessions while you are out and keep up an atmosphere of security while you are at home. These observation pictures can be moved to a PC or PC and can be seen later. This advanced security framework comprises of equipment and programming segments that gather and store the reconnaissance camera data into a MMC card. These reconnaissance pictures can be moved to a PC or PC and can be seen later. This advanced security framework comprises of equipment and programming segments that gather and store the reconnaissance camera data into a MMC card. These reconnaissance pictures are then moved to a PC or PC and can be seen later. The computerized camera "sees" the scene before it, communicates the pictures as a digitized signal over the Internet. These advanced pictures can be recorded, shown or retransmitted to anyplace on the planet. Since controlling and checking are done through Internet, an ever increasing number of progressions can be additionally made.

114.WIRELESS SENSOR AND DATA TRANSMISSION NEED AND TECHNOLOGY

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ABSTRACT:
In the Intensive consideration unit or during sedation, patients are connected to screens by links. These links discourage nursing staff and obstruct the patients from moving openly in the medical clinic. Notwithstanding, quickly creating remote innovations are relied upon to take care of these issues regions in current patient checking

and set up the most significant clinical boundaries to screen. What's more, usable remote strategies for short-extend information transmission were investigated and as of now utilized remote applications in the emergency clinic condition were contemplated. The advancements of remote transmission, for example, WLAN, cell phone, an assortment of remote controllers, and supporter and so on, are broadly utilized in every day life.Its primary application in clinical is Bio-telemetry. It has encouraged to biomedical investigates for quite a few years and has been applied to pass on different boundaries like breath rate, temperature, beat rate,PCO2,PO2,velocity of blood.In this proposed work, Pulse rate, Temperature and breath rate are distinguished by Microcontroller and Zigbee module is utilized for distributed information correspondence. Different sensors are utilized to detect the beat rate, Respiration and temperature estimations.

115.IMAGE AUTHENTICATION FOR SECURITY SYSTEM OVER INTERNET

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ABSTRACT:
Web security depends on explicit assets and guidelines for ensuring information that gets sent through the Internet. This incorporates different sorts of encryption, for example, Pretty Good Privacy (PGP). Different parts of a protected Web arrangement incorporates firewalls, which square undesirable traffic, and hostile to malware, against spyware and hostile to infection programs that work from explicit systems or gadgets to screen Internet traffic for risky connections.In picture confirmation process we place our computerized camera in a predetermined region and make the snap efforts. Utilizing the system interface card, which is associated with the PIC microcontroller naturally transfer these pictures to the web. Implanted web server that helps in checking and controlling of mechanical/home types of gear halfway from any area utilizing the innovation of Internet. The different boundaries in the business are refreshed to the web by the installed gadget .The customer can bring the transferred refreshed information anyplace from the globe.All the capacities are constrained by the microcontroller based inserted framework. It has a PIC processor as its center. This framework peruses the information from computerized camera send it to the controller. The controller sends these information to the web utilizing TCP/IP convention. The framework has two fundamental modules implanted side and the PC side.The PC side application programming can be created utilizing HTML and any scripting language. The website page created with this product causes the client to screen and control the boundaries continuously utilizing the PC.

116.DESIGN AND IMPLEMENTATION OF ACOUSTIC ECHO CANCELLOR

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ABSTRACT:
Reverberation is a wonder where a postponed and mutilated adaptation of a unique sound or electrical sign is reflected back to the source. The Acoustic Echo Cancellation (AEC) square is intended to evacuate echoes, resonation, and undesirable included sounds from a sign that goes through an acoustic space.A versatile channel algorithmically changes its boundaries so as to limit an element of the distinction between the ideal yield d(n) and its genuine yield y(n). This capacity is known as the cost capacity of the versatile calculation.we are thinking about that the ideal sign (d) is ruined and our point is to dispose of the undesired part to get signal. For this reason we are utilizing versatile channel. It utilizes calculation which gives a lot of taps. The tap loads could then be executed as the comparing channel, inversed and applied to the got signal, therefore creating the first sign in its unique structure.The yield result is gotten by mimicking the program in the Modelsim simulater. The yield is acquired as waves, which showes the relating variety in the yield. The principle reason for the paper is to taking out the reverberation from the voice signal in VLSI. The reverberation has been progressively expelled from the voice signal with the assistance of the versatile channel. The versatile channel utilizes the Least mean square [LMS] Algorithm to limit the reverberation from the first voice signal. With the assistance of this versatile channel the resounded signals are progressively expelled from the first voice signal.

117.SnapFiner:A Page-Aware Snapshot System for Virtual Machines

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Virtual machine (VM) snapshot is an essential part of cloud infrastructures. Unfortunately, the snapshot data are likely to be lost due to disk failures, so that the associated VM fails to recover properly. To enhance data availability without compromising application performance upon rollback recovery, it is desired

to place multiple replicas of snapshot across disperse disks. However, due to the large size of replica, it induces non-trivial storage cost when managing massive snapshots in clouds. In this paper, we investigate this problem and find out that the semantic gap exists between snapshot creation and snapshot storing is one key factor inducing high storage cost. To this end, we propose SnapFiner, a page-aware snapshot system for creating and storing snapshots efficiently. First, SnapFiner acquires a fine-grained page categorization with an in-depth page exploration from three orthogonal views, thereby discovering more pages that can be excluded from the snapshot. Second, SnapFiner varies the number of replicas for different page categories based on a page-aware replication policy, achieving low storage cost without compromising availability and performance. Third, SnapFiner handles the loss of pages either intentionally dropped upon snapshot creation or unexpectedly damaged due to disk failures, enabling proper system execution after recovery.

118.Embedded Platform for Gas Applications Using Hardware/Software Co-Design and RFID

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[1,2]Assistant Professor, Department of ECE,Jeppiaar Institute of Technology

ABSTRACT:
This paper presents the development of a wireless low power reconfigurable self-calibrated multi-sensing platform for gas sensing applications. The proposed electronic nose (EN) system monitors gas temperatures, concentrations, and mixtures wirelessly using the radio-frequency identification (RFID) technology. The EN takes the form of a set of gas and temperature sensors and multiple pattern recognition algorithms implemented on the Zynq system on chip (SoC) platform. The gas and temperature sensors are integrated on a semi-passive RFID tag to reduce the consumed power. Various gas sensors are tested, including an in-house fabricated 4×4 SnO 2 based sensor and seven commercial Figaro sensors. The data is transmitted to the Zynq based processing unit using a RFID reader, where it is processed using multiple pattern recognition algorithms for dimensionality reduction and classification. Multiple algorithms are explored for optimum performance, including principal component analysis (PCA) and linear discriminant analysis (LDA) for dimensionality reduction while decision tree (DT) and k-nearest neighbors (KNN) are assessed for classification purpose. Different gases are targeted at diverse concentration, including carbon monoxide (CO), ethanol (C 2 H 6 O), carbon dioxide (CO 2), propane (C 3 H 8), ammonia (NH 3), and hydrogen (H 2). An accuracy of 100% is achieved in many cases with an overall accuracy above 90% in most scenarios. Finally, the hardware/software heterogeneous solution to implementation PCA, LDA, DT, and KNN on the Zynq SoC shows promising results in terms of resources usage, power consumption, and processing time.

119.A Novel Signal Acquisition System for Wearable Respiratory Monitoring

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ABSTRACT:
In this paper, a novel human respiration detection method based on angular velocity is proposed for continuous acquisition and analysis of respiratory signals. Using patient-specific information derived from a wearable sensor, our proposed system is capable of monitoring human respiration and assists in identifying potential respiratory disorders by relying on pre-defined simple procedures. Specifically, our signal verification platform is equipped with a carbon dioxide concentration detection device in order to acquire a synchronous signal. In addition, a median filter method is used to extract the respiratory waveform from the original signal. The obtained angular velocity waveform pertaining to human respiration is then compared to the respiratory carbon dioxide concentration waveform, and the validity of our designated parameters is verified. The test results demonstrate that our implemented system is appropriate for unobtrusive respiratory signals acquisition and analysis; therefore, it can be considered a potential alternative for physiological monitoring and respiratory disorders screening.

120.A Protection of Medical Images through a cooperative Encryption/Watermarking System

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Medical image watermarking has become an important research area in the field of data security and confidentiality as patient's medical records are linked to open environment for further diagnosis and long term storage.

Confidentiality of patient's data can be achieved by hiding Electronic Patient's Record (EPR) data in corresponding medical images, thus saving storage space and bandwidth requirement at the time of transmission. Medical images require extreme care when embedding extra data within them because the additional information should not affect the quality of the image and image readability. The objective of this paper is to conduct a research on medical image applications. In this paper, a combined watermarking/encryption system for telemedicine is proposed. This system is built on an approach which combines a watermarking algorithm with an encryption algorithm. Watermarking is achieved by a system based on redundant discrete wavelet transform and Singular Value Decomposition. For encryption, Blockchain based image encryption is proposed. The performance of the proposed method is analysis in terms of PSNR (Peak Signal to Noise Ratio), MSE (Mean Square Error) and Correlation coefficient(CC).

Index Terms— Feistel structure, encryption, medical image security, watermarking.

121.A Protection System for fisherman while crossing line of control

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ABSTRACT:
The main aim is to give a well equitable user friendly environment for Indian Fisherman to handle hazardous situation with the help of engine control. This paper comes with a consistent solution for this problem and protects the Indian fisherman from dangerous situation and being crossing the maritime boundary and save their life and improve the safety of fisherman. In this system we implement GPS and GSM technology. The GPS technology is to navigator to track the current location of a boat. Whenever fishermen reach the warning border, the border security forces will send notification to the LCD displaying ship, so that fishermen will be alerted. Even if they didn't stop the boat, we use a relay to stop the boat. The relays will cutoff the power supply to the motor, so that boat will be automatically stopped. This device can track the GPS data every single time at whatever point the fisher man's cross the Indian border. It is a significant depression issue and encourages trouble in the both people and also their economic expenditures.

Keywords: WSN node, Zigbee, Sensor, LCD, GPS Module.

122.EFFECT OF THERMAL CYCLE AND COOLING RATE ON MICROHARDNESS OF LASER WELD STAINLESS STEEL JOINTS

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Abstract:
Thermal cycles and cooling rates of stainless steel joints during welding process are estimated through analytical model. Thermal cycles (that explored the peak temperatures) and the cooling rate predicted in the radial direction from the centreline weld of a transient heat source during welding. The higher peak temperatures of thermal cycle that results in higher cooling rate at the centreline of the weld joint and start decreasing towards the radial directions. The micro hardness of the measurement also observed that maximum at the centreline and start decreases towards the radial distances. The micro hardness curve reveals the changes in microstructure at the weld pool and heat-affected zone due to the effect of peak temperature and faster cooling rate.

Keywords: Laser Welding,Thermal cycle, Peak Temperature, Cooling Rate, Micro Hardness, Microstructure.

123.INVESTIGATION OF INTERNAL FLAWS OF LASER WELD STAINLESS STEEL JOINTS USING X – RAY RADIOGRAPHY

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Abstract:
Welding has done for making AISI 316 L stainless steel joints by butt joint configuration using pulsed laser source. The investigation of internal flaws was carry out for samples using high precision non-destructive testing such as X – ray radiography flaw detection testing. The presence of air bubbles and incomplete penetration at the root side have observed. The incomplete penetration reveals that laser input power should have increased. Therefore, the

sample has recommended for re-welding with higher laser heat input during welding. Thus, X – ray radiography flaw detection testing very useful tool to determine the presence of internal flaw and incomplete penetration of welding jointsfor qualification**.**

Keywords: X – Radiography Test, Ultrasonic Test, Stainless Steel, Defect, Welding.

124.MECHANICAL PROPERTIES OF LASER WELD STAINLESS STEEL JOINTS

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Abstract:

A perfect weld joint has to be qualified in testing of mechanical properties. Usually, the destructive testing methods such as Tensile Test, Impact Test, Bend Test and Hardness Test are carryout to evaluate mechanical strength of the weld sample whether joint strength is replicating the properties of parent materials or not. The tensile test has shown that the failure took place in heat-affected zone of weld joint. The impact test and bend test results are closely matching with the parent material. Therefore, the laser weld samples are qualified as per standards ASTM.

Keywords: Tensile Test, Elongation, Ultimate Tensile Strength, Hardness Test, Impact test, Bend Test.

125.ANALYSIS OF SOLITON MANAGEMENT IN SYMMETRIC POTENTIAL

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ABSTRACT:

Many outstanding works have been done in *PT* symmetric complex-valued periodic potentials which will enable manufacturing of integrated *PT* photonic devices with unique characteristics such as double refraction, power oscillations, non reciprocal diffraction patterns etc. In this work the propagation of solitary waves in such periodic symmetric potential system is considered. Even though soliton solutions have been proposed for these systems, a complete Lax pair which proves the integrability or the conditions under which this system becomes integrable is not given so far. Considering this important omission, in this study one and two-soliton solutions are obtained by means of Darboux transformation and Lax pair.

Keywords: Solitons, nonlinear Scrodinger equation, Symmetric Potential, Darbaux Transformation, Lax Pair

126.TWO SOLITON PROPAGATION IN GENERALIZED INHOMOGENEOUSNLS EQUATION WITHSYMMETRIC POTENTIAL

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ABSTRACT:

For an inhomogeneous fiber, a generalized inhomogeneous nonlinear Schrödinger equation (GINLS) model is considered to be the most realistic and universal nonlinear model. The present study discusses the dynamical behaviors of soliton in an inhomogeneous nonlinear medium, whose linear refractive index are perturbed by an inhomogeneous and complex profile. The perturbation can be considered as a time varying complex symmetric potential. The impact of symmetric potentials on soliton behaviors is analyzed.

Keywords: Generalized Inhomogeneous NLS Equation, Symmetric Potential,Solitons.

127.ISOMORPHISM BETWEEN TREES OF ORDER N ≤ 4 VIA IDEAL GRAPHS

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Abstract:

Ideal graph of a simple, undirected and finite graph G is formed from G by considering every u-v path with all internal vertices of degree two as an edge uv in the ideal graph $I_d(G)$ of the graph G. Cycles of G remain same in the ideal graph $I_d(G)$. As the size of the $I_d(G)$ is always less than or equal to the size of the actual graph G, it is very much useful to analyze the properties of the graph G via ideal graph $I_d(G)$. In this paper, we analyze the isomorphism between trees of order ≤ 4 via Ideal graphs of the corresponding graphs.

Keywords: Isomorphism, Ideal Graph

128.An Exploration of Design and Thermal Analysis of the Distinctive Material on Plate

Brake with Frictional Heat Generation

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ABSTRACT:

Disc Plate brakes are exposed to immense warm worries amid tedious and hard braking. Amid this examination, the limited component models of the circle brake are planned utilizing Star E programming with three unique materials reproduced utilizing ANSYS workbench 14.5 programming depends on the Limited Component Technique for the auxiliary investigation dislodging, extreme pressure farthest point and warm investigation and inclinations, heat stream and motion, for the diverse material of the plate. An examination of relocation, Nodal temperature, warm slopes and transition should be possible for the three distinct materials. It uncovers best basic and warm investigation via Carbon Artistic Lattice material.

KEYWORDS: Disc Brake, Designing, Structural Analysis, Thermal Analysis.

129.EVALUATION OF POLYPARAPHENYLENE TEREPHTHALAMIDEREINFORCEMENT ON ZINC PHOSPHATE COATED ALUMINIUM COMPOSITES

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Abstract:

In pursuit of attaining light-weight aircraft assemblies, high design stress levels have to be implemented and materials with high specific strength such as Aluminum etc. are to be installed. However, a widespread spectrum of fatigue load exists at the aircraft wings and other aerodynamic machineries that may cause instigation and proliferation of fatigue cracks and clinches in a catastrophic rupture. In this perspective the contemporary research exertion emphasis on the preparation of a laminate using polyparaphenylene terephthalamide fibre reinforced composite in 0^o-90^o orientation by using epoxy resin as adhesive and to analyse the mechanical properties. And to improve the adherence of this lamination deposition of zinc phosphate composite coating was coated as a prior coating by compound transformation covering process which improves the durability of this Polyparaphenylene terephthalamide fibre reinforced lamination. Main objective of this work is to make a composite laminate with high strength, high firmness, and low weight for various applications. A major enhancement in the fatigue performance was witnessed by shielding polyparaphenylene terephthalamide fibres with Aluminium using epoxy resins.

Keywords: Composite, Epoxy resin, Polyparaphenylene terephthalamide fibre, Aluminium, Kevlar.

130.DEGRADATION OF AQUAMYCETIN BY PHOTO-FENTON OXIDATION METHOD

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Abstract:

The degradation of aquamycetin was studied by Photo-Fenton oxidation. Initial concentration of aquamycetin, Fe^{2+}/H_2O_2 ratio and irradiation time was used as the experimental variables. The percentage degradation of aquamycetin was determined based on the peak area of the parent compound in the LC-MS/MS chromatogram. The extent of degradation is found to be a function of its initial concentration, concentration ratio of Fe^{2+}/H_2O_2 and irradiation time. Under a given set of conditions, increase in concentration of aquamycetin from 10 to 50 mg/l results in a decrease in the extent of degradation of these compounds from 96 to 63%. The optimum concentration of Fe^{2+}/H_2O_2 for the degradation of aquamycetin by photo fenton oxidation is 1:20. The percentage reduction in total organic carbon (TOC) gives a measure of the extent of mineralization of aquamycetin.

Keywords: Aquamycetin, Advanced oxidation process, Photo-Fenton method, Degradation

131.EVALUATION OF MAJOR CATIONS AND ANIONS IN THE KORTALAIYARRIVER, TAMILNADU, INDIA

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ABSTRACT: The increasing population, urbanization and industrial sources have given rise to environmental stress and pollution all over the world. Industrialization and urbanization of the riverine region often leads to decrease in the resource and

destruction of natural defense structures. A study on the Major Cations and Anions present in the Kortalaiyar River is of greater importance to evaluate the extent of accumulation of salts in the river.The level of contamination is also determined by the concentration of these ions in water. The accumulation of heavy metals
in water is also studied in the present study.

The analysis also throws light in the gradient od sediment formed in the river and the sources of the pollutants.

KEY WORDS:

Kortalaiyar River, major cations, anions,

Pollution, Heavy metals

132.AN ASSESSMENT OF CALCIUM CARBONATE AND ORGANIC MATTER PRESENT IN THE KORTALAIYAR RIVER, TAMILNADU, INDIA

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ABSTRACT:

Kortalaiyar river is one of the three rivers that flow through the Chennai metropolitan. The present work involves the study of Calcium carbonate and Organic matter present in river sediments. For this work, thirty samples of air dries and powdered sediments were analyzed using the standard methods. The concentration of $CaCO_3$ in the river can be used to investigate the sedimentary lining of the aquatic system. This also gives an idea regarding the extent of dryness of the river especially during non-monsoon seasons. The metal ions are strongly adsorbed by solid organic matter. The structure and composition of humic matter can vary considerably depending upon its origin and can be expected to influence the results of sorption experiments. This is the essence of the evaluation of Organic matter in the water samples. The organic matter vary from 0.3% to 5.2% and the $CaCO_3$ content varies from 0.3 % to 5.2 % in the sediments of river Kortalaiyar.

KEYWORDS: Kortalaiyar River, sediments, Calcium carbonate, Organic matter, aquatic system, Toxicology

133.GEOCHEMISTRY OF THE KORTALAIYAR RIVER, TAMILNADU, INDIA

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ABSTRACT:

The objective of the present study is to assess the contamination level in Kortalaiyar River which plays an inevitable role in the water supply, food security and economicdevelopment of the Chennai city. Samples of sediment and water were collected from 30 locations starting from Poondi Lake to Ennore creek to analyze the geochemistry of the river. The geochemical analysis was carried out for Pre Monsoon and Post Monsoon seasons for two consecutive years. The trace metals and the major metals analyzed are considered for the ecotoxicolgy by evaluating their availability and interrelationships using Pearson's correlation matrix and Cluster analysis. The riverine sediments of Kortalaiyar River are assessed to contain varying concentration of major metals and trace metals.The level of contamination is figured out to be notably high in certain areas which are above the standards considered. The River is found tobe contaminated with heavy metals from various anthropogenic inputs. Hence, measures are to be taken to conserve this fluvial system.

KEYWORDS: Kortalaiyar river, Ecotoxicology, Fluvial system, Sediments, Trace metals

134:GENERAL SOLUTION AND STABILITY OF QUATTUORDECIC FUNCTIONAL EQUATION IN QUASI B-NORMED SPACES

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Abstract:

In this paper, we introduce the following quattuordecic functional equation

$$f(x+7y)-14f(x+6y)+91f(x+5y)-364f(x+4y)+1001f(x+3y)$$
$$-2002f(x+2y)+3003f(x+y)-3432f(x)+3003f(x-y)-2002f(x-2y)$$
$$+1001f(x-3y)-364f(x-4y)+91f(x-5y)-14f(x-6y)+f(x+7y)=14!f(y)]$$

investigate the general solution and prove the stability of this quattuordecic functional equation in quasi β-normed spaces by using the fixed point method.

Keywords: Quattuordecic Functional Equation, Fixed Point Method, Hyers-Ulam Rassias Stability, Quasi-ß-Normed Space

135.GENERALIZED HYERS-ULAM STABILITY OF A CUBIC

RECIPROCALFUNCTIONAL EQUATION

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Abstract:
In this paper, we obtain the generalized Hyers-Ulam stability of a new cubic reciprocal functional equation of the form

$$f(2x+y)+f(2x-y)=\frac{4f(x)f(y)\left[4f(y)+3f(x)^{\frac{2}{3}}f(y)^{\frac{1}{3}}\right]}{\left(4f(y)^{\frac{2}{3}}-f(x)^{\frac{2}{3}}\right)^{3}}$$

We also extend the results related to Hyers-Ulam stability, Hyers-Ulam-Rassias stability, Ulam-Gavruta-Rassias stability and J.M. Rassias stability controlled by the mixed product-sum of powers of norms for the same equation.

Keywords: Reciprocal functional equation; reciprocal-quadratic functional equation; generalized hyers-ulam stability; non-archimedean field.

136.SOLUTION AND GENERALIZED HYERS-ULAM STABILITY OF A RECIPROCAL-QUADRATIC FUNCTIONAL EQUATION

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Abstract:
The purpose of this paper is to achieve the general solution of a new reciprocal-quadratic functional equation of the form

$$f(x+y)=\frac{f(x)f(y)}{f(x)+f(y)+2\sqrt{f(x)f(y)}}$$

and investigate its generalized Hyers-Ulam stability with f(x)≠ f(y). In addition, we prove the stabilities associated with Hyers-Ulam stability, Hyers-Ulam-Rassias stability, Ulam-Gavruta-Rassias stability. We also provide counter-examples to show that the above functional equation is not stable for singular cases.

Key words and phrases. : Reciprocal functional equation, Bi-reciprocal functional equaiton, Generalized Hyers-Ulam stability

137.A STUDY ON THE CHARACTERIZATION OF BRANCH AND BOUND ALGORITHM WITH CUTTING PLANE METHOD

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ABSTRACT:
Branch-and-cut methods are exact algorithms for integer programming problems. They consist of a combination of a cutting plane method with a branch and bound algorithm. These methods work by solving a sequence of linear programming relaxations of the integer programming problems. Cutting plane method improves the relaxations of this problem. Branch and cut algorithms are those that have been used to solve traveling salesman problems. The aim of this paper is to give a review over the characterization of the function for the branch-and-Cut method. Each method was explained by an example with properties. The application of Branch and Bound with cutting plane method was given elaborately.

KEYWORDS: Branch and Bound, Cutting plane, Relaxation algorithm, Linear programming, Traveling Salesman problem.

138.A STUDY ON THE MINIMUM COST AND MAXIMUM FLOW PROBLEM

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ABSTRACT:
By using techniques such as mathematical modelling to analyze complex situations, operations research gives executives the power to make more effective decisions and build more productive systems. The minimum-cost flow problem is an optimization and decision problem to find the cheapest possible way of sending a certain amount of flow through a flow network. The minimum cost flow problem is one of the most fundamental among all flow and circulation problems because most other such problems can be cast as a minimum cost flow problem and also that it can be solved efficiently using the network simplex algorithm. In

optimization theory, maximum flow problems involve finding a feasible flow through a flow network that obtains the maximum possible flow rate. The maximum flow problem can be seen as a special case of more complex network flow problems, such as the circulation problem. The maximum value of an s-t flow is equal to the minimum capacity of an s-t cut in the network, as stated in the maximum-flow minimum-cut theorem. In this paper, I tried to give a deep idea on minimum cut and maximum flow problems with examples. The well-known algorithm of Ford-Fulkerson was discussed and finally concluded with its real application places.

KEYWORDS: Decision making, Minimum-cost flow, Maximum flow, Networking, Ford-Fulkerson algorithm.

139.CHARACTERIZATION OF α-ARY CLOSURE OPERATIONS IN MULTIPLE CHANNELS OF DIGITAL TOPOLOGY

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ABSTRACT:
The closure operations which is commonly used as a basic topological structure in digital topology. Some of these structures are well-behaved with respect to connectedness and so are suitable for applications in digital topology. Mainly the multiple express channels increase throughput to saturate wire density in α-ary n-cube, where n stands for natural numbers. This paper is about a certain generalized topological structures, with the aim of showing that can provide suitable framework within which to compare various approaches to digital topology with an ordinary topology. Here mainly speaks about the generalized topological structures, called closure operations, that are associated with α-ary relations $(\alpha > 1)$.

KEYWORDS: Closure,α-ary, n-cube, Topological structures,digital topology.

140.IDENTIFICATION OF OPEN CLOSED SETS IN FUZZYSTRONGLY $(i,j)(fgsp)^*$BITOPOLOGICAL SPACE

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ABSTRACT:
In normal bi-topological space, it is already proved and I checked it with the examples. In this paper, we defined the concept of fuzzy strongly $(i,j)(fgsp)^*$ open and closed sets in strongly $(i,j)(fgsp)^*$ with continuous properties. We also characterize open and closed strongly $(i,j)(fgsp)^*$ in fuzzy bi-topological spaces and their sub-sets. With the membership values of a particular example, the strongly $(i,j)(fgsp)^*$ closed sets and strongly $(i,j)(fgsp)^*$ continuous properties are verified. Also, noted the interrelating map with other sets. Throughout this paper I used X = [0, 1].

KEYWORDS: Topological space, Bi-Topological space, Open sets, Closed sets, strongly $(i,j)(fgsp)^*$Continuous functions.

141.Growth and characterization of 2-amino-6-methylpyridnium 4-hydroxybenzoate

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ABSTRACT:
The organic nonlinear optical single crystals of 2-amino-6-methylpyridnium 4-hydroxybenzoate (2A6MP4HB) are grown using isothermal solvent evaporation technique. The title crystal is crystallized in monoclinic system with centrosymmetric space group $P2_1/c$. The micro analyses confirmed the stoichiometric compositions of 2A6MP4HB. The thermal stability and decomposition of novel 2A6MP4HB are analyzed by thermogravimetric/differential thermal analysis (TG-DTA) and differential scanning calorimetric (DSC) analysis. The temperature dependence specific heat capacity of 2A6MP4HB is analyzed through modulated differential calorimetric analysis (MDSC). The MDSC study suggested that 2A6MP4HB could possess high optical damage threshold, which is

an essential requirements for optical devices. All these studies are performed for the first time and aimed to explore the useful and safe region of thermal properties to explore its usefulness for device fabrications.

Keywords: Crystal growth; CHN; NLO; TG-DTA; MDSC

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142.DFT CALCULATIONS OF N-SUCCINOPYRIDINE : AN ORGANIC NONLINEAR OPTICAL MATERIAL

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ABSTRACT:
Density functional theory (DFT) calculations of NSP have been performed by using B3LYP method with 6–311++G(d,p) basis set to derive the optimized geometries, first order hyperpolarizability and dipole moments.The molecular stability and bond strength have been investigated through the Natural Bond Orbital (NBO) analysis. Molecular properties such as Mulliken population analysis, thermodynamic functions and perturbation theory energy analysis have also been reported. Electrostatic potential map (ESP) obtained by electron density isosurface provided the information about the size, shape, charge density distribution and site of chemical reactivity of the title molecule. These studies have been calculated theoretically to explore the NLO properties of NSP in molecular level.

Keywords: DFT; B3LYP; NLO; NBO; Mulliken Charges

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143.GROWTH AND CHARACTERIZATION OF AN ORGANIC NONLINEAR OPTICAL MATERIAL HYDRAZONIUM L–TARTRATE:

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ABSTRACT:
Bulk single crystals of Hydrazonium L–tartrate (HLT) an organic nonlinear optical material have been grown by isothermal solvent evaporation method. The occurrence of coloration of HLT solution which is reported to have hindered the growth of HLT crystals under normal ambient conditions has been deferred to a considerable duration by modifying the experimental conditions to facilitate the crystal growth. Studies such as Powder X–ray Diffraction (XRD), Carbon, Hydrogen and Nitrogen (CHN) analysis and Thermogravimetric and Differential Thermal Analysis (TG/DTA) confirmed that the crystals grown using modified growth conditions are indeed HLT.

Keywords: Crystal growth; CHN; NLO; TG-DTA; XRD

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144.OPTICAL AND MECHANICAL STUDIES ON 2A6MP4HB FOR NONLINEAR OPTICAL APPLICATIONS

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ABSTRACT:

Single crystals of 2-amino-6-methylpyridinium 4-hydroxybenzoate (2A6MP4HB) are grown by isothermal solvent evaporation technique. The UV-Vis-NIR spectral study indicates that newly designed 2A6MP4HB single crystal has the transparency window 350–1100 nm, which is useful for optoelectronic applications. The nonlinear refractive index, nonlinear absorption coefficient and third order nonlinear susceptibility of 2A6MP4HB single crystal are determined by using Z-Scan The mechanical

behaviors of title compound are studies at room temperature using Vickers microhardness tester and the results confirmed that 2A6MP4HB belongs to soft material category. To analyse he useful and safe region of optical and mechanical properties and to explore the usefulness of title material for device fabrications, all these are performed.

Keywords: Single Crystals; Nonlinear Optics; UV-Vis-NIR; Z-Scan; Microhardness
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145.FACES OF REALITIES IN THE NOVEL **THE SHADOW LINES BYAMITAV GHOSH**

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ABSTRACT:
The paper is a presentation of different faces dealt by Amitav Ghosh in the novel The Shadow Lines. Amitav Ghosh a renowned writer known for his in depth knowledge towards history and human insights. Amitav Ghosh, a Bengali has made his novels win many awards and has been accepted by the readers of this century. His best notable novels are The glass Palace, The sea of Poppies, The river of smoke and The Shadow Lines, they all deal with the historical concepts interlinked with humanity, These could have been attraction as his father was in the Indian Army because of his Burmese uncles who used to say stories of life in Burma. Amitav Ghosh writings emotions of a real world where there existed peace and humanity. All his novels deal with a cause, In glass Palace he views an Orphan Rajkumars life, In the Sea of Poppies he brings out a lady from the idea of Sati, In the Shadow lines he makes people think why there existed Borders, The themes in this paper is about the reality and the existence in the novel ***The shadow lines***, the paper brings out certain truth which are simple and yet not followed. The whole theme lies on a common man life with his existence with the society, The need for borders both eternal and external in a man's life. The paper is an view of society in the midst of politics social and economical sitation where the common people are the suffers and migration is their only option. The paper reviews the peoples faces during the migration from India to Pakistan and their borderline findings.
Keywords: Border, freedom, Truth, Suffering.

146.BATTLES FOR LAND IN THE SELECT NOVELS IN AMITAV GHOSH

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ABSTRACT:
The paper finds the inner battle of people for land the select novels of Amitav Ghosh, the novels The Glass Palace, The Sea of Poppies and The Shadow Lines used in the paper figures a bridge to understand the reality of common people in the life of post colonialism and their nativity. Ghosh an eminent fictional writer was born in Calcutta in a Bengali family. Ghosh becomes a Distinguished Professor in Comparative literature at Queens College, New York and also a visiting professor at Harvard University. Some of his famous novel were The Circle of Reason, The Shadow Lines, In An Antique Land, Dancing in Cambodia, The Calcutta Chromosome, The Glass Palace, The Hungry Tide, and the Ibis Trilogy Sea of Poppies(2008), River of Smoke(2011), and Flood of Fire (2015). He was awarded the Padma Shri by The Indian Government and Elected as the Royal Society of Literature in 2009 and named a ford foundation Art of Challenge Fellow in 2015. In this paper the author uses a common tool(land) to show about a drastic change in the lives of people, an ecological imbalance in the life of people. Land plays a major role in almost all the novels of Amitav Ghosh. Ghosh brings out his view on the nineteenth century people who suffer to get rid of slavery, ruthless killing and British Empire in need of their land. In all these suffering Ghosh portrays an indirect vision to the readers that the they are all connected to one need called the land. Ghosh finds the imbalance of people when their land is taken away from them or when they are made as slaves in their own land.
Key words: people, Nativity, sufferings, Battle.

147.METAPHOR OF HISTORY IN

THE SELECT NOVELS OF AMITAV GHOSH

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ABSTRACT:
The paper present an rethinking of the history through the element of metaphor that prevails as an element in building a conventional idea. The paper brings out a unique bond between the land and the people. The controversial realities that happened during the war- time and the nations such as India that suffered for want of freedom and an identity. Amitav Ghosh a renowned writer known for his in depth knowledge towards history and human insights. Amitav Ghosh, a Bengali has made his novels win many awards and has been accepted by the readers of this century. His best notable novels are *The glass Palace, The sea of Poppies, The river of smoke and The Shadow Lines and many more as* they all deal with the historical intercept interlinked with humanity, Ghosh's use of characters as metaphors to convey his reality of land, freedom and identity. The metaphorical characters such as Dolly in *The Glass Palace,* Deeti in *Sea of Poppies* or Grandma Tha'mma in *The Shadow Lines* stand for the traumatic experiences of alienation brought about by historical events. They play a vital role in articulating the need for rootedness (nationhood).

Keywords: Freedom, Struggle, Metaphor,

Realities.

148.POST-COLONIAL UNDERSTANDING OF FREEDOM, IDENTITY AND SELF REALIZATION THROUGH SELECT NOVELS OF AMITAV GHOSH

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ABSTRACT:
The paper portrays the search for freedom and identity is as a predominant element in postcolonial literature through the select novels of Amitav Ghosh. The element of building freedom and identity depends on the nature of existence in a place, the country, and the circumstance. Amitav Ghosh an renowned fictional writer born in Calcutta in a Bengali family and a Distinguished Professor in Comparative literature at Queens College, New York and also a visiting professor at Harvard University. He has written many novels with historical, social and political influence that predicts the dimensions of Post colonial Literatrue. Being an Anthropologist and imaginative writer Ghosh has witnessed, researched and skillfully bought out epic novels and reality novels on post colonialism and its influences. Some of his famous novel were The Circle of Reason, The Shadow Lines, In An Antique Land, Dancing in Cambodia, The Calcutta Chromosome, The Glass Palace, The Hungry Tide, and the Ibis Trilogy Sea of Poppies, River of Smoke, and Flood of Fire. He was awarded the Padma Shri by The Indian Government and Elected as the Royal Society of Literature in 2009 and named a ford foundation Art of Challenge Fellow in 2015. In this paper paper The essence of individuality has been changing from time to time, reflecting the changes in society. These concepts have been formed to a large extent by social locations and the role of an individual in society. Social attributes such as his or her race, class, gender, and such other factors also contribute to the concept of freedom and identity. The natives of a region could not reshape their culture due to colonization, leading to cultural fall and search for the lost identity. The paper exhibits a challenge towards a different dimension of post colonial understanding in the select novels of Amitav Ghosh.

Key words: Post colonialism, Freedom, Nativity, Colonization.

149.A few APPLICATIONS OF LAPLACE TRANSFORMS in ANALYTIC NUMBER THEORY

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Abstract:
A prologue to Laplace Transform is the subject of this paper. It manages what Laplace Transform is, and what is it as a matter of fact utilized for. The meaning of Laplace Transform and a large portion of its significant properties have been referenced with gritty evidences. This paper likewise incorporates a concise outline of Inverse Laplace Transform. A number a techniques used to discover the time space work from its recurrence area proportionate have been clarified with gritty clarifications. It likewise incorporates the definition of Laplace Change of certain

uncommon capacity like the Heaviside's Unit Step Function and the Dirac Delta Function. A couple of handy life uses of Laplace Transform have additionally been expressed.

Keywords: Laplace Transform, Inverse Laplace Transform, Dirac Delta Function, Heaviside's Unit Step function.

150.GAME THEORY MODELS FOR COMMUNICATION BETWEEN AGENTS: A REVIEW

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Abstract:
In reality, specialists or substances are in a persistent condition of collaborations. These associations lead to different sorts of multifaceted nature elements. One key trouble in the examination of complex specialist collaborations is the trouble of demonstrating operator correspondence on the premise of remunerations. Game hypothesis offers a point of view of examination and demonstrating these connections. Beforehand, while a lot of writing is accessible on game hypothesis, a large portion of it is from explicit areas and doesn't cook for the ideas from an agent based viewpoint. Here in this paper, we present a complete multidisciplinary best in class survey and scientific classification of game hypothesis models of complex communications between operators.

Keywords: Operational Research, Game theory, Game hypothesis, Persistent condition

151.STOCK MODEL FOR DECAYING THINGS AND TIME ESTIMATION OF MONEY FOR A LIMITED TIME SKYLINE UNDER THE ALLOWABLE POSTPONEMENT IN INSTALMENTS

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ABSTRACT:
In this article, a stock model is determined by expecting steady pace of crumbling of units in a stock, time estimation of cash under the states of passable deferral in instalments. The ideal recharges and division of process duration are choice factors to limit the current estimation of stock expense over a limited arranging skyline. The affectability investigation is done by a numerical model.

Keywords: Stock model, passable deferral in instalments, limited time skyline, steady pace of crumbling, postponement in instalments

152.FINANCIAL PRODUCTION LARGE SIZE MODEL FOR DISINTEGRATING ITEMS WITH PARTIAL PUTTING IN A RAIN CHECK

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ABSTRACT:
In this article, a financial creation strategy for crumbling things with fractional putting in a rain check. A verifiable suspicion in most stock control models is that when there is a deficiency, either complete delay purchasing or complete lost deal is expected. Such a supposition that isn't generally legitimate taking into account the various reactions by clients during stock out. In this paper, we build up a monetary creation plan for crumbling things with halfway putting in a rain check. Two numerical models circular segment used to delineate the hypothesis/Computational outcomes demonstrate that the arrangement of our model prompts lower cost.

Keywords: production large size model, disintegrating items, Computational outcomes, hypothesis outcomes, monetary creation plan

153.ASSISTIVE SYSTEM FOR VISUALLY IMPAIRED STUDENTS

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ABSTRACT:A huge assistive support system is developed for visually impaired students to assist and automate their examinations. This paper proposes an application to solve the problem of students being dependent on scribes to take examinations. The Braille display, device which rests on the keyboard by means of raising dots through holes on a flat surface. Upon clicking particular keys on the keyboard, questions will be dictated by using the concept of speech synthesis, and answers can be given accordingly based on the concept of speech recognition. The speech synthesis converts text into speech units like vocal cords and acoustic phonetics. Then the detailed description on various converted speech units like words, syllables, demisylablles, diphone, allophone, phoneme are combined to form a full speech with phonetic sounds.

154.OBSTACLE DETECTION SYSTEM FOR AUTONOMOUS TRAINS

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ABSTRACT:
In recent days, the development of Autonomously driving trains for public passenger traffic is more attractive study. This leads to the various safety level assurance confirmation system as in conventional systems. Therefore, this paper proposes an Obstacle Detection System for Autonomous Trains that detects all the obstacles in front of the train. An multi sensor system with radar and video technology is developed. It estimates the near distance, far distance using radar sensors, tele camera, a data fusion unit. This overall information is more meaningful than the sum of single sensor data sequences that detects the obstacle for autonomous trains. The results from the system show that multi sensor environment is highly potential to find the obstacle detection

155.TRAINING AND TESTING MALICIOUS URL

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ABSTRACT:
Training and testing a malicious the URL place the important role in all trend of technology research efforts. For this yearly 4,500 new attacks are identified every day and to reduce this significant growth new mobile web technology is introduced and it is easier to rise with the use of mobile device and also the smartphones. It also identifies the group of political stand points easily for both personal and enterprise use. At this point speed at which each new attack is also deployed considerably by outpaced boxed anti-malware software.

156.SECURE SEARCH USING ORDERED BUCKETIZATION TECHNIQUE

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Jeppiaar Institute of Technology

ABSTRACT:
Ordered bucketization (OB), a primitive for allowing efficient range queries on encrypted data. First, we address the open problem of characterizing what encryption via a random order-preserving function leaks about underlying data. We show that, for a database of randomly distributed plaintexts and appropriate choice of parameters, Random Order Preserving Function (ROPF) encryption leaks neither the precise value of any plaintext nor the precise distance between any two of them. On the other hand, we also show that ROPF encryption does leak both the value of any plaintext as well as the distance between any two plaintexts to within a range of possibilities roughly the square root of the domain size. We then study an encryption scheme with OB (EOB) and suggests a new security model for EOB, IND-OCPA-P, which assumes an adversary has reasonable power. The IND-OCPA-P model to analyze the security of the proposed EOB and the encryption schemes supporting an efficient range query over encrypted data. Because this model allows an adversary to query an encryption of a chosen message, it is stronger than the security model on which the Order-preserving Encryption Revisited was proven secure.

157.DISTRIBUTED ENERGY EFFICIENT CLOUDS OVER CORE NETWORKS

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[1,S]Assistant Professor, Department of IT, Indra Institute of Engineering and Technology
[3] Assistant Professor, Department of CSE, Jeppiaar Institute of Technology

ABSTRACT:
The emerging cloud computing offers new computing models where resources such as online applications, computing power, storage and network infrastructure can be shared as services through the internet. The popular utility computing model adopted by most cloud

computing providers (e.g., Amazon EC2, Rackspace) is inspiring features for customers whose demand on virtual resources vary with time. Energy consumption is the key concern in content distribution system and most distributed systems. These demands an accumulation of networked computing resources from one or multiple providers on data centers extending over the world. This paper has introduced a framework for energy efficient cloud computing services over non-bypass IP/WDM core networks. We have analyzed three cloud services, namely; content delivery, Storage as a Service (StaaS) and virtual machines-based applications. A mixed integer linear programming (MILP) optimization was developed for this purpose to study network related factors including the number and location of clouds in the network and the impact of demand, popularity and access frequency on the clouds placement, and cloud capability factors including the number of servers, switches and routers and amount of storage required at each cloud.

158.TRUTHFUL GREEDY MECHANISMS FOR DYNAMIC VIRTUAL MACHINE PROVISIONING AND ALLOCATION IN CLOUDS

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[1]Assistant Professor, Department of CSE, Jeppiaar Institute of Technology
[2]Assistant Professor, Department of IT, Indra Institute of Engineering and Technology

ABSTRACT:

Cloud computing is a large-scale distributed computing paradigm in which a pool of computing resources is available to users via the Internet. Computing resources, e.g., processing power, storage, software, and network bandwidth, are represented to cloud consumers as the accessible public utility services. In cloud computing, cloud providers can offer cloud consumers two provisioning plans for computing resources, namely reservation and on-demand plans. In general, cost of utilizing computing resources provisioned by reservation plan is cheaper than that provisioned by on-demand plan, since cloud consumer has to pay to provider in advance. With the reservation plan, the consumer can reduce the total resource provisioning cost. However, the best advance reservation of resources is difficult to be achieved due to uncertainty of consumer's future demand and providers' resource prices. To address this problem, an optimal cloud resource provisioning (OCRP) algorithm is proposed by formulating a stochastic programming model.

159.SOCIAL DISTANCING USING MOBILE WIFI AND DISEASE SPREAD CON

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[2,3]Assistant Professor, Department of IT, St. Joseph College of Engineering

ABSTRACT:

The application uses Mobile-WIFI to maintain distance among the people. It identifies the affected person by analyzing the SSID of the person's mobile WIFI via the app and maintain the social distancing by checking whether the WIFI-signal is strong and alerts the person to stay away. It has two types of users - civilians and test results publishers. The civilians take tests to doctor then results will be published by an authorized user in the hospital. The application helps in finding the disease affected people by storing the person's test information in the database. If the infected person approaches, anybody who has installed the application on their mobile phone will get an alert alarm sound and vibrate. If the people register in this application and run it as the background app when taking tests regarding the infection of the disease will help society to get rid of the disease spread. The test results will be updated in the database frequently for people's safety by test results publisher.

160.VICTIM TRACKER APP FOR CAPTURING DISEASES

Muthukumaran. S
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ABSTRACT:

The TRACKER APP is mainly focused on to track the infections victims by combining the technology of smart watch sensor and smart phone application. The smart watch sensor senses the symptoms in human and update the info to the managers via the infection's tacker app in the smart phone. It helps to find the victims easily and we can separate the victims from the rest of the people.so we can save the world by this method. infections are spreading everywhere in faster rate. In order to take control over the situation and help this world to get free from this deadly virus. The first method is to create a mobile application that interact with the smart watch and the sensors in it. Here the sensors detect the symptoms of covid'19,which is programmed to the sensor and the information collected by the sensors in the smart watch is send to the mobile phone, which has an

application that takes the info about the victims and send it to the officials

161.ADVANCEMENT OF EMERGING TECHNOLOGIES IN BIG DATA

[1]Sudha Mercy. S, [2]C. Vidhya, [3]Dayana. R
[1,3]Assistant Professor, Department of CSE, Eswari Engineering College
[2]Assistant Professor, Department of CSE, Jeppiaar Institute of Technology

ABSTRACT:
Collection of large datasets is called as Big Data this dataset is complex to process through traditional related database traditional related database. The major issue in big data is managing the explosion of massive amount of heterogeneous information which is present in structured, unstructured and semi-structured format. In big data, size of the data is beyond the ability of the typical database software tools. Traditional database is also not able to handle this massive data. Information, data, knowledge are being created and collected at a rate that is rapidly approaching the Exabyte/Year. Its aggregation, creation is accelerating and within few years, data will approach the Zettabyte/Year. Volume is only the aspect of big data. The volume of big data represents long term challenges such as data capture, data storage, scalability, availability, data analytics and data visualization.

162.CLOUD COMPUTING FOR MANAGING AND DEPARTMANT RESOURSES

1Revathi, [2]Punitha, [3]Muthuvel. S
[1,2]Assistant Professor, Department of Information Technology, Sri Ramanujar Engineering College
[3]Assistant Professor, Department of CSE, Jeppiaar Institute of Technology

ABSTRACT:
Cloud computing plays an important role in all technology field and in this project for storing the data efficiently at anytime, anywhere all over the world, we are creating the system to monitor the outgoing task in a company anytime. For this we are going to use stack process in a web app development. All the allocated request will be stored in the stack and based on the last in authority chain the data is received and stored in the cloud environment. The higher authority is placed first and given good profit and good efficiency

163.NN CLASSIFICATION FOR DETECTING TUMOUR IN THE LUNGS

[1]S. Suganya, [2]Dinesh Kumar. M
[1]Student, Sai Ram Engineering College.
[2]Assistant Professor, Department of CSE, Jeppiaar Institute of Technology

ABSTRACT:
Now a days Lung Tumors can be kindhearted or threatening disease. And this Kindhearted tumor can be evacuated, and it does not spread to the small part of the body. This threatening tumor will regularly spread in depth and cause passing to all the organs of the human body. In Early days it is difficult to find lung disease can help specialists to treat patients and keep them alive. As an example, we can say, pleural emission and ordinary lung are two distinguished and arranged right now. So, in this proposed paper it presents a PC helped grouping Method in Computer Tomography (CT) Images of lungs created utilizing ANN. The main reason is to identify the lung infections by using the component extraction through a Transform method called Gabor Wavelet. For this NN classification has been designed for Artificial Neural Network of ILD patterns.

164.EVENT MANAGEMENT PLATFORM FOR UNIVERSITIES AND INSTITUTIONS USING MOBILE APPLICATION DEVELOPMENT

Suji. V. S, Dinesh Kumar. M
Student, Sai Ram Engineering College.
Assistant Professor, Department of CSE, Jeppiaar Institute of Technology

ABSTRACT:
The proposal brings the entire manual process of College event management online which is built using Asp .Net as a front end and SQL Server as a backend. The main purpose of this project is to simplify the process of handling each event by providing a web interface for admin and teacher. The admin part consists of multiple modules to initiate with the event by adding the schedule of the events, adding student who are interested in Volunteering for the event activities, adding teachers who will conduct the particular event activity which is allotted by the admin itself and lastly, viewing the results of each event held in college. The student (Volunteer) part has come up with handling all the event related activity assigned by the admin. Student (Volunteer) performs various task such as registration, cafeteria and also viewing the list of students to mark the winner of each round, generating the results based on multiple rounds won by the student. It also contains every staffs and volunteer's details who are responsible for every separate event.

165.ONLINE STUDENT MONITORING SYSTEM USING MOBILE APPLICATION

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[1]Assistant Professor, Department of CSE, Eswari Engineering College
[2]Assistant Professor, Department of CSE, Jeppiaar Institute of Technology

ABSTRACT:

In today's hi-tech circumstances even though there was a less process to do on all the works there are still some basic works need to be done by humans. In that case, registering the links and undergo the preparation for the placements in the Engineering Colleges and Universities place hyperthetical role on each student as well as professors. Professors are more likely to spend three to four hours for making to students to interact with registrations and procedures appropriately. Also, students would face struggles in some details what need to be filled. Again, overcoming those scenarios, the professors must make sure how many students have registered and proceeded further and also who have not yet started the process. This monitoring process would increase them more work and time spending. In order to make easier an application which would decrease their workload and their valuable time. This application would be notified to the students after the professors update the corresponding instructions. The students once viewed and registered to the appropriate websites are insisted to attach the registered page screenshots and mark it as done. As immediate response, this would be saved in separate pages as registered with their names. This would contribute to less much more work complexity for the professors when there are more than one post to be registered. No need of resending the post again and again, it would be saved permanently

166.REAL ESTATE PRICE EVALUATION SYSTEM USING OBJECT AND AMENITY DETECTION ALGORITHM

[1]Padma Priya. [2]R, Jasmine Naineta, [3]Dayana. R
[1,2]Assistant Professor, Department of ECE, Saveetha Engineering College
[3]Assistant Professor, Department of CSE, Jeppiaar Institute of Technology

ABSTRACT:

Machine learning applications are used worldwide in a variety of regression problems. Yet it is to be implemented in real estate to predict the price of a place. This regression problem can easily be solved using machine learning, but things get complicated when u start considering the furniture's present in the real estate. Now the real estate is bound to sell for a much higher price and the traditional machine learning algorithm will fail as the learning dataset is drastically different from the real-world problems. Our algorithm approaches this problem in a different manner, instead of taking the furniture's and other amenities in the real estate into account of the actual value of it, the algorithm identifies these assets using Python Image Processing (PIP) and increases the price of the property by the real time price of the amenities. The algorithm also takes the wear and use of the amenities into consideration before deciding upon the final price. This algorithm will revolutionize the real estate industry by providing next-to-accurate prices for a property.

167.RESEARCH AND DEVELOPMENT IN CONSERVATION OF FOREST/CROP USING AI AND ML

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[1,]Student, Sai Ram Engineering College.
[2]Assistant Professor, Department of CSE, Jeppiaar Institute of Technology

ABSTRACT:

Forest is main resource for many human needs. Forest plays vital role in our day to day life e.g. paper, food, dairy products etc. But now due to human activity forest are polluted and exploited as a result many animals are at end extinction any herbal and medicinal plants are extinct, so there is a need for conservation of forest resource. This can be done by using Artificial Intelligence and machine learning. Studying of wealth of forest includes measure of rainfall, measure quality of soil, determine no of species, animal activity etc. Any plants or crop need water. But there is some limited. Over irrigation is not good for crop as well as it wastes lot of water. For that we construct automated irrigation system using raspberry pi. Animal form basis of food chain. Many animals became extinct and many animals are at end of extinction. We can monitor the roaming of animals and we can analyses the animal whether it's a rare or normal species. This can be done by ML and AI algorithms. Human can analyses the crop with just appearance of crop. e.g. If a crop is dark in color the framer concludes its heathy variety. here same can be done by using ML and AI algorithm. When same soil is used multiple times the fertility of soil deceases so, there is need to provide fertilizers to soil. generally human add fertilizer to soil for certain periodical time ie once in 4 mounts etc. This work can be automated with robot with embedded system.

168.RASPBERRY PI BASED ANDROID CONTROLLED SURVEILLANCE ROBOT

[1]S.Hari, [3]DAYANA.S
[1,2]Student, Sai Ram Engineering College.
[2]Assistant Professor, Department of CSE, Jeppiaar Institute of Technology

ABSTRACT:
There is a huge need of security most especially in homes, workplaces, military area, borders. There has always been a high demand for security systems that could protect man, property, boundaries of nations. This project aims to provide surveillance in highly sensitive areas like border areas, terrorist hotspots without having to risk human life for the same. In this project, we use a raspberry pi which is controlled via an Android Bluetooth app and a 360-degree night vision camera for surveillance purpose. The camera provides a live stream of the video that it captures which can be seen in an android app as well. The App for the camera also a complete 360-degree rotation providing complete surveillance, also featuring provision saving video as well as the audio. The Spy robot chassis powered by a Raspberry Pi is interfaced with a Bluetooth module that communicates with an android app which sends direction controls to the chassis

169.HOME AUTOMATION USING ARDUINO

[1]Dr. J. Farithabanu, [2]Dr. Marie Claude. N
[1]Professor, [2]Associate Professor
[12]Department of CSE, Jeppiaar Institute of Technology.

ABSTRACT:
The main objective of this project is to develop a home automation system using an Arduino board with Bluetooth being remotely controlled by any Android OS smart phone. As technology is advancing so houses are also getting smarter. Modern houses are gradually shifting from conventional switches to centralized control system, involving remote controlled switches. Presently, conventional wall switches located in different parts of the house makes it difficult for the user to go near them to operate. Even more it becomes more difficult for the elderly or physically handicapped people to do so. Remote controlled home automation system provides a most modern solution with smart phones. In order to achieve this, a Bluetooth module is interfaced to the Arduino board at the receiver end while on the transmitter end, a GUI application on the cell phone sends ON/OFF commands to the receiver where loads are connected. By touching the specified location on the GUI, the loads can be turned ON/OFF remotely through this technology.

170.PERSON/WHEELCHAIR FALL DETECTION USING IOT

Dr. J. Farithabanu
Professor, Department of CSE, Jeppiaar Institute of Technology

ABSTRACT:
When it comes to old age, it becomes necessary to monitor our old ones for their health and safety. Due to weakness and weak joints they have a great risk of falling. Now it is important to know if an old age person has fallen so that he/she can be helped on time. Also, people on wheelchair need to be
checked for fall detection. For this purpose, we propose a smart fall detection system. The system uses accelerometer and gyro sensor to detect person movements, It can be mounted on persons hand or wheelchair for detection. The sensor is connected to a microcontroller in order to constantly transmit the acceleration data. Now the system keeps monitoring for fall detection and abrupt movement changes in person. A sudden abrupt change with jerk in the system is treated as a fall. Now in case the person did not fall and alarm was false, the system allows to snooze the alert if person presses snooze button in 5 seconds. If person does not press the snooze, system detects person has fallen and automatically triggers alert through wifi connection to alert the loved ones of the person about the situation instantly

171.INTEGRATED COUPLED-INDUCTOR AND DIODE-CAPACITOR FOR A HIGH VOLTAGE GAIN DC-DC CONVETER:

Author name: Mrs. L. PATTATHURANI

Abstract:
Design and implementation of high efficiency and high step –up non-isolated DC-DC converter. The high power non –linear loads and low power loads produce voltage fluctuations, harmonic currents and an imbalance in network which

results into lower Power factor operation of power supply.

There is a need of improved Power factor and reduced harmonic current in input line. In this project high step-up boost converter with coupled inductor has been introduced to regulate the line voltage. The DC power to this proposed converter is derived from AC lines by using diode bridge rectifier with filter.

Design and implementation is to improve source side power factor with reduced harmonic content and also to improve the voltage conversion ratio at the DC load side.

Keywords- Isolated DC-DC generator, Boost converter, Bridge rectifier.

172.PERFORMANCE IMPROVEMENT OF THREE LEG INVERTER FED BLDCM DRIVE:

Author name: Mrs. L. PATTATHURANI

Abstract:

In small scale and large scale applications like automobile industries, domestic appliances such as Refrigerators, washing machine and air conditioning units which use conventional motor technology.

These conventional motors have a chacterstics of Low torque, high maintenance and low efficiency. The usage of BLDCM enhances various performance factors ranging from higher efficiency, higher torque, high power density, low maintenance and less noise than conventional motors. The main drawback is high cost.

Two leg inverter fed BLDCM drive is proposed which uses only four switches and two current sensors compared with six switches, three current sensors in case of three leg inverter fed BLDCM drive.

Less number of switches and current sensors means less switching loss and low cost. In this paper a two leg inverter fed BLDCM drive with two input DC source is proposed.

The proposed PMBLDCM drive is modeled and its performance is simulated in MATLAB / SIMULINK .This proposed method is a simple, low cost and enhanced performance of dive is obtained i.e., reduced torque ripple, less voltage stress, Low current THD and fast dynamic performance of PMBLDCM drive.

Keywords- Switching loss, Total harmonic distortion.

173.ADVANCED DESIGN TOOLS FOR THE RELIABILITY SYSTEMS

Author name:

Ms..S.Priya

Abstract:

In many important energy conversion systems, the power electronic converters are proven to have high failure rates. At the same time, the failures of the power electronics systems are becoming more and more unacceptable because of the high cost of failures and booming power capacity.

As a consequence, an appropriate assessment of reliability performance for the power electronics is a crucial and emerging need, because it is the essential information for the design improvements as well as for the extension of converter lifetime, and reduction of the cost-of-energy. Unfortunately, there is still lack of suitable and cost-effective tools for the reliability assessment in power electronics. In this paper, an advanced design tool structure, which can acquire various reliability metrics of the power converters, is proposed.

The proposed reliability design tool is based on the failure mechanisms in the critical components of the power electronics system, and the mission profiles in the converter applications are also taken into account. Finally, the potential methodologies, challenges and technology trends involved in this tool structure are also discussed.

Keywords-Advanced design, power converters.

174.ROTOR POSITION ESTIMATION FOR BRUSHLESS DC MOTORS SENSOR LESS

Author name: Ms.S.Priya

Abstract:

Brushless DC motor speed is controlled by synchronizing the stator coil current with rotor position in order to acquire an accurate alignment of stator rotating field with rotor permanent-magnet field for efficient transfer of energy. In order to accomplish this goal, a motor shaft is instantly tracked by using rotating rotor position sensors such as Hall effect sensors, optical encoders or resolvers etc.

Adding sensors to detect rotor position affects the overall reliability and mechanical robustness of the system. Therefore, a whole new trend of replacing position sensors with sensor less rotor position estimation techniques have a promising demand.

Among the sensor less approaches, Back-EMF measurement and high frequency signal injection is the most common. Back-EMF is an electromotive force, directly proportional to the speed of rotor revolutions per second, the greater

the speed motor acquires the greater the Back-EMF amplitude appears against the motion of rotation.

Keywords- Hall effect sensors,optical encoders

175.VARIABLE FREQUENCY DRIVE FOR THREE PHASE INDUCTION MOTOR DRIVES

Author name:
Ms.Vinnarasi ponnury

Abstract:
A 3-phase Variable Frequency Drive (VFD). These motor drives are designed to be used in conjunction with a 3-phase induction motor. Because these motors typically only have an on/off state of operation, a VFD is needed if multiple operation speeds are desired.

Also, apart from selectable speeds, the efficiency of the overall system is increased due to the fact that the motor only sees the necessary amount of input power to achieve desirable output power. Also, the motor can be slowly brought up to speed, eliminating huge start-up current spikes.

Design processes for a 3-Phase Variable Frequency Drive (VFD) as broken up into two stages: The AC-DC converter and the DC-AC converter. It acknowledges three (3) design versions, all. The output of the motor drive is 3-phase pulse width modulation (PWM) ranging in possible operation frequencies from 0Hz to 13 kHz.

The frequency control circuit uses an Arduino Uno based of the ATMEGA 328p.

Keywords- Variable frequency drive, Arduino board

176.IR COMMUNICATION USING WIRELESS ELECTRICAL APPLIANCES CONTROL SYSTEM

Author name:
Mrs.L.Pattathurani

Abstract:
Controlling electrical appliances through IR remote is interesting and very useful application. This system is widely used in industries, offices, Banks, hotels, hospitals, and display boards. In this project, IR is used for controlling any appliance in an industry by controlling the loads.

IR rays are transmitted through remote and these rays are received by a receiver named TSOP 1738. Here, in this project two microcontrollers are used, one for master SECTION and other for slave section.

The IR rays received by TSOP are given to the master section. from master section, IR signals are given to slave section for LED indication and are displayed on 7-segment for the respective loads. Now, from MASTER section, the loads are controlled through triac driving circuit. In the triac driving circuit, as the controller cannot provide sufficient current, MOC'S are used to drive these triacs and these triacs in turn are connected to loads.Next, in the slave section, the door opening and closing is done through a stepper motor rotating in clockwise and anticlockwise direction respectively. In this, for every respective load on activation, a message is shown on 7 segment display as load1, load2, load3, load4, load5, load6.

Keywords-sevensegment display,TRIACs,Display boards

177.ACTIVE RECTIFIER BASED SINGLE SWITCH DRIVE CIRCUIT FOR LED LAMPS

Author name:
Mr.K.Jayavelu

Abstract:
This paper presents the implementation of a two-stage light-emitting diode (LED) driver based on commercial integrated circuits (IC). The presented LED driver circuit topology, which is designed to drive a 150 W LED module, consists of two stages: AC-DC power factor correction (PFC) stage and DC/DC power converter stage. The implementation of the PFC stage uses IC NCP1608, which uses the critical conduction mode to guarantee a unity input power factor with a wide range of input voltages. The DC/DC power converter with soft-switching characteristics for the entire load range uses IC FLS2100XS. Furthermore, the design of an electromagnetic interference (EMI) filter for the LED driver and the dimming control circuit are discussed in detail. The hardware prototype, an LED lighting system, with a rated power of 150 W/32 V from a nominal 220 V/50 Hz AC voltage supply was tested to show the effectiveness of the design. The presented LED driver was tested for street lighting, and the experimental results showthat the power factor (PF) was higher than 0.97, the total harmonics distortion (THD) was lower than 7%, and the efficiency was 91.7% at full load. The results prove that the performance of the presented LED driver complies with the standards: IEC61000-3-2 and CIRSP 15:2009.

Keywords- EMI,Power converters and THD

178.AUTOMATIC PLANT WATERING SYSTEM

Author name:
Mrs. L. PATTATHURANI

Abstract:
During summers, most people are too lazy to water the potted plants on their rooftop gardens every day. The project is a simple and exciting automatic plant watering system that you can build yourself in just a few hours. It is an Arduino based automatic plant watering system that uses a soil moisture sensor. The project can be controlled from your smart phone using the Arduino software controller. The usage of either wifi system or with the help of Bluetooth module. Two types of soil moisture sensors are available in the market—contact and non-contact sensors. A contact soil sensor is used in this project because it has to check soil moisture to measure the electrical conductivity.The circuit comprises an Arduino UNO board, a soil moisture sensor, a servo motor, a 12V water pump and an L293D (IC1) motor driver IC to run the water pump. You can power the Arduino board using a 7V to 12V wall wart or plug-in adaptor or solar panel. You need a separate 12V battery or power supply or solar panel for the pump motor. Using the Arduino UNO board, you can water six different potted plants. By adding a few more lines in the code, you can water even more plants—by using the Arduino Mega 2560 board which has more analogue input pins. You can also add an Ethernet or Wi-Fi shield and use the Twitter library. A 16×2 LCD can be added to indicate moisture levels. Enabling option can be added with the circuit to refill the tank after a few days, depending on the volume of the tank.

Keywords-Arudino software, LCD display,Bluetooth module

179.LOW COST TOXIC GAS FIRE ALARM SYSTEM

Author name: Ms. S.PRIYA

Abstract:
Carbon-monoxide gas is one of the most toxic gases. It is an odorless, colorless and tasteless flammable gas kills human life. It is found spark produced by burning of fuels in cars or trucks, room heaters, etc. It is less dense than air. But small amount of Carbon monoxide gas is beneficial. It is used for surgery purpose in hospitals. It is the simplest carbon and is iso electronic with other triply-bonded diatomic molecules having 10 valence electron. It burns with color of blue flame. Carbon monoxide has some fuel constituent. Before CO gas, coal gas is used for domestic purpose. In iron smelting process, Carbon monoxide is used as byproduct. It considered being as drug when it used in small amount. It is mostly formed by the photochemical process.
The release of Carbon Monoxide gas from room heater in hotel room caused family death. Emission of carbon monoxide gas, caused people in the room had a breathing trouble and died. Due to this reasons, we came up with idea of implementing carbon monoxide gas detector along with some new features in hotel rooms. When the gas is detected in detector, it will intimate the hotel control room with a notification as the gas released in a particular room by using software application and automatically the heater gets turned off. From this project we can reduce those kinds of gas emission accidents. We can also use this technique in home automation, as there would be the chance of emission of gas from Air conditioner, Refrigerator, Car, etc. It is cost effective and reliable.

Keywords-Carbon monoxide gas, Detector, Home automation

180.AUTOMATIC VEHICLE SENSOR IN ACCIDENT PRONE HIGHWAYS

Author name: Dr.Rajesh kumar

Abstract:
Modern society faces serious problems with transportation systems, including but not limited to traffic congestion, safety, and pollution especially in highways . Information communication technologies have gained increasing attention and importance in modern transportation systems. Automotive manufacturers are developing in-vehicle sensors and their applications in different areas including safety, traffic management, and infotainment. Government institutions are implementing roadside infrastructures such as cameras and sensors to collect data about environmental and traffic conditions. By seamlessly integrating vehicles and sensing devices, their sensing and communication capabilities can be leveraged to achieve smart and intelligent transportation systems. We discuss how sensor technology can be integrated with the transportation infrastructure to achieve a sustainable Intelligent Transportation System (ITS) and how safety, traffic control and infotainment applications can benefit from multiple sensors deployed in different elements of an ITS. Finally, we discuss some of the challenges that need to be addressed to enable a fully operational and cooperative ITS environment.

Keywords-ITS, vehicle sensors, traffic management.

181.SOLAR POWER SUPPLY VIA TRANSFORMER

AUTHOR NAME: Mr.K.Jayavelu

Abstract:

A transformer on a solar power facility is primarily used to step-up the voltage to deliver the renewable energy to the utility grid. However, the transformer has some added benefits in that it provides galvanic isolation between the solar facility and the utility grid.Energy policies worldwide are mandating large-scale integration of solar panel (SP) generators with inverters on distribution systems. This causes several SPs to be connected to a distribution transformer. The SP and its interfacing inverter alter the performance characteristics of the transformer. In addition, when new sources and loads are connected to a distribution system, from an asset-management perspective, it is imperative to understand and quantify their effect on distribution system components. This project presents a two-step study on the effects of SP on distribution transformers via simulation and experiments. In step one, the simulation work quantifies the amount of harmonic distortion caused by SP and associated inverters in distribution transformers considering solar farms and rooftop residential installations.

The simulation work uses network topology, load, and generation data of a Canadian utility. Various inverter technologies, output powers, carrier signal frequencies, filtering techniques, numbers of active inverters, and transformer configurations are studied. In step two, level of harmonic distortion observed in simulation is created in a laboratory environment using a commercial inverter for SP applications. A three-phase dry-type transformer is tested to observe the effect of higher harmonic distortion on core and winding temperatures of the transformer. Experimental results conclude that under the worst case loading scenario (i.e., full load with active power flow reversed), the transformer lifetime expectancy is anticipated to decrease by 8.3%.

Keywords-Solar panel generators, transformers,Harmonic distortions

182.A PFC BASED BLDC MOTOR DRIVE USING A CANONICAL SWITCHING CELL CONVERTER

Author name: Mr.F.Maxo savio

Abstract:

This paper presents a power factor correction (PFC)-based canonical switching cell (CSC) converter-fed brushless dc motor (BLDCM) drive for low-power household applications. The speed of BLDCM is controlled by varying the dc-bus voltage of voltage source inverter (VSI). The BLDCM is electronically commutated for reduced switching losses in VSI due to low-frequency switching. A front-end CSC converter operating in discontinuous inductor current mode (DICM) is used for dc-bus voltage control with unity power factor at ac mains. A single sensor for dc-bus voltage sensing is used for the development of the proposed drive, which makes it a cost-effective solution. A prototype of the proposed configuration is developed, and its performance is validated with test results for the control of speed over a wide range with a unity power factor at universal ac mains

Keywords-Voltage source inverter, Switching modes,DICM

183.VOLTAGE CONTROLLED CUSTOM POWER DEVICE FOR IMPROVEMENT OF POWER QUAITY

Author name: Mr.Pawan kumar

Abstract:

Due to increasing complexity in the power system, voltage sag is becoming one of the most significant power quality problems. Voltage sag is a short reduction voltage from nominal voltage, occurs in a short time. If the voltage sags exceed two to three cycles, then manufacturing systems making use of sensitive electronic equipments are likely to be affected leading to major problems. It ultimately leads to wastage of resources (both material and human) as well as financial losses. This is possible only by ensuring that uninterrupted flow of power is maintained at proper voltage levels. This project tends look at the solving the sag problems by using custom power devices such as Distribution Static compensator (D-STATCOM).

Proposed scheme follows a new algorithm to generate reference voltage for a distribution static compensator (DSTATCOM) operating in voltage-control mode. The proposed scheme ensures that unity power factor (UPF) is achieved at the load terminal during nominal operation, which is not possible in the traditional method. Also, the compensator injects lower currents therefore, reduces losses in the feeder and voltage-source inverter. Further, a saving in the rating of DSTATCOM is achieved which increases its capacity to mitigate voltage sag. Nearly UPF is maintained, while regulating voltage at the load terminal, during load change. The state-space model of DSTATCOM is incorporated with the deadbeat predictive

controller for fast load voltage regulation during voltage disturbances.

Keywords-UPF,D-STATCOM,Voltage regulations.

184.CASCADE COCKROFT-WALTON VOLTAGE MULTIPLIER APPLIED TO TRANSFORMER LESS HIGH STEP UP DC-DC CONVERTER

Author name: Ms.D.Thaniga

Abstract:

This research proposes a change of magnitude dc-dc device supporting the Cockcroft-Walton (CW) voltage number while not a transformer, providing continuous input current, with low ripple, high voltage, quantitative relation and low voltage stress on the switches, diodes, and capacitors. The projected device should be appropriate for applying to low-input-level dc generation systems. In this study, the projected management strategy employs 2 freelance frequencies, one that operates at high frequency to attenuate the scale of the inductance and an opposite one that operates at the comparatively low frequency in keeping with the required output voltage ripple. Keywords: Cockcroft-Walton (CW) voltage multiplier factor, high voltage quantitative relation, structure electrical converter, increase dc-dc device. The n-stage CW-voltage multiplier is applying low input AC voltage to high output DC voltage. It provides continuous input current with low ripple, high voltage gain, reduced switching losses, low voltage stress on the switches, diodes and capacitors and also improving efficiency of the converter. Step-up dc-dc converters have been proposed to obtain high voltage ratios without extremely high duty cycle by using isolated transformers or coupled inductors. In order to obtain low input current ripple and high voltage ratio current-fed converters are used. **Keywords-**Transformers, switching loss, converters

185.INTRUSON DETECTION SYSTEM FOR AMI

Author name: Ms.D.Gaja

Abstract:

This paper investigates current industrial and academic efforts to address detecting security events across the range of advanced metering infrastructure (AMI) networks and devices. The document is intended to give AMI vendors and asset owners a clear understanding of monitoring requirements of AMI and to identify key research challenges related to intrusion-detection technology and large-scale deployment.

The effective design and deployment of intrusion-detection systems (IDSes) in a utility's AMI environment have several characteristics that differentiate them from design and deployment in traditional information technology environments. For example, deploying a perimeter IDS might not provide the coverage necessary for an AMI system. Because there tends to be mesh networks in addition to IP-based backhaul networks, positioning an IDS at the AMI head-end system could miss malicious activity in the mesh network. In addition, there can be scalability issues as some utilities deploy millions of meters in their service territories. The goal of this study is to help utilities and vendors to understand intrusion detection requirements, gaps in existing approaches, and research problems that need to be solved to build and deploy a scalable and comprehensive security monitoring solution.

Keywords-IDS, AMI environment systems anddetection technology.

186.STAMPING AUTOMATIC AND PAD PRINTING MACHINES

Author name: Mr.A.Antonycharles

Abstract:

Stamping and pad printing Machine is one of the principle machines in stamping industry & printing industry. It is mainly used as the name indicates to stamp the logo or any other symbols. So we are going to make a machine for "and make it with minimum cost and for profitable output.

The machine is simple to maintain, easy to operate. Hence we tried our hands on "automatic stamping machine." Automatic stamping machine is working on the principle of microcontroller.

By using this machine we can easily print our logo or name on leather, card board, papers, and plastic articles crafts by using pad printing tool.

Keywords-Microcontroller,card boards,plastic articles

187.IMPLEMENTATION OF PI CONTROLLER FOR FOURTH ORDER RESONANT POWER CONVERTER WITH capacitive output filter:

Author name: Mrs.T.Muthukumari

Abstract:

A closed loop control of the fourth order (LCLC configuration) resonant converter has been simulated. The PI controller has been used for closed loop operation and the performance of proposed converter has been estimated with the closed loop and the open loop condition.

The steady state-transient responses of nominal load, sudden line and load disturbances have

been obtained to validate the controller performance.

The proposed approach is expected to provide better voltage regulation for dynamic load conditions.

Keywords-Open loop systems and closed loop systems, resonant converters.

188.NEXT GENERATION NARROW BAND (UNDER 500KHZ) POWER LINE COMMUNICATION (PLC) STANDARDS

Author name: Ms.D.Thaniga

Abstract:

In the past decade, several efforts around the world were started with the goal of introducing "smart metering" capabilities into the power grid. The Power Grid is a commodity delivery system where the commodity (electric power) has a production-to-consumption cycle time of zero: generation, delivery and consumption must happen all at the same time. This requirement creates unique challenges for sensing, communications, and control.These efforts have spurred renewed interest in the design of next generation Narrowband Power Line Communications (NB-PLC) transceivers. In the past few years, ITU-T and IEEE have standardized a family of next generation OFDM-based NB-PLC transceivers some of which are today being considered for massive deployments in Europe and Asia. This paper addresses the important role that PLC has not only for smart metering but also for many other Smart Grid applications, and also gives an overview of the main differences between these next generation NB-PLC standards.

Keywords-Narrowband Power Line Communications, Smart Grid applications

189.A SINGLE PHASE ACTIVE DEVICE FOR POWER QUALITY IMPROVEMENT OF ELECTRIFIED TRANSPOSITION

Author name: Mrs.L.Pattathurani

Abstract:

Performance investigation of Active Power Filter for harmonic elimination is interdisciplinary area of interest for many researchers. This paper presents performance improvement of 3-phase Series Active Power Filter (SeAPF) with Hysteresis Current Control technique for elimination of harmonic in a 3-phase distribution system. The shunt active filter employs a simple method called synchronous detection technique for reference current generation. proportional-integral (PI) and Fuzzy Logic Controller (FLC) are designed to adjust the parameters of the SePF system. The proposed system has achieved a low Total Harmonic Distortion (THD) which demonstrates the effectiveness of the presented method. This paper presents B4inverter topology which give reduced number of switches and switching losses. The simulation of global system control and power circuits is performed using Matlab- Simulink and Sim Power System toolbox. The simulation results presented demonstrate improved performance of the SePF system with the proposed fuzzy logic control approach.**Keywords-** Fuzzy Logic Controller, Total Harmonic Distortio

190.SMART WASTE BIN MANAGEMENT SYSTEM, USING ARDINO CONTROLLER

Author name: Mrs.L.Pattathurani

Abstract:

System is introduced to manage waste in big cities effectively without having to monitor the parts 24×7 manually. Here the problem of unorganized and non- systematic waste collection is solved by designing an embedded IoT system which will monitor each dumpster individually for the amount of waste deposited. Here an automated system is provided for segregating wet and dry waste. A mechanical setup can be used for separating wet and dry waste into separate containers here sensors can be used for separating wet and dry. For detecting the presence of any waste wet or dry can be detected using an IR sensor in the next step for detecting wet waste a moister sensor can be used. In this process, if only IR is detected motor will rotate in the direction of the dry waste container if both the sensor detects the waste then it will go to the wet container. Both these containers are embedded with ultrasonic sensors at the top, the ultrasonic sensor is used for measuring distance. This makes it possible to measure the amount of waste in the containers if one of the containers is full then alert message will be sent to the corresponding personal.

Keywords- Ultrasonic sensors,IR modules

191.DESIGN AND IMPLEMAENTATION OF LOW COMPLEXITY ADJUSTABLE FILTER FOR EFFICIENT HEARING USING EMBEDDED SYSTEMS

Author name: Mrs.L.Pattathurani

Abstract:

The emerging demand for personalized hearing aids requires the filter bank of a hearing aid system to be capable of decomposing the sound waves in accordance with the characteristic of the

patient's hearing loss. In this paper, an efficient adjustable filter bank is proposed to achieve this goal. By careful design, the number of the sub bands as well as the location of the sub bands can be easily adjusted by changing a 4-bit control signal. The proposed filter bank has extremely low complexity due to the adoption of fractional interpolation and the technique of symmetric and complementary filters. Only one prototype filter is needed for each of the stages, the multiple pass bands generation stage and masking stage. We show, by means of examples, that the proposed filter bank can meet different needs of hearing loss cases with acceptable delay.

The auditory system is a very sensitive and complex network. Diseases, drugs, noise, trauma and aging may have resulted in varying degrees of hearing loss, which makes hearing impairments one of the most common sensory disturbances in the world. The most effective way to compensate hearing loss is to employ a hearing aid system which is an integration of voice amplification, noise reduction, feedback suppression, automatic program switching, environmental adaptation, and etc. The basic function of a hearing aid system is to amplify sounds selectively and then transfer the processed signal to the ear.

Keywords- Amplification, noise reduction

192.LOWCOST MICROCONTROLLER BASED QUADCOPTER

Author name: Mr.A.Antony Charles

Abstract:

Technological advancements in fields of rescue operations as well as in remote package delivering systems has led us to the development of a quad copter. In this modern age of technology, quadcopter has become one of the most popular inventions in the field of science. A quadcopter, also known as UAV (Unmanned Aerial Vehicle) uses four propellers for lift and stabilization. The rotors are directed upwards and they are placed in a square formation with equal distance from the center of mass of the quad copter. The quad copter is controlled by adjusting the angular velocities of the rotors which are spun by electric motors. Nowa-days, quadcopters have received considerable attention from researchers as the complex phenomena of the quadcopter has generated several areas of interest.

The quad copter's flight controller is an Arduino microcontroller and its flight movements can be controlled using a transmitter-receiver setup. The quad copter is designed mainly for the purpose of search & rescue operations as well as for remote package delivering operations. On the quad copter is attached a pressure, temperature and humidity sensor which gives the readings of a particular place. Also, there is a magnetometer attached which indicates the direction of the quad copter to where it is facing. These readings are being sent from the quad copter to a base station using a server-client concept. For this, a Wi-Fi module, namely ESP8266 has been used.

Keywords- UAV, Quad copter.

193.NOVEL ENERGY STORED QUAZI Z-SOURCE CASCADED MULTILEVEL INVERTER

Author name: Mrs.T.Muthukumari

Abstract:

The quasi-Z-source cascade multilevel inverter (qZS-CMI) presents many advantages over conventional CMI when applied in photovoltaic (PV) power systems. For example, the qZS-CMI provides the balanced dc-link voltage and voltage boost ability, saves one-third modules, etc. However, the qZS-CMI still cannot overcome the intermittent and stochastic fluctuation of solar power injected to the grid. This paper proposes an energy stored qZS-CMI-based PV power generation system. The system combines the qZS-CMI and energy storage by adding an energy stored battery in each module to balance the stochastic fluctuations of PV power.

This paper also proposes a control scheme for the energy stored qZS-CMI-based PV system. The proposed system can achieve the distributed maximum power point track for PV panels, balance the power between different modules, and provide the desired power to the grid. A detailed design method of controller parameters is disclosed. Simulation and experimental results verify the proposed system and the control scheme.

Keywords- CMI, P-V cells

194.ENERGY GENERATION USING ARDUINO BASED MOTOR DRIVEN SYSTEM

Author name: Dr.Prajith prabhakar

Abstract:

In the field of motor vehicle manufacture the development and production of economical and dependable power plants and fuels there for are desirable. To such end accomplishment different characters and kinds of power sources and fuels have been developed and employed, though insofar as I am aware, the majority thereof have been either costly, expendable or consumable, entailing the costs of continuing production. In contradistinction to such, it is the purpose of my

invention to provide and utilize a natural source of perpetually available and economical motive power, to wit, airflow course and treated in such coursing flow to create ram pressure which is applied to and operates or activates the propellers of ganged electric generators suitably mounted and housed within a vehicle carried and exposed air tunnel. With forward movement of the thus-equipped vehicle, air is gathered and entered into the forwardly disposed air tunnel scoop, converted to ram pressure and flow-contacted with the propellers of the generator battery thereby driving them and generating electric current which, in turn, is conducted to, charges and maintains a vehicle-carried storage battery at the desired or required voltage for operating the vehicle electric motor.

Keywords- electric generators, storage battery

195.SPEED CONTROL OF PMDC MOTOR USING BRIDGELESS SEPIC CONVERTER

Author name: Mrs.L.Pattathurani

Abstract:

The bridgeless SEPIC converter design is used for the speed control of permanent magnet DC motor. This paper focuses the design of Bridgeless SEPIC topology having reduced switching and conduction losses with improved power factor. It is designed to work in Discontinuous Conduction Mode (DCM) to achieve the speed control of DC motor by varying the input supply to the armature. This converter is investigated theoretically and the performance comparisons of this proposed converter is verified with MATLAB simulation. The design example of a low voltage and PMDC Motor is developed.

Keywords- Discontinuous Conduction Mode (DCM), MATLAB simulation

196.FPGA BASED REAL-TIME IMAGE SEGMENTATION FOR MEDICAL SYSTEMS AND DATA PROCESSING

Author name: Mrs.T.Muthukumari

Abstract:

Medical imaging often involves the injection of contrast agents and subsequent analysis of tissue enhancementpatterns. X-ray angiograms are projections of 3D reality into 2D representations there is a fairamount of self occlusion among the vessels. Hence one cannot extract the vessels directly using the image intensitiesor gradients (edge) alone. Vessel extraction from angiogram images is useful for blood vessels measurement and computervisualizations of the coronary artery. This project describes the algorithm for automatic segmentation of coronaryarteries in digital X-ray projections (coronary angiograms) .The pattern recognition technique used in this project is

K-Means clustering. In this technique clusters are formed based on the minimum distance criteria with random seedpoint selection. As the dataset's scale increases rapidly, it is difficult to use K-means and deal with massive data, so animproved K-means algorithm is proposed.

Keywords- X-ray angiograms, 2D representations.

197.DESIGN AND IMPLEMENTATION OF SINGLE STAGE INTEGRATED BUCK-FLYBACK CONVERTER BASED POWER SUPPLY

Author name: Mr.A.Antony Charles

Abstract:

This paper investigates the integrated buck-flyback converter as a good solution for implementinglow- cost high-power-factor ac-dc converters with fast output regulation. It will be shown that,when both buck and flybacksemistages are operated in discontinuous conduction mode, thevoltage across the bulk capacitor, which is used to store energy at low frequency, is independentof the output power. This makes it possible to maintain the bulk capacitor voltage at a low valuewithin the whole line voltage range. This project implements a buck converter for the first stageand flyback converter for output stage. These topologies are very good solution for fast output dynamics. Another advantage of this integrated buck-flyback converter, is that switch handlesthe highest of buck or flyback current not addition of both currents. The remaining current ishandled by the diodes of the integrated switch, which gives lower losses. The buck capacitorvoltage is independent of load, duty cycle, and switching frequency and it only depends on theac input voltage and the ratio of the two buck and flyback inductance. This is an importantfeature of the integrated converter operating in discontinuous mode, which allows them to providefast output voltage regulation. The simulation has been performed to verify the feasibility of theproposed LED lamp driver.

Keywords- LED lamp driver., bulk capacitor voltage.

198.AN ENERGY STORED QUASI Z SOURCE CASCADED MULTILEVEL INVERTER

Author name: Ms.D.Thaniga

Abstract:

In the world today, there is a huge demand of power, although we have sufficient energy

generation technique, renewable energy power generation plays a major role, like solar. This paper is about the control technique which includes ES-QZSI combined with CMI and energy storage in order to get constant output power without fluctuation from the solar panel. Combines cascaded multilevel inverter and quasi Z source inverter. Battery is used to balance the fluctuations of photovoltaic systems and achieve high voltage/high power. Solar power presents the intermittent and unscheduled characteristics, so energy storage is always added in PV system to get a smooth power. Energy stored QZSI (ES-QZSI) has already been proposed for PV system application. If combining the ES-QZSI with the CMI together, the ES-QZS-CMI based PV system will inherit all the merits of the energy storage and QZS-CMI based PV system. Moreover, comparing to the QZS-CMI based PV system, the new system can send the balanced power to the grid, and at the same time each module ensures separate MPPT to collect maximum solar power.

Keywords- QZSI (ES-QZSI),CMI

199.A VOLTAGE CONTROLLED DSTATCOM FOR POWER QUALITY IMPROVEMENT

Author name: Dr.Prajith prabhakar

Abstract:

Due to increasing complexity in the power system, voltage sag is becoming one of the most significant power quality problems. Voltage sag is a short reduction voltage from nominal voltage, occurs in a short time. If the voltage sags exceed two to three cycles, then manufacturing systems making use of sensitive electronic equipment's are likely to be affected leading to major problems. It ultimately leads to wastage of resources (both material and human) as well as financial losses. This is possible only by ensuring that uninterrupted flow of power is maintained at proper voltage levels. This project tends look at the solving the sag problems by using custom power devices such as Distribution Static compensator (D-STATCOM).Proposed scheme follows a new algorithm to generate reference voltage for a distribution static compensator (DSTATCOM) operating in voltage-control mode. The proposed scheme ensures that unity power factor (UPF) is achieved at the load terminal during nominal operation, which is not possible in the traditional method. Also, the compensator injects lower currents therefore, reduces losses in the feeder and voltage-source inverter. Further, a saving in the rating of DSTATCOM is achieved which increases its capacity to mitigate voltage sag. Nearly UPF is maintained, while regulating voltage at the load terminal, during load change. The state-space model of DSTATCOM is incorporated with the deadbeat predictive controller for fast load voltage regulation during voltage disturbances. With these features, this scheme allows DSTATCOM to tackle power-quality issues by providing power factor correction, harmonic elimination, load balancing, and voltage regulation based on the load requirement.

Keywords- DSTATCOM ,UPF

200.A SINGLE STAGE ZVS-PWM INVERTER FOR INDUCTION HEATING APPLICATIONS

Author name: Mrs.T.Muthukumari

Abstract:

This paper deals with a single phase AC/DC/AC soft switching utility frequency AC to high frequency AC converter. Single phase half bridge inverter is used to provide continuous sinusoidal input current with nearly unity power factor at the source side with extremely low distortion. The proposed converter can operate with zero-voltage switching during both switch-on and switch-off transitions. Moreover, this topology doubles the output voltage, and therefore, the current in the load is reduced for the same output power.The working of the high frequency inverter using the latest MOSFETs are illustrated, which includes high frequency AC power regulation ranges based on zero voltage soft switching (ZVS) operation ranges are compared with those of the previously developed high frequency inverter

Keywords- MOSFETs and zero voltage soft switching.

201.A BL-CSC CONVERTER FED BLDC MOTOR DRIVE WITH POWER FACTOR CORRECTION

Author name: Dr.Prajith prabhakar

Abstract:

This paper presents a power factor correction (PFC) based bridgeless-canonical switching cell (BL-CSC) converter fed brushless DC (BLDC) motor drive. The proposed BL-CSC converter operating in a discontinuous inductor current mode is used to achieve a unity power factor at the AC mains using a single voltage sensor. The speed of BLDC motor is controlled by varying the DC bus voltage of the voltage source inverter (VSI) feeding BLDC motor via a PFC converter. Therefore, the BLDC motor is electronically commutated such that the VSI operates in fundamental frequency switching for reduced

switching losses. Moreover, the bridgeless configuration of CSC converter offers low conduction losses due to partial elimination of diode bridge rectifier at the front end. The proposed configuration shows a considerable increase in efficiency as compared to the conventional scheme,a combination of switch, capacitor (C1) and diode (D) is known as a 'canonical switching cell' and this cell combined with an inductor (Li) and a DC link capacitor (Cd) is known as a CSC converter.With proper design and selection of parameters, this combination is used to achieve PFC operation when fed by a single phase supply via a DBR (Diode Bridge Rectifier) and a DC filter.

Keywords- Diode Bridge Rectifier, power factor correction

202.BIDIRECTIONAL DC-DC CONVERTER FOR MICRO WIND TURBINE

Author name: Dr.Prajith prabhakar

Abstract:

The paper presents the application of low cost boost rectifier for micro wind turbine generator using Bidirectional dc-dc converter. The proposed system with battery storage and micro wind generating system provides energy saving and uninterruptable power within distribution network. Hardware can be implemented using a low cost microcontroller.

Keywords- micro wind generating &microcontroller.

203.CYCLOCONVERTER BASED UPS WITH ZVS AND ZCS SWITCHING FOR HARMONICS REDUCTION

Author name:Mr.A.Antony Charles

Abstract:

A new conversion system for a UPS (Uninterruptiblepower supply) using a high frequency link is described. Theproposed UPS consists of a high frequency inverter, a highfrequency transformer, high frequency cycloconverter usingphase shift modulation is proposed. Zero current switchingcommutation for full bridge active power switches and zerovoltageswitching operation for cycloconverter bi-directionalswitches are obtained. Soft switching operation is providedin a wide range of voltage regulation without utilizing anauxiliary inductor in the primary side of an isolatingtransformer. Based on the simulation and experimentalresults, the steady – state operation principles of theconverter are analysed. The simulationis done usingMATLAB 7.3 under simulink. Experimental results from2KHz fixed switching frequency is presented to introducethe switching operation

Keywords-- Frequency , Phase shift modulation , Zero-Voltage switching (ZVS) , Zero-current switching (ZCS)

204.RISK FREE COAL MINES USING WIRELESS SENSOR NETWORKS

Author name:Dr.Prajith prabhakar

Abstract:

To design a monitoring system for coal mine safetybased on wireless sensor network. Humidity, temperatureand unwanted gases like methane, carbon monoxide arethe major factors which affect the miners. In this projectdetecting temperature, humidity values in case of abnormalconditions and finding the leakage of unwanted gassesusing different sensors. Detected values can be transmittedto ground station using zigbeeprotocol and intimate to theminer usinglcddisplay . Health monitoring of the minercan also be done through heart beat monitoring usingvibration sensor. Here carbon monoxide is taken as aimportant factor and made a brief research on how it isaffecting the miners. Counting system can be designedusing infrared and it is used to calculate the number ofpersons entering and existing the working area.

Key Words*:* ZIGBEE protocol, Wireless Sensor Network.

205.IMPLEMENTATION OF Z-SOURCE INVERTER FED INDUCTION MOTOR FOR CONTROLLING SPEED

Author name:Dr.Prajith prabhakar

Abstract:

Traditionally Voltage Source Inverter (VSI) and CurrentSource Inverter (CSI) fed induction motor drives have alimited output voltage range. Conventional VSI and CSIsupport only current buck DC-AC power conversion andneed a relatively complex modulator. The limitations of VSIand CSI are overcome by Z-source inverter.The Z-source inverter system employs a uniqueimpedance(LC) network at the main circuit.By controllingthe shoot-through duty cycle, the Z-source can produceany desired output AC voltage, even greater than the linevoltage (i.e. 325V for 230V AC) regardless of the inputvoltage. The proposed Z-source inverter system providesride-through capability during voltage sags, reduces lineharmonics, improves power factor and reliability, andextends the output voltage range. Analysis and simulationresults were presented to demonstrate these features. Thissystem reduces harmonics, electromagnetic interferencenoise.

Key Words:current source inverter (CSI), voltagesource inverter (VSI), Z-source inverter (ZSI), electromagnetic interference (EMI).

206.OPTIMIZATION OF MULTILEVEL INVERTERS WITHCASCADE TOPOLOGY

Author name:Ms.Thaniga.D

Abstract:
Multilevel inverters with a large number of steps cangenerate high quality voltage waveforms, good enough tobe considered as suitable voltage template generators.Many levels or steps can follow a voltage reference withaccuracy, and with the advantage that the generated voltagecan be modulated in amplitude instead of pulse-widthmodulation. An active harmonic elimination method isapplied to liminate any number of specific higher orderharmonics of multilevel converters with unequal dc voltages.This paper is focused on minimizing the number of powersupplies and semiconductors for a given number of levels.The simulation is done using MATLAB 7.3 under simulink.Experimental results obtained from an optimized prototype,capable of generating 9 levels of voltage with only two powersupplies and 8 transistors per phase, are shown.

KEYWORDS: Amplitude (AM), pulse-width modulation(PWM),cascade topology(H-brige)

207.IMPLEMENTATION OF MULTIPORT BIDIRECTIONAL C-DC CONVERTER USING EMBEDDED CONTROLLER

Author name:Mr.A.Antony charles

Abstract:
Multiport dc–dc converters are particularly interestingfor sustainable energy generation systems where diversesources and storage elements are to be integrated. Thispaper presents a zerovoltage switching (ZVS) three-portbidirectional dc–dc converter. A simple and effective dutyratio control method is roposed to extend the ZVSoperating range when input voltages vary widely. Softswitchingconditions over the full operating range areachievable by adjusting the duty ratio of the voltage appliedto the transformer winding in response to the dc voltagevariations at the port. Keeping the volt-second product (halfcyclevoltage-time integral) equal for all the windings leadsto ZVS conditions over the entire operating range. A detailedanalysis is provided for both the two-port and the threeportconverters. Furthermore, for the three-port convertera dual-PI-loop based control strategy is proposed to achieveconstant output voltage, power flow management, and softswitching.The three-port converter is implemented andtested for a fuel cell and super capacitor.

Keywords—Bidirectional converters, fuel cells,multiport converters, softswitching, super capacitors, threeportconverters.

208.TOPOLOGY CONTROL BASED POWER AWARE ANDBATTERY–LIFE-AWARE DYNAMIC SOURCE

Author name:Mrs.T.Muthukumari

Abstract:
As the use of small portable and mobile computingdevices increase, the MANET (mobilead hoc network) isbecome an increasingly popular topic of research anddevelopment activities. MANET is power constrained sincenodes operate with limited battery energy. To maximize thelifetime of these networks at the same time of holding the conventional network performance. A new DSR-baseenergy saving routing is proposed and analyze in this paper.The paper shows that WSN save power by using traffic engineering based approaches, topology control based approaches or reserved based approaches and that all energy saving approaches can be classified under these three main categories. Using these three categories or combinations of them is a key to investigating routing design issue that needs to be enhanced in order to improve the life span of a wireless network. The paper applies the new introduced classification to a number of key routing protocols to show that it provides a distinction in their approaches towards saving power and that it is capable of highlighting the key features related to energy saving in each of these routing.

Keywords:MANET, conventional network

209.DESIGN OF ADAPTIVE EDGE DETECTION FILTER ON AN FPGAFOR VIDEO IMAGE PROCESSING

Author name:Mr.A.Antony Charles

Abstract:
The embedded system have transform technologyproduct from everyday consumer electronic devices tocomplex industrial system.As hardware and memorybecome less expensive and more powerful, embeddedsystem will become even more pervasive .At this time,design will more complex .To meet this demand, designermust find the ways to efficiently develop software andhardware at an even faster rate. Methodologies that addressthis is model based design. Simulink is an environment formultidomain simulation and model based design fordynamic and embedded systems .It provides an interactivegraphical environment and

a customizable set of blocklibraries.So let we design, simulate, implement and test avariety of time varying systems, including communications,controls , signal processing ,video processing and imageprocessing.Edge detection is a terminology in imageprocessing and computer vision, particularly in the areasof feature detection and feature extraction .Theimplementation of an adaptive edge detection filter on anFPGA using a combination of hardware and softwarecomponents provides the necessary performance for realtime image and video processing ,while retaining the systemflexibility to support an adaptive algorithm.

Keywords: *FPGA, communication protcols*

210.DESIGN AND REALIZATION OF MODBUSPROTOCOL BASED ON EMBEDDED LINUX SYSTEM

Author name: Dr.Prajith prabhakar

Abstract:
With the rapid development of the embedded computertechnology, the new generation of industrial automation data acquisition and monitoring system,which takes the highperformance of embedded microprocessor as its core,adapts well to the application system. It meets the strictrequests of the function,reliability, cost, size and powerconsumption, etc. In the industrial automation applicationsystem, the Modbus communication protocol is widespreadindustrial standard and is used in massive industrialequipments, including DCS, PLC, RTU and the intelligentinstrument, etc. In order to reach the demand of theembedded data acquisition monitoring system of theindustrial automation application, an embedded dataacquisition monitoring platform based on Modbus protocolunder the Linux environment is designed in this paper. Theserial port Modbus master protocol is realized, whichincludes two kinds of communication mode: ASCII and RTU.As a result, communicating with various serial Modbus salveprotocol equipments can be satisfied. The Modbus masterrealized by this embedded platform is stable and reliable. Ithas excellent prospect in the embedded data acquisitionmonitoring system of new automation applications.

Keywords: Embedded system; Embedded Linux; Modbusprotocol; Data acquisition; Monitoring and control

211.PNEUMATIC DOUBLE HEADED SHAPER MACHINE

MR. ARUN S[1], MR. KANNAN S[1],
Mr.D.ARUNKUMAR[2]
1Assistant Professor, Department of Mechanical Engineering, Jeppiaar institute of technology, Kunnam , Sriperumpudur, Chennai – 631604, Tamil Nadu, India
.2 Assistant Professor, Department of Mechanical Engineering, Jeppiaar institute of technology, Kunnam , Sriperumpudur, Chennai – 631604, Tamil Nadu, India.

ABSTRACT:
A shaper is a machine which is used for to machining a slot in the work piece by using single point cutting tool. The standard or plain shaper has a ram, reciprocating horizontally.This shaper machine is fabricated by the working principle of whit worth quick return mechanism. The shaper uses a 5/2 solenoid valve a double acting pneumatic cylinder.The project intends to use shaper for high production as well. A small skelton, structure has been fabricated to demonstrate the machining time reduction in shaping machines.Air enters the cylinder due to pressure difference. When the air enters the piston end, forward stroke takes place. When the air enters the rod end of the cylinder return stroke takes place thus machining the work piece materials.This pneumatic double headed. Shaper machine can be widely used in low cost automation in manufacturing industries. The metal removal rate is high. The manpower requirements is also reduced.

212.INFLUENCE OF PROCESS PARAMETERS ON NYLON66 USING ABRASIVE WATER JET MACHINING

MR.ARUN S[1], MR. KANNAN S[2]
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ABSTRACT: Abrasive water jet machining is anunconventional machining process in which the metal is removed from brittle and hard material in the form of microchips. With increase in need of plastics, fibre, metals the present study highlights the influence of different parameters like pressure, SOD, time, abrasive grain size on the metal removal of Nylon66(polyamide) by abrasive water jet machining .The result of experiment conducted were analysed and optimized with TAGUCHI method of optimization and ANOVA for optimal value. The project outlines an experimental study to optimize the effects of cutting parameters on surface finish (μm), kerf width (mm) and MRR (g/min) of Nylon66 work material by employing Taguchi technique. The orthogonal array, signal

to noise ratio and analysis of variance were employed to investigate the performance characteristic in abrasive water jet machining. Four parameters were chosen as process variables pressure (bar), Transverse speed (mm/min), Abrasive flow rate (mg/min) and Stand-Off distance (mm). It is found that Transverse speed is the major parameter that influences the MRR (g/min), Kerf width (mm) and Surface finish (μm). Increase in Pressure (bar) and Abrasive flow rate (mg/min) also increases the MRR (g/min) and Surface finish (μm).

213.ANALYSIS OF WELDING PARAMETERS OF STAINLESS STEEL SR 304 BY TUNGSTEN INERT GAS WELDING

ABSTRACT:

SS304 is an austenitic grade stainless steel which is used for a wide range of construction applications. It contains 18% Chromium and about 8-10% of Nickel as the major elements. It is also used for making tanks containing a variety of liquids and solids.TIG welding is a fusion welding process in which welding is done by a non-consumable tungsten electrode. It is normally used to weld stainless steel and other non-ferrous metals such as Aluminium and Magnesium, but again it can be applied to all the metals. The welding parameters of TIG welding such as current, voltage and filler rod affects the quality of the weld. In this project the strength of the weld for different currents are compared by conducting various test like tensile test, bend test and hardness test. In the tensile test the stress-strain curve, load-displacement curves are plotted. In bend test the load- displacement curve is plotted. Hardness test, microstructure and macrostructure studies are also carried out to determine the quality of the weld.

214.DESIGN AND OPTIMIZATION OF WARE HOUSE LAYOUTS FOR EFFECTIVE MATERIAL MOVEMENT IN SOUTHERN PRESSINGS

ABSTRACT:

Ware house management is a key part of the supply chain and its primary aim is to control the movement and storage of materials within a ware house and the process associated transactions including shipping, receiving, put away and pricing. The material movement time in southern pressings is studied and it is reduced by designing the new layout for the ware house. This will be an original study done to understand the existing layout in southern pressings. It will also pave way to reduce the material movement time and to optimize the new ware house locations and the facilities in it. This study will limit its criteria to southern pressings manufacturing units and its tier industries. This study will be conducted in the present ware house of southern pressings. The data sans the layout details are collected from the organization environment. Quantitative analysis will be done on the collected data such as ALDEP (Automated Layout Design Program) algorithm for new layout designs and multi criteria decision making process such as Analytical Hierarchy Process (AHP) for optimizing the facilities. This study will help in concluding the optimized ware house locations and facilities in it for southern pressings and will recommend areas for improvement.

215.A FINITE ELEMENT STUDY ON MATERIAL BEHAVIOR OF NYLON 66 FOR VARIOUS PROCESS PARAMETER IN ABRASIVE JET MACHINING

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ABSTRACT:

A finite element model of abrasive jet impact on nylon 66 for different process parameters such as nozzle angle and abrasive velocity are developed to analyse the influence of stress.The nature of the mechanisms involved in the domain of AWJ machining is still not well understood but is essential for AWJ control improvement. It is based on an AWJ process which in this case represents the impact of a particular abrasive grain .The combination of five nozzle angles 30º, 45º, 60º, 75º and 90º with three abrasive velocities 400m/s, 500m/s and 600m/s has been simulated using the tools LS-DYNA and Hypermesh for obtaining the results such as maximum shear stress, plastic strain, pressure, von mises stress and result velocity for effective material removal of nylon 66 such as less duration of material removal and maximum material removal rate.Totally fifteen simulation has been carried out with a mesh element as X mesh for nylon 66 and tetramesh for silicon carbide which acts as abrasive particle. For the above said results and consolidated for the best solution. From the simulation it has been found that the 90º and 600m/s combination is

recommended for its maximum shear stress for material removal with less time and the parameter can be easily set for its effective use.

216.WEIGHT OPTIMIZATION OF HOPPER IN ELECTROSTATIC PRECIPITATOR

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ABSRACT:
The particulate matters released out of the industries such as boiler, cement, power generation etc. received attention because of firm environmental protection agency (EPA). Electrostatic precipitators (ESP) developed by Frederick G. Cottrell (Professor of chemistry at the University of California, Berkeley) is the most commonly used technologies for separation of ash particles from the emission. The objective of this work is optimizing the stiffener size and shape so that the weight of the hopper and nozzle can be as minimum as possible. The main aim of this work is to reduce the existing weight of the hopper 5%. In this present work the APDL programmer is built for the modeling of the hopper and nozzle and to reduce the weight. The simulation result shows that by taking the optimization runs the software gives the idea of the stiffener size and shape to be used. The results show the appropriate weight distribution and use of stiffener size where needed and all the stress and deflection are within limit.

217.ALTERNATIVE METHOD FOR PURIFICATION OF WATER USING DYNAMO AND REVERSE OSMOSIS

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ABSTRACT:
Water purification is the removal of contaminants from untreated water to produce drinking Water that is pure enough for the most critical of its intended uses, usually for human Consumption. Water contains many types of Dissolved salt (mainly NaCl) in it and the process which used to remove these salt and other Minerals from water is called desalination. The amount of salt present in water is measured in Term of salinity. Reverse Osmosis is best used method for conversion of brackish and sea Water into fresh water i.e. for water purification. Reverse osmosis removes 96-99% of Elemental ions, 99% of almost all other impurities. Energy consumption is a key factor which influences the freshwater production cost in reverse osmosis (RO) process. Energy recovery and reuse options have already been very well explored in the current desalination industry. Achieving minimum theoretical specific energy consumption for water recovery is not feasible due to effects of concentration polarization, membrane fouling and hydraulic resistance to permeate flow. Due to these limitations, energy recovery along with water recovery can be a better alternative to improve energy consumption and economics of the RO process both in small & large scale applications. This paper reviews currently available process configurations, operating strategies, and discusses potential pathways to recover and recycle energy and water to improve the performance of the RO process.

218.INVESTIGATION OF ENERGY DENSITY AND ORIENTATION OF LASER SINTEREDBIOCOMPATIBLEMATERIAL

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ABSTRACT:
Selective laser sintering is a kind of Rapid prototyping process whereby a three-dimensional part is built layer wise by laser scanning a powder. The effects of Surface Finish,Hardness, Tensile and Compressive Strength has been investigated on biocompatible material (Polyamides) which has been laser sintered by using selective laser sintering process.The various process parameters such as laser power, scan spacing and Orientation of SLS has been identified for optimization. Experiments have

been carried out by considering L9 orthogonal array by varying the levels of above said parameters on those sintered specimens. The outputs such as hardness, surface roughness, Tensile and Compressive Strength has been identified and optimized by means of design of experiments taguchi technique to evaluate the best parameter values for the larger harness and smaller surface roughness of the sintered specimens. The SN ratio, one way ANNOVA and regression model has been generated to predict the Hardness and Surface Roughness. It's been found that Laser Power 12.5 (W), Scan Spacing 0.13 (mm) and Orientation 90(Deg) yields the smaller Surface Roughness and Laser Power 10.5, (W), Scan Spacing 0.17, (mm) and Orientation 45(Deg) yields the larger Hardness & Tensile. For compressive strength Laser Power 14.5 (W), Scan Spacing 0.13 (mm) and Orientation 45 (Deg) yields the larger value of the sintered material

219.DESIGN OF PUNCHING MACHINE FOR LOW COST APPROACH

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ABSTRACT:
The main aim of this project is to perform punching operation on the work piece with reduced manpower, cost and increased safety. The proposed work describes the design and fabrication of prototype of punching machine using synchronous motor and rotary worktable. Punching process is one of the most important and necessary processing steps in sheet metal industry. It is possible to achieve good results in the form of reduced manufacturing lead time, reduced cost and increased safety of the worker. In this process the worktable is made to rotate, this provides more safety to the workers during the operation.

220.EMISSIONS ANALYSIS ON SECOND GENERATION BIODIESEL

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Abstract:
This work investigates the effect of adding octanol with biodiesel derived from cashew nut shell on its emissions characteristics is conducted in stationery diesel engine. The main purpose of this work is intended to reduce the emissions by fuelling biodiesel derived from cashew nut shell and the octanol blends. Cashew nut shell biodiesel is prepared by transesterification process. Oxygenated additive used in the work is octanol. The experiment is conducted using four test fuels such as, biodiesel derived from cashew nut shell (CNSBD), a fuel containing 90% cashew nut shell biodiesel and 10% octanol (CNSBD90+Oct10), a fuel containing 80% cashew nut shell biodiesel and 20% octanol (CNSBD80+Oct20) and neat diesel. Experimental work concluded that by adding 10% of octanol to cashew nut shell biodiesel 10.15%, 2.67%, 5.13% and 2.14%reduction in CO, HC, NOx and Smoke emissions were observed respectively. Further by fueling with these blends, no modifications in engines were required.

221.PERFORMANCE AND EMISSION ANALYSIS ON BLENDS OF DIESEL, WASTE COOKING OIL AND N-PENTANOL IN CI DIESEL ENGINE

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Abstract:
This study proposes an approach to formulate a renewable, eco-friendly fuel by recycling waste cooking oil (WCO) with diesel (D) and n-pentanol (P) to improve fuel-spray characteristics. Three ternary blends (D50-WCO45-P5, D50-WCO40-P10 and D50-WCO30-P20) were selected based on the stability tests and prepared with an objective to substitute diesel by 50% with up to 45% recycled component (WCO) and up to 20% bio-component (n-pentanol) by volume. The fuel properties of these ternary blends were measured and compared. The emission impacts of these blends on a diesel engine were analysed in comparison with diesel and D50-WCO50 (50% of diesel + 50% of WCO) under naturally articulated and EGR (exhaust gas recirculation)

approaches. Doping of n-pentanol showed improved fuel properties when compared to D50-WCO50. Viscosity is reduced up to 45%. Cetane number and density were comparable to that of diesel. Addition of n-pentanol to D50-WCO50 presented improved brake specific fuel consumption (BSFC) for all ternary blends. Brake thermal efficiency (BTE) of D50-WCO30-P20 blend is comparable to diesel due to improved atomization. Smoke opacity reduced, HC emissions increased and CO emissions remained unchanged with doping n-pentanol in the WCO. NOx emission increases with increase in n-pentanol and remained lower than diesel and all load conditions. However, NOx can be decreased by up to threefold using EGR. By adopting this approach, WCO can be effectively reused as a clean energy source by negating environmental hazards before and after its use in diesel engines, instead of being dumped into sewers and landfills.

222.EXPERIMENTAL INVESTIGATION ON THE EFFECT OF IGNITION ENHANCERS IN THE BLENDS OF TAMARIND BIODIESEL/DIESEL BLENDS ON A CI ENGINE

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Abstract:

The present study utilizes two oxygenates, dimethyl carbonate (DMC) and n-butanol (n-B), derived from non-food-based lignocellulosic biomass in a blended form with transesterified oil extracted from waste tamarind seeds to power a diesel engine for any improvement in combustion, performance, and emission characteristics. Three test fuels, viz., B50%, B50% + DMC10%, and B50% + n-B10%, were prepared by splash blending, and the results were correlated with baseline diesel fuel. The experimental results indicate that accrual of oxygenates to tamarind oil methyl ester has improved the combustion characteristics in comparison to diesel and B50% + n-B10%: the peak heat release rate (HRR) for B50% + DMC10% was 4.8 and 5.1% higher, respectively. The brake thermal efficiency (BTE) of an engine fueled with a B50% + DMC10% blend was better than that fueled with B50% + n-B10% but lower than that fueled with baseline diesel. The oxides of nitrogen (NOx) emission were higher side when the engine was fueled with both oxygenated blends compared to diesel: B50% + DMC10% exhibits 6 and 2% higher values than diesel and B50% + n-B10%, respectively, at peak load conditions. Smoke opacity experienced a sharp reduction when fueled with a B50% + n-B10% blend; there was about 11.76, 19.60, and 23.52% reduction when fueled with diesel, B50%, and B50% + DMC%, respectively. Carbon monoxide for B40% + DMC10% was the lowest compared to diesel, B50%, and B50% + n-B10%, and there were about 21.5, 86.8, and 34.7% reduction in emissions, respectively. Hydrocarbon emission for B50% + DMC10% was the lowest compared to diesel, B50%, and B50% + n-B10%, and there were about 8.6, 27.5, and 17.2% reduction in emissions. Reformulation of diesel with DMC, n-butanol, and tamarind oil methyl ester renders a chance to decrease emissions and use renewable fuel in diesel engines.

223.EFFECTIVE UTILISATION OF WASTE PLASTIC OIL IN A DI DIESEL ENGINE USING HIGH CARBON ALCOHOLS AS OXYGENATED ADDITIVES

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ABSTRACT:

This present study utilizes fuels derived from non-food based sources (a) waste plastic and (b) ligno-cellulosic biomass to power diesel engines. The energy embodied in waste plastic could be recovered by catalytic pyrolysis as waste plastic oil (WPO) andligno-cellulosic biomass can be subjected to gasification, pyrolysis, steam reforming and bacterial fermentation to yield platform chemicals. This method presents a sustainable solution for (a) waste plastic management and (b) diesel dependency. This study aims at the effective utilization of WPO in

a light-duty, water-cooled, four-stroke, direct-injection diesel engine. For this purpose, WPO was extracted from mixed waste plastic via catalytic pyrolysis in a lab-scale extraction unit. Preliminary testing was carried out by analyzingthe engine characteristics of the selected diesel engine fueled with neat WPO. Experiments were conducted at three injection timings (21°, 23° and 25°CA bTDC) and exhaust gas recirculation (EGR) rates (10, 20 and 30%) at the engine's rated power output. When compared to diesel, the combustion event occurred closer to the TDC when the injection timing is delayed from 25°CA bTDC to 21°CA bTDC. The peak in-cylinder pressures and HRRs dropped gradually as the injection timing was delayed from 25°CA bTDC to 21°CA bTDC at all EGR rates. WPO injected at the advanced injection timing of 25°CA bTDC and low EGR rate of 10%, WPO was found to deliver diesel-like fuel consumption

224.A SUSTAINABLE AND ECO-FRIENDLY FUELING APPROACH USING WASTE VEGETABLE OIL WITH PARAMETRIC OPTIMIZATION OF EMISSION AND PERFORMANCE CHARACTERISTICS IN A DI DIESEL ENGINE

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ABSTRACT:

This study utilizes fuels derived from non-food based sources (a) waste cooking oil (WCO) and (b) ligno-cellulosic biomass to power diesel engines. This method presents a sustainable solution for (a) waste cooking oil management and (b) diesel independency. This study aims at the effective utilization of WCO in a stationary direct-injection diesel engine using high carbon alcohols like n-propanol, n-butanol and n-pentanol as ternary blend components with diesel. For this purpose, WCO collected from restaurants were used. Investigation was carried out by analyzing the engine characteristics when fueled with ternary blends of n-pentanol, diesel and WCO. Three ternary blends (D50-WCO45-Pe5, D50-WCO40-Pe10 and D50-WCO30-Pe20) were selected based on the stability tests and prepared with an objective to substitute diesel by 50% with up to 45% recycled component (WCO) and up to 20% bio-component (alcohols) by volume.The effect of these blends on combustion, performance and emissions of a DI diesel engine was analyzed in comparison with diesel with and without exhaust gas recirculation (EGR). Addition of n-pentanol to D50-WCO50 presented improved brake specific fuel consumption (BSFC) for all ternary blends. Brake thermal efficiency (BTE) of D50-WCO30-Pe20 blend is comparable to diesel due to improved atomization. Smoke opacity reduced, HC emissions increased and CO emissions remained unchanged with increasing n-pentanol in the blends. NOx emission increased with increase in n-pentanol content in D50-WCO50 but remained lower than diesel. However, NOx can be further decreased only by using EGR. It was concluded that increase in percentage of high carbon alcohols in ternary blends resulted in better engine characteristics.

225.AN EXPERIMENTAL INVESTIGATION OF LIGNO-CELLULOSIC BIOFUEL ADDITIVES TO DIESEL BLENDS FOR IMPROVEMENT OF PERFORMANCE COMBUSTION AND EMISSION CHARACTERISTICS OF A CI ENGINE

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ABSTRACT:

The present study utilizes two high carbon bio-alcohols (cyclo-hexanol and n-octanol) derived

from non-food based ligno-cellulosic biomass in blended form with diesel to power a light-duty direct-injection single cylinder diesel engine that is widely used in Indian agricultural sector. In this study, two high carbon alcohols, *viz*., cyclo-hexanol and n-octanol derived from ligno-cellulosic biomass were proposed as blend components with diesel.The performance and emissions of a light-duty, water-cooled, single-cylinder, direct-injection diesel engine fueled with cyclo-hexanol/diesel and n-octanol/diesel blends were analyzed. Experiments were conducted at the rated load (bmep = 5.3bar) and speed (1500rpm) using the blend composition of n-octanoland cyclo-hexanolin diesel (10%, 20% and 30% by vol.), EGR (10%, 15% and 20%) and injection timing (19°, 21° and 23° CA bTDC) as controllable factors. The conclusions (with reference to baseline engine fueled with diesel at its stock settings) drawn were presented. Peak pressure and HRR of the engine for all alcohols reduced gradually with increasing EGR rates. The combustion shifted closer to the TDC (due to longer ignition delay) when the start of injection is delayed from 23°CA to 19°CA bTDC. The peak in-cylinder pressures and HRRs were noticed to be dropping gradually as the injection timing was delayed from 23°CA to 19°CA bTDC. NOx emissions were found to be better at delayed injection.

226.DRIVE MECHANISM FOR A GROUND BASED TRACKING ANTENNA SYSTEM

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ABSTRACT:
This paper deals with the Design of a drive mechanism for antenna , which provides the steering mechanism for the spatial orientation of the antenna reflector. The drive enables rotation of antenna reflector from -90° to +90° about the Elevation axis (in the vertical plane) and 0° to 360° about the Azimuth axis (in the horizontal plane).
The work is limited to the design of drive system of the antenna and does not deal with the structural aspect. The design should satisfy the criteria of compactness, stiffness, and positional accuracy with minimum backlash, optimum torque characteristics and reliability aspects.
The design approach comprises of evaluating the various drive options and selection of appropriate options based on the above criteria.
From the assessment of the available options the Epicyclic Gearbox drive system is found to be most suited. The overall Drive Mechanism encompasses the design of the Epicyclic Gearbox, selection of an appropriate Bearing for the Elevation movement and selecting the most suited coupling and Motor.
Modular design concepts are adopted. The design is divided into different modules and computer programs are developed for the reflector torque, inertia load, gear design etc. Selection was made for standard products available in the market such as bearings, couplings etc. The drive torque requirements of the antenna are due to wind, inertia of moving parts, acceleration requirements, friction and unbalance.

227.UNIVERSAL VACUUM FIXTURE

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ABSTRACT:
From ancient years production engineering is one of the booming fields in any of the industrial world. There are many supports for a production process such as tools, jigs, fixtures which lead to the successful completion of an end product. A fixture is a device one among them used to clamp the work pieces during a machining operation.
There are many types of fixtures used in today's trends such as, mechanical fixtures, pneumatic fixtures, vacuum fixtures and magnetic fixtures. Among this a vacuum fixture is one used to hold

the objects using vacuum force. And the major drawback with current vacuum clamping method is that it can clamp only flat objects perfectly parallel to the clamping surface.
So, we have decided to fabricate this vacuum fixture in way that, it is capable of clamping cylindrical types of works also.

228.DESIGN OF SMART ENGINE

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ABSTRACT:
The engine stays running continuously even at idling conditions like waiting at a signal, etc. During these times all the cylinders in the engine are continuously fed with the fuel, ignited, burnt and exhausted. This involves a lot of fuel wastage. Our project involves cutting out the fuel supply to the 3 out of 4 cylinders during the idling conditions, thereby reducing the fuel usage and makes the engine more economic.

229.STUDY ON THE WATER JET CUTTING PROCESS

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ABSTRACT:
Waterjet cutting, introduced in the early '70s, uses a highly pressurized stream of water, sometimes with an added abrasive. The waterjet stream, moving at nearly three times the speed of sound, can penetrate almost any material and thickness. Waterjets are often used on composites and plastics that cannot tolerate heat, mechanical damage, or delamination. And because the jet of water is constricted to a tiny diameter at such high pressures, the workpiece does not get wet. Manufacturers wanting to cut plastics, glass, metals, and food more efficiently, are often thwarted by the slow and inexact cutting caused by knives, shears, saws, and other technologies. Graphite/epoxy composites cannot be cut to the required tolerances even with plasma arc or laser cutting. However, waterjets can cut to near-net shape on complex configurations and produce high-quality, dust-free cuts in virtually any material. Waterjets are widely used in aero-space, automotive, electronics, and other industries to cut products like titanium aircraft components, printed circuit boards, automobile dashboards, diapers, cake and candy. Automated waterjet cutting systems offer power, accuracy, and repeatability.

230.PERFORMANCE INVESTIGATION OF PNEUMATIC TIRES

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ABSTRACT:
Air-filled tires are known as pneumatic tires, and these are the type in almost universal use today. Pneumatic tires are made of a flexible elastomer material such as rubber with reinforcing threads/wires inside the elastomer material. The air compresses as the wheel goes over a bump and acts as a shock absorber. The air in conventional pneumatic tires acts as a near constant rate spring because the decrease in the tire's volume as the tire compresses over a bump is minimal. "Airless" tires usually employ a type of foam or sponge like construction which consists of a large number of small air filled cells. As a result, compression is localised within the tire and the effective spring rate rises sharply as the tire compresses. The result is a tire which is less forgiving, particularly with regards to sharp transient bumps and provides poor ride and handling characteristics. The "steering feel" of such tires is also different from that of pneumatic tires, as their solidity does not allow the amount of torsion that exists in the carcass of a pneumatic tire under steering forces, and the resultant sensory feedback through the steering apparatus; as a result they feel as if they are pivoting on bearings at the contact point. They are more popular for bicycles than for automobiles, which have tires which are much more robust and immune to puncture

231.STUDY AND ANALYSIS OF HYBRID VEHICLES

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ABSTRACT:A hybrid vehicle (HV) is a vehicle that uses two distinct power sources such as an on-board rechargeable energy storage system (RESS) and a fuelled power source for vehicle propulsion, Human powered bicycle with battery assist, and a sail boat with electric power. The Plug-in hybrid electric vehicles combine the best of electric and hybrid-drive technologies. What is more, these plug-in hybrids should not be much more complex, heavy or pricey than present hybrid models. First, their internal combustion engines will shrink as their electric motors and batteries grow. Second, batteries and electronic components have been steadily dropping in price. A conventional auto costs about 12 cents a mile to operate at current gasoline prices. A plug-in hybrid could run on electrons at three cents mile using electricity costing about eight cents a kilowatt-hour, the current average residential rate. And given that half of American cars travel only 25 miles a day or less, a plug-in with a battery capable of providing power for a 20-mile range could cut petroleum-based fuel consumption by as much as 60 percent. Even a long-distance commuter driving a plug-in hybrid could go most of a typical day on less expensive electricity stored in an advanced batter that was topped up overnight via a conventional wall socket and partially recharged at work during the day.

232.PERFORMANCE STUDY ON HYDRAULIC ELEVATORS

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ABSTRACT:

The hydraulic elevators are distinguished of the other ones because they take a piston that inside she has oil, and it is what propels him to be able to ascend. The machine that takes this full with oil, and when the hydraulic elevator wants to lower, the machine absorbs the oil that is in that moment in the piston and in that instant it begins to lower down. This manoeuvre type is advisable for buildings with few heights, although they can also settle in buildings that they have more heights. The advantage of these types of hydraulic elevators is that they don't need room of machines up of the hole, since the hydraulic group can settle below or where more suits to the community of neighbours, although it is recommended that this installed near the hole of the elevator, to avoid possible yield decreases. There are two types of hydraulic elevators that are: with direct drive or with differential drive. These two types of elevators work to two speeds, for what the stops of floors become softer. The types of booth doors and of external, they can vary it depends on each company, but they can put on it depends on the space of the hole, with automatic, semiautomatic doors, or doors jambs.

233.STUDY AND INVESTIGATION OF HYDROELECTRICITY

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ABSTRACT:
Hydroelectricity is electricity obtained from hydropower. Most hydroelectric power comes from the potential energy of dammed water driving a water turbine and generator, although less common variations use water's kinetic energy or dammed sources, such as tidal power. Hydroelectricity is a renewable energy source. To produce hydroelectric power it is necessary to utilise the movement of significant amounts of water. Therefore, one would need to utilise a stream or weir. This requirement can prove problematic for many people, however, providing there is a hydro source relatively close by, it would be possible to set up a community hydro project. A typical hydro system would require a weir to divert the water flow as appropriate, a penstock pipe to pass the water to the turbine, a

"powerhouse" (to convert the kinetic energy of the water into electricity), an outflow to release the water back to source and power cabling to deliver the electricity to the necessary points. There is a small visual impact and the turbines produce some noise, however, these can be avoided by careful planning. The most important environmental aspect to note is that the ecology of the source of water is not negatively disturbed by water flow through the turbine.

234.EXPERIMENTAL AND COMPARISON STUDY OF HEATTRANSFER CHARACTERISTICS OF WICKLESS HEAT PIPES BY USING VARIOUS HEAT INPUTS

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2Assistant Professor, Department of Mechanical Engineering, Jeppiaar institute of technology, Kunnam , Sriperumpudur, Chennai – 631604, Tamil Nadu, India.

Abstract :
A wickless heat pipe is a heat transfer device which combines the principles of both thermal conductivity and phase transition without the usage of wick structure. The heat pipe generally consists of three sections namely evaporator section, adiabatic section and condensation section. An apparatus set up consisting of four heat pipes made up of different materials namely Copper, Aluminium, Brass and Stainless steel along with heater and cooling duct was designed and fabricated. Various working fluids such as Acetone, Toluene, Ethanol and Dichloro methane are used to determine which among the above working fluids can be used efficiently in heat pipes to improve its performance. The heat inputs are varied from 80 W to 460 W to determine the efficient heat input for the heat pipes. Thus the experiment was carried out to study the thermal efficiency of theheat pipes by using different materials, different working fluids and different heat inputs. At the end of the experiments, copper was found to be the material with high thermal conductivity when compared to the other materials. Dichloromethane was found to be one of the most efficient working fluid to be used in heat pipes at the heat input range of 160 W.

Keywords: Heat pipe, heat transfer characteristics, working fluid inventory

235.EXPERIMENTAL INVESTIGATION OF NICKEL BASED HARD FACED DEPOSIT ON AISI 321 GRADE BASE METAL USING PLASMA TRANSFERRED ARC WELDING PROCESS.

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ABSTRACT:
Few pressurized light water reactor [PWR] components are designed to perform rotation and translation movement for operation and control of emergency core cooling system in the light water thermal nuclear plant. The relative motion between the components may lead to wear. Also, there is a possibility of self welding of these components due to elevated temperature in the working environment. To reduce the wear and self welding problems throughout the operating period of emergency core cooling system in the thermal nuclear plant, the components are designed with coating of hard faced metal. The nuclear components are made of AISI 321 titanium stabilized stainless steel materials. Titanium is added in the steel for inter-granular corrosion resistance at elevated temperature. It has good corrosion resistance, excellent weld ability & formability, high creep rupture strength. Nickel base hard facing alloy is widely used for hard face coating in the nuclear reactor components. Since, it has high wear and tear resistance under elevated temperature in the nuclear reactor. Hence, Ni-base Colmonoy hard facing material is chosen. The AISI 321 base metal, Nickel base hard facing coating material and Plasma Transferred Arc [PTA] process were selected for experiment. Efforts have been put through this project for developing PTA hard facing procedure, effect of post weld heat treatment, study of microstructure including micro hardness, macro hardness, surface hardness on coating as well as fusion zone and base metal.

KEYWORDS: Nuclear,Welding,Heat treatment

236.SMART SURVIELLANCE SYSTEM USING DEEP LEARNING (2017-18)

Aruna Jasmine [1], Sonia Jenifer Rayen [2]
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Abstract:
Enormous information applications are devouring the majority of the space in industry and exploration region. Among the across the board instances of huge information, the job of video streams from CCTV cameras is similarly

significant as different sources like web-based social networking information, sensor information, farming information, clinical information and information advanced from space research. Observation recordings have a significant commitment in unstructured enormous information. CCTV cameras are actualized in all spots where security having a lot of significance. Manual reconnaissance appears to be monotonous and tedious. Security can be characterized in various terms in various settings like burglary recognizable proof, savagery location, odds of blast and so forth. In packed open places the term security covers practically all sort of irregular occasions. Among them viciousness recognition is hard to deal with since it includes bunch action. The atypical or anomalous action examination in a group video scene is troublesome because of a few genuine limitations. The paper incorporates a profound established review which begins from object acknowledgment, activity acknowledgment, swarm examination lastly brutality recognition in a group situation. Larger part of the papers looked into in this study depend on profound learning method. Different profound learning techniques are thought about regarding their calculations and models. The primary focal point of this review is use of profound learning methods in identifying the specific check, included people and the happened movement in a huge group at all atmosphere conditions. Paper examines the basic profound learning execution innovation engaged with different group video examination strategies. Constant handling, a significant issue which is yet to be investigated more in this field is additionally thought of. Very few techniques are there in taking care of every one of these issues at the same time. The issues perceived in existing strategies are recognized and summed up. Likewise future heading is given to lessen the deterrents recognized. The study gives a bibliographic rundown of papers from ScienceDirect, IEEE Xplore and ACM advanced library.

237. RASPBERRY PI AND ROLE OF IOT IN EDUCATION (2017-18)

Neelakandan S, Annamalai R

[1]Assistant Professor, Jeppiaar Institute of Technology,
[2]Associate Professor, Jeppiaar Institute of Technology

Abstract:

In this time of high and quick moving innovation, understudies are all the more requesting and ready to utilize creative learning techniques, additionally, they will be Seeing forward to living and getting by in the new condition of a brilliant study hall. This subject gives a structure to explain how it very well may be used to initiate a brilliant and creative college grounds life to improve the conveyance and effectiveness of ordinary exercises with thought of the social and natural connections, and thus give a savvy as well as in like manner, an economical grounds. The utilization of the web of things (IOT) can trade and utilize data for understudies' cooperation and collaboration with the class colleagues and educators in a truly reasonable manner. For the instructive appraisal of an understudy's connection, the estimation of understudy mindfulness is an imperative segment of it. The requirement for a high strategy for evaluation likewise emerges in the advancement of new innovation in the method of another style of learning. The understudies involvement with utilizing the LMS Moodle for e-learning (electronic learning) so the understudies get the full preferred position by associating of this innovation and their learning aptitudes increment to an elevated level by utilizing learning investigation as talked about in this report. The story investigates the appropriateness of the Raspberry Pi advancement board or single board PC for showing improvement, IoT innovations and situations. The objective of this examination is to distinguish and propose minimal effort, proficient and adaptable stage which can help with presenting the IoT worldview in the showing procedure, as significantly as to offer the Provision to individual understudies about social conduct and individual's receptiveness by utilizing Learning Management System (LMS).

238.NAIVEBAYES CLASSIFICATION OF SECURE ENCRYPTED DATA IN CLOUD

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Indira Institute of Technology

ABSTRACT:

Datamining is the extraction of hidden predictive information from the large database. It is a powerful new technology applied in various fields such as banking, medicine , scientific research and among government agencies. As an emerging computing paradigm, cloud computing attracts many organizations to consider seriously regarding cloud potential in terms of its cost-efficiency and flexibility. Cloud computing provides the flexibility to outsource their data in encrypted form on the cloud. But the existing privacy preserving classification techniques were not sufficient. We propose a predefined naive

bayes classifier which makes use of the trained datasets to solve the classification problem in the cloud. The data in the cloud were able to retrieve without ever decrypting
them. Our protocol protects the confidentiality of data, hides the data access pattern and also reduces the computation speed and the cost.

239.SMARTCASA – AN ENHANCED HOME AUTOMATION CONTROL USING IOT

Annamalai R
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Jasmine Assistant Professor ,Peri Institute of TechnologySudha
Mercy S ,Assistant Professor ,Eswari Engineering College

ABSTRACT:
The increasing popularity of home automation is mainly due to its affordability, easy availability and simplicity of usage through the smartphones. The biggest challenge in developing a home automation control system is constructing a stable control system with all the essential features required under a single system. The aim of this project is to design a home automation control using android smartphone with high security features like face recognition, voice control, monitoring and access restrictions. The system not only focuses on providing security features but it also gives features like statistical data about the home appliances, accessing the system from around the globe, scheduled control and a distributed architecture of home automation. One of the added features is, it is more compatible with differently abled users. Extending its features an improved quality of life with reduced power consumption costs conservation of renewable energy is possible.

240.AUTOMATICRECONFIGURATION OF LINK FAILURES IN WIRELESS MESH NETWORKS

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Sudha Mercy .S
Assistant Professor,Eswari Engineering College

ABSTRACT:
The Wireless Mesh Networks (WMN) is a rapid emerging high potential wireless technology that has a wide variety of
applications with several advantages like fast transmission, easy installment and maintenance and is a cost effective mechanism. As like any development, this technology also met with some problems like frequent Link failures due to a several factors. This affects the performance and quality of the link in the Wireless Mesh Networks. So we need an efficient routing algorithm that needs to overcome the defects in case the link becomes unstable. This project proposes an economic, fast and reliable, and quality assured automatic reconfiguration system that provides the Wireless Mesh Networks an efficient recovery mechanism and to maintain the network performance. This Automatic Reconfiguration of Link Failures in Wireless Mesh Networks performs the necessary changes which are cost effective with minimum delay and satisfies the QoS demands of the network. This project implementation aims at improving the network performance and efficiency to a great extent.

241.EFFECTIVE UTILISE THE EIGEN FACE DETECTION USING DIMENSIIONALITY METHOD – 2017 -18

Mr. N. Prabhakaran, AP / IT, Jeppiaar Maamallan Engineering College
Mr. R. Annamalai, AP / IT, Jeppiaar Institute of Technology

ABSTRACT:
Dimensionality decrease strategies have been effectively utilized for face acknowledgment. Among the different dimensionality decrease calculations, straight (Fisher) discriminant examination (LDA) is one of the mainstream directed dimensionality decrease techniques, and numerous LDA-based face acknowledgment calculations/frameworks have been accounted for in the most recent decade. Be that as it may, the LDA-based face acknowledgment frameworks experience the ill effects of the adaptability issue. To conquer this restriction, a steady methodology is a characteristic arrangement. The principle trouble in building up the steady LDA (ILDA) is to deal with the backwards of the inside class disperse network. In this paper, in view of the summed up solitary worth deterioration (LDA/GSVD), we build up another ILDA calculation called GSVD-ILDA. Not quite the same as the current methods in which the new projection network is found in a confined subspace, the proposed GSVD-ILDA decides the

projection framework in full space. Broad analyses are performed to contrast the proposed GSVD-ILDA and the LDA/GSVD just as the current ILDA techniques utilizing the face acknowledgment innovation face database and the Carnegie Mellon University Pose, Illumination, and Expression face database. Test results show that the proposed GSVD-ILDA calculation gives a similar exhibition as the LDA/GSVD with a lot littler computational multifaceted nature. The test results additionally show that the proposed GSVD-ILDA gives preferred arrangement execution over the other as of late proposed ILDA calculations251.

242.RATING PREDICTION BY EXPLORING USER'S PREFERENCE ANDSENTIMENT (2017-18)

Daya Mary Mathew [1], Annamalai R[2]

[1]Federal Institute of Science and Technology,Kerala, [2] Associate Professor,
Jeppiaar Institute of Technology

ABSTRACT:

With the event of e-commerce, shopping on-line is becoming more and more popular. The explosion of reviews have led to a significant problem, information overloading. the way to mine user interest from these reviews and understand users' preference is crucial for us. Traditional recommender systems mainly use structured data to mine user interest preference, like product category, user's tag, and therefore the other social factors.During this paper, we firstly use LDA+Word2vec model to mine user interest. Then, we propose a social user sentimental measurement approach. At last, three factors, including user topic, user sentiment and interpersonal influence,are fused into a recommendersystem (RS) supported probabilistic matrix factorization.We conduct a series of experiments on Yelp dataset, and experimental results show the proposed approach outperforms the prevailing approaches.

243.EVAULATE TO REDUCE THE FACIAL EXPRESSION RECOGNITION SYSTEM USING NEURAL NETWORK - 2017 -18

Mr. N. Prabhakaran, AP / IT, Jeppiaar Maamallan Engineering College
Mr. R. Annamalai, AP / IT, Jeppiaar Institute of Technology

ABSTRACT:

The most expressive way people show feelings is through outward appearances. In our venture we propose a neural system based methods to distinguish the feelings of the individual dependent on the outward appearances. Face appearance acknowledgment is additionally valuable for planning new intelligent gadgets offering the chance of new ways for people to associate with PC frameworks.

The proposed framework utilizes Facial Animation Parameters (FAPs), bolstered by the MPEG-4 norm, as highlights portraying outward appearances. Specifically, the FAPs controlling the development of the external lips and eyebrows are utilized as visual highlights for characterization. Analyses were performed under a few distinct situations using external lip and eyebrow FAPs independently and together. Another methodology is proposed for presenting outward appearance and FAP bunch subordinate stream loads. The loads were picked dependent on the outward appearance acknowledgment results acquired when FAP bunch streams are used exclusively. In the initial step, the Low Level Facial Animation Parameters are removed. The subsequent advance investigations these FAPs by methods for Neural Networks to evaluate the articulations. The proposed outward appearance acknowledgment framework accomplishes relative decrease of the articulation acknowledgment blunder of 44%, contrasted with the single-stream framework.

244.AN EFFICIENT IMAGE FILTERING FOR GAUSSIAN NOISE REDUCTION USING FUZZY TECHNIQUE - 2017 – 18

Mr. N. Prabhakaran, AP / IT, Jeppiaar Maamallan Engineering College
Mr. R. Annamalai, AP / IT, Jeppiaar Institute of Technology
Dr. R. Needuchelian, Professor / CSE, Sri Venkateswara College of Engineering

ABSTRACT:

The Ultimate objective of rebuilding procedures is to improve a picture in some predefined sense. In spite of the fact that there are territories of cover, picture upgrade is to a great extent an emotional procedure, while picture rebuilding is generally a goal procedure. Rebuilding endeavors to remake or recoup a picture that has been debased by utilizing an earlier information on the corruption wonder. Consequently rebuilding methods are situated towards displaying the debasement and applying the reverse procedure so as to recuperate the first picture. Picture rebuilding plan could be utilized to improve satellite pictures. obviously, since the first picture is as of now adulterated by clamor, it is beyond the realm of imagination to expect to get a numerical measure which shows how "great" the picture is. Contingent Upon the application (The objective of this postulation work is to structure a proficient picture channel for Gaussian Noise

Reduction e.g., Visual assessment, Segmentation), one could favor lighter or heavier sifting. Gaussian Noise Reduction is basically engaged here. So spatial handling is done here. Typically the Noise in a picture is fluffy in nature. So the fluffy procedure is applied for sifting Gaussian clamor from pictures. Numerous Fuzzy based procedures are grown however are not explicitly intended for Gaussian clamor. A few Techniques in picture commotion decrease for the most part manage motivation clamor. In this work, the fluffy based sifting strategy for Gaussian clamor decrease are broke down and it is discovered that fluffy picture channel is a decent separating procedure for Gaussian commotion decrease and furthermore for edge safeguarding. Be that as it may, this channel isn't well suit for high commotion level decrease. So this fluffy channel is adjusted to suit as a productive channel for Gaussian Noise Reduction with high clamor level.

The Filter Estimates a "Fluffy Derivative" so as to be less delicate to neighbor hood varieties because of picture structures, for example, edges. The Membership capacities are adjusted by the clamor level to perform "Fluffy Smoothing". The Modified Adaptive Threshold Selection yields a superior outcome in separating. It likewise chooses estimated commotion level. It is additionally appeared in the table by contrasting and existing technique. The Experimental outcomes shows a superior outcome when Gaussian clamor level is higher. It likewise shows least mean square mistake when contrasted and other separating Techniques.

245.PERFORMANCEIMPOVEMENT OF SEGMENTATION USING FUZZY CLUSTERING APPROACHES - 2017 - 18

Mr. N. Prabhakaran, AP / IT,
Jeppiaar Maamallan Engineering College
Mr. S. Neelakandan, AP / IT, Jeppiaar Institute of Technology

ABSTRACT:

Bunching is a valuable methodology in picture division, information mining, and other acknowledgment issues for which unlabeled information exist. Bunching dependent on fluffy C – implies (FCM) yields preferable and important outcomes over hard grouping strategies. FCM is one of the force full strategies for doing the division procedure on Multi-unearthly picture, when the ground truth of a picture isn't accessible. A bunching or parceling of unlabeled component vectors acquired from the multi-phantom picture gives a division of the picture into unlabeled areas. The resultant locales can be named by hand or by some robotized procedure. Pictures are regularly huge, comprised of numerous pixels. A 500 x 500 pixel picture from which an element vector is removed at every pixel gives 250000 unlabeled component vectors. Such a picture, which isn't viewed as especially huge today, will set aside a lot of effort to bunch or parcel. This paper portrays the new altered fluffy bunching calculation which decreases the time multifaceted nature of the grouping, without influencing their quality. Two methodologies are recently presented in this paper. The First methodology lessens the quantity of highlight vectors introduced to the FCM calculation. It is finished by making the vector for a picture that contains single section for each particular dark incentive in a picture and it will be utilized in making of arrangement map. The subsequent methodology diminishes the time intricacy for every cycle of FCM. It is acknowledged by making two information structures that makes the reusability in bunching process. Fluffy C-implies Clustering calculation is changed to deal with these information structures. At long last, the two methodologies will endeavor to diminish the general time for processing the bunches in FCM.

246.NETWORK BANDWIDTH PREDICTION USING MACHINE LEARNING ALGORITHMS 2017-18

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TechnologyMr.S.Velmurugan AP/Vel Tech
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Abstract : The applicability of network design and service planning plays an important role in the bandwidth prediction. The way of predicting the network usage is to detect the required bandwidth for future periods. This prediction helps to utilize the subsistence facilities in the superlative way. Considering the high cost of bandwidth, at peak hours of a network traffic we can follow a special type of scheme to purchase. For this research, the bygone usage data of FWDR network nodes is subject to univariate linear time series ARIMA model after systematic transformation is used to predict required bandwidth for future needs. The predicted data is compared to the factual data obtained from the same network and the predicted data has been found to be within 10% MAPE. This model reduces the MAPE by 11.71% and 15.42% respectively as compared to the non-systematic

transformed ARIMA model at 99% CI. The outcome indicate that the systematically transformed ARIMA model has better concert when compared to non-systematically-transformed ARIMA model. Larger dataset can be taken along with season adjustments and consideration of long term variations, for more precise and longer term predictions.

247.MINING TEXT DATA USING SIDE INFORMATION----2017-18

Ms.Sonia Jenifer Rayen,AP/IT,Jeppiaar Institute of Technology
Ms.Aruna Jasmine,AP,Peri Institute of Technology

ABSTRACT:
In this mission side information performs a key role. In the existing machine side information is used however implemented on a pure clustering data instead than inside the proposed system side records is used on a few new techniques inclusive of COATES and COLT. In many text mining applications, side-information is available at the side of the text documents. Such side-statistics can be of different kinds,such as report provenance data, the links within the report, user-access behavior from net logs, or different non textual attributes which are embedded into the text document. Such attributes may incorporate a first-rate quantity of information for clustering purposes. Side information is not anything that Metadata is "information approximately facts". There are metadata types of structural metadata, about the design and specification of facts structures or "facts about the boxes of data"; and descriptive metadata about man or woman instance.

248.IMPLEMENTATION OF MEDICAL KNOWLEDGE EXTRACTION FROM TRUTH DISCOVERY AND SUPERVISED METHODS 2017-18

Mr.S.Neelakandan,AP/IT,Jeppiaar Institute of Technology
Mr.R.Annamalai, AP/IT,Jeppiaar Institute of Technology
Mr.S.Velmurugan AP/Vel Tech MultiTech Dr.RR & Dr.SR Engineering collge

Abstract:
The medical question and answer website plays a vital role in today's fast world because everything is becoming digital .When the world is stepping forward to become digital ,then storage of data becomes a complex task .If a Question and Answer website is considered for extracting medical data ,it is observed that each and every data that is generated becomes valuable .Thus ,storing all these data by filtering out the unwanted data is a challenge .This is not possible when gathered information from the patients in a detailed manner and then separating it into useful information .When proposed a system to avoid the time taken ,cost of extraction of the useful information from unwanted sentences .Moreover ,our main aim is to reduce the volume of the data that is stored in the back end for faster retrieval of data. This project has an additional feature of leaving a message in chat to the doctors and whenever the registered users login to the account they can see details about any camp .This project has another advantage to give the patients some first aid related videos according to their wish .The implement this project in the name of, Easy Med which can automatically give you suggestions.

249.AUTOMOTIVE CRACK DETECTION FOR RAILWAY TRACK USING ULTRASONIC SENSORZ

Ms.Sonia Jenifer Rayen,AP/IT,Jeppiaar Institute of Technology 2017-18
Ms.Aruna Jasmine,AP,Peri Institute of Technology

ABSTRACT:
In the fast developing country, people are facing many accidents; it would be undesirable for any nation to losing their life for unwanted cause. Railways are one of the important transports in India. There is a need for manual checking to detect the crack on railway track and always railway personnel takes care of this issue, even though the inspection is made regularly. Sometimes the crack may unnotice. Because of this the train accident or derailment may occur. In order to avoid this situation and automate the railway crack detection has been proposed. Here ultrasonic sensor is used to detect the crack in the railway track by measuring distance from track to sensor, if the distance is greater than the assigned value the microcontroller identifies there is a crack, also it tells the exact location of the crack by the formula " DISTANCE=SPEED*TIME ". While the checking process is going on, the train may approach, it is identified by the vibration

sensor and gives alert to the microcontroller, thereby shrinks the size of the robot between the two tracks. After the train has crossed it returns to its normal position and continue its checking process

250.DISTRIBUTED DIGITAL LEDGER WITH ASCERTAINABLE PRIVACY USING MACHINE LEARNING 2017-18

Mr.S.Neelakandan,AP/IT,Jeppiaar Institute of Technology
Mr.R.Annamalai, AP/IT,Jeppiaar Institute of Technology
Mr.S.Velmurugan AP/Vel Tech MultiTech Dr.RR & Dr.SR Engineering collge

Abstract :
A Distributed ledger is a database that shares information and synchronised across the network. Distributed digital ledger proposes the knowledge of sharing the data of their own, which is stored in a secured manner. Even though the data are stored in decentralized which record is a grouping transaction. Rather than having a central administrator like a traditional database, the ledgers have a system of synchronized databases that provide an auditable history of information and are visible to anyone within the network. The data can be viewed and shared privately across the network. We use Threshold Pallier theorem to share and view the data. There are 4 modules in this project. They are Ledger, Advocate, Client and Judge. The Ledger is the admin who uploads and modifies the case details. Ledger will also generate the member id for the advocates, judges and clients. The member id will be unique and it is generated using threshold pallier theorem for privacy. The advocates and the judges can view and share the case details for reference. The clients can search advocates for their case. The Machine learning is used to find advocates for specific cases. The data sets of advocates with their specializations are fed to the database. So that the client can easily find the advocate with specified specialization. The threshold pallier theorem manages and decides whether the data should be shared publicly or privately.

251.LI-FI TECHNOLOGY – A VISIBLE LIGHT COMMUNICATION 2017-18

Ms.Sonia Jenifer Rayen,AP/IT,Jeppiaar Institute of Technology
Ms.Aruna Jasmine,AP,Peri Institute of Technology

ABSTRACT:

At the time of using wireless net at any place whether it's miles personal or stealing from others, one has possibly gotten frustrated because of the slow velocity of net whilst more devices are linked to a single router. Due to growing of internet users exponentially, Radio Spectrum is congested but the call for for wireless facts double every year. Dr. Harald Haas has give you a solution for the ones he calls Data through illumination". LI-FI is a brand new epoch of high intensity light supply of stable state design which bring easy lighting answers to widespread and specialty lighting. LI-FI is now a part of the VLC as is implemented using white LED light bulbs. Data transmission takes place from this LED bulb by using various the contemporary at extremely excessive speeds which undetectable by the human eye.

252.INDIAN CURRENCY DETECTION AND RECOGNITION USING CONVOLUTION NEURAL NETWORK MODEL AND DEEP LEARNING. 2017-18

Mr.S.Neelakandan,AP/IT,Jeppiaar Institute of Technology
Mr.R.Annamalai, AP/IT,Jeppiaar Institute of Technology
Mr.S.Velmurugan AP/Vel Tech MultiTech Dr.RR & Dr.SR Engineering collge

Abstract:

The human visual framework could be utilized for perceiving and validating cash notes. Notwithstanding, the perception powers of our eyes are constrained, and it is regularly hard for us to perceive authentic cash with no innovative help. Profound learning strategies have demonstrated to be successful and predominant for some applications. They have been especially fruitful in outperforming human visual acknowledgment abilities when enormous information is utilized. In this manner profound learning has been utilized to improve the precision of cash acknowledgment. In the wake of considering the current cash distinguishing proof writing, we present an

extensive diagram of money acknowledgment. We likewise examine the basic issue of expanding the restricted sum of information accessible. This technique is in view of Deep Learning, which has seen colossal achievement in picture order assignments as of late. This procedure can support the two individuals and machine in recognizing a phony cash note progressively through a picture of the equivalent. The proposed framework, AFCRS can likewise be conveyed as an application in the cell phone which can push the general public to recognize the phony and unique money notes.

253. ANONYMIZATION APPROACH USING CLUSTERING ALGORITHM IN ARTIFICIAL INTELLIGENCE

Mr. Muthuvel. S,AP/CSE,Jeppiaar Institute of Technology

Abstract:
k-anonymization techniques have been the focus of intense research in the last few years. An important requirement for such techniques is to ensure anonymization of data while at the same time minimizing the information loss resulting from data modifications. In this paper we propose an approach that uses the idea of clustering to minimize information loss and thus ensure good data quality. The key observation here is that data records that are naturally similar to each other should be part of the same equivalence class. We thus formulate a specific clustering problem, referred to as k-member clustering problem. We prove that this problem is NP-hard and present a greedy heuristic, the complexity of which is in O(n2). As part of our approach we develop a suitable metric to estimate the information loss introduced by generalizations, which works for both numeric and categorical data.

254. CONGESTION MANAGEMENT IN DEREGULATED POWER SYSTEMS USING GENERATOR RESCHEDULING AND FACTS DEVICES

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Abstract:
This paper presents the Congestion Management (CM) methodologies and how they get modified in the new competitive framework of electricity power markets. When the load on the system is increased or when some contingency occurs in the system, some of the lines may become overloaded. Thus, the loadability of the system should be increased by generating and dispatching the power optimally for the secure operation of power system. In this paper, the CM problem is solved by using the optimal rescheduling of generating units and load demands, and the Swarm intelligent techniques are used to handle this problem. Here, the CM problem is solved by using the Particle Swarm Optimization (PSO), Fitness Distance Ratio PSO (FDRPSO) and Fuzzy Adaptive-PSO (FA-PSO). First, the generating units are selected based on sensitivity to the over-loaded transmission line, and then these generators are rescheduled to remove the congestion in the transmission line. This paper also utilizes the demand response offers to solve the CM problem. The effectiveness of the proposed CM methodology is examined on the IEEE 30 bus and Indian 75 bus test systems.