

**Abstract Proceedings
of
NATIONAL LEVEL CONFERENCE ON RECENT CHALLENGES IN
ENGINEERING, SCIENCE AND TECHNOLOGY**

NCRCEST2020

Date :- 29th Feb 2020

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MESSAGE



I am extremely happy and feeling honour to associate with “NATIONAL CONFERENCE ON RECENT CHANGES IN ENGINEERING SCIENCE AND TECHNOLOGY (NCRCEST2020)”. The Conference aims to bring different ideologies under one roof and provide opportunities to exchange ideas face to face, to establish research relations and to find national partners for future collaboration. The themes and sub-themes for this conference are indicative of relevant research areas to give the prospective authors innovative prepositions about the ambit of discussion.

I would like to congratulate RAMACHANDRA COLLEGE OF ENGINEERING AND ANVESHANA EDUCATIONAL AND RESEARCH FOUNDATION to conduct such event in systematic way and to disseminate the knowledge to all the corners of the country. Researchers need to carry the ideas presented in this conference to next level and continue their research with good collaborations. I wish the management, faculty, staff and students of Ramachandra College of Engineering to conduct such good quality conferences in the future also with standard and quality publications.

All the Best

Dr. B T P Madhav

Professor & Associate Dean (Research)
Koneru Lakshmaiah Education Foundation,
K L Deemed to be University, AP, India

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On behalf of the Organizing Committee, I have immense pleasure to note that the *Ramachandra College of Engineering* is organizing the NATIONAL LEVEL CONFERENCE ON RECENT CHALLENGES IN ENGINEERING, SCIENCE AND Technology, on 29th Feb 2020.

ENGINEERING” discipline is one of the fundamental aspects of new inventions and innovations the field of Electronic, mechanical, civil and many other fields. Thus, an conference Meeting Organized by *Ramachandra College of Engineering* will help develop many aspects of in the field of engineering and many research oriented innovations to the society. I strongly feel that the continued initiatives of *Ramachandra College of Engineering* for the betterment of mankind by organizing such scientific conferences will be extremely helpful for future research and technical practices in general and in engineering in particular.

I am sure that the delegates, experts, students, researchers, Pharma industries, policy makers and healthcare givers will all tremendously benefit from the deliberation of this congress in a warm and friendly environment. Your presence and deliberation will make this congress remarkably successful in all aspects of Engineering.

**Sri Ganta Ramachandra Rao ,
Chairman, RCE**

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MESSAGE



It is a pleasure to welcome you to NCRCEST2020, the national level conference ENGINEERING, SCIENCE AND TECHNOLOGY at Ramachandra College of Engineering. The conference is organized as a set of tracks in the field of engineering and technology. The successful organization of RCE has required talents, dedication and time of many volunteers and strong support. Special gratitude and appreciation is due the various track chairs as they are primarily responsible for the content of the technical program. I would also like to thank organizig committee and review committee for arranging the successful conference. We hope that you will find the conference both enjoyable and valuable, and also enjoy the architectural, cultural and natural beauty of greenery in and around the college.

**Dr.Dola Sanjay S,
M.Tech., Ph.D
Principal, RCE**

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NATIONAL LEVEL CONFERENCE ON RECENT CHALLENGES IN ENGINEERING, SCIENCE AND TECHNOLOGY addresses the issues through the seminar on a vibrant platform for academicians, researchers and industry practitioners from the related areas to share their original research work , practical experience and exhibitions, bringing together representatives of all those involved at every fields of business, industry, academic, government and civil.

The International Conference facilitates ideas, statistics, and interpretation and program possibly to solve. The conference focuses on RECENT CHALLENGES IN ENGINEERING, SCIENCE AND TECHNOLOGY”. The conference will address recent issues and will look for significant contributions to advanced engineering studies in theoretical and practical aspects. It provides a multi-disciplinary forum for the exchange of knowledge and expertise in the recent developments in the fields of Engineering Science and Technology. I am self-assured that your deliberations and the outcome of your efforts will raise public awareness about the role and value technology as a tool to promote economic, social and cultural development while addressing the complex issues on your agenda.

It is my privilege to wish all the delegates a successful techno career and take the special honour to welcome you all to this Conference NCRCEST-2020. We look forward for key note addresses, invited lectures, paper presentations and audience participation during the conference.

With best wishes.

Ravindra Vinjamuri
Life Board Edu Solutions Pvt. Ltd.
Bangalore

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

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

CONNECT proactively with the worlds of practice and policy, with academic work nationally and globally, with our research work, and with the local community.

NURTURE a high performance work environment by emphasizing and supporting a climate of autonomy, stretch, and team work.

GROW our capacity, but do so in a thoughtful and strategic manner, aiming to have an impact commensurate with our ambitions, and ensuring that we maintain and upgrade the quality of our people and our experience.

Dr. D. Sucharitha
Director – AERF

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MESSAGE



I hope this message finds you and your family in the best of health and spirits. It was nice to hear you have presented in National Conference. It was really a delight to hear that it has been fairing well in the field of Engineering Applications and Basic Sciences

NATIONAL LEVEL CONFERENCE ON RECENT CHALLENGES IN ENGINEERING, SCIENCE AND TECHNOLOGY NCRCEST2020 addresses these issues through the seminar and exhibitions, bringing together representatives of all those involved at every fields of business, industry, academic, government and civil.

I must congratulate you on the attending and presenting research paper. The conference focuses on “**NATIONAL LEVEL CONFERENCE ON RECENT CHALLENGES IN ENGINEERING, SCIENCE AND TECHNOLOGY**”. This conference is going to address many issues. I wish all the delegates a successful techno career and take the privilege to welcome you all to this International Conference NCRCEST-2020. In this moment of celebration I congratulate one and all who involved in conference.

All the Best.

Dr.L.Bharathi

Convenor & HoD , ECE

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“NATIONAL LEVEL CONFERENCE ON RECENT CHALLENGES IN ENGINEERING, SCIENCE AND TECHNOLOGY NCRCEST2020” addresses these issues through the seminar and presentations, bringing together representatives of all those involved at every fields of business, industry, academic, government and civil strata.

The national conference facilitates ideas, information and programs on a platform that encourages creative thinking and innovation in the fields mentioned in the theme of the program. The conference focuses on “**NATIONAL LEVEL CONFERENCE ON RECENT CHALLENGES IN ENGINEERING, SCIENCE AND TECHNOLOGY**” which is very relevant to the present day scenario. I congratulate the organizers, coordinators sponsoring members, participants of the National Conference on “**NATIONAL LEVEL CONFERENCE ON RECENT CHALLENGES IN ENGINEERING, SCIENCE AND TECHNOLOGY**” I am confident that the deliberations and the outcome of your efforts will raise public awareness about the role and value of the theme of the conference as a tool to promote economic, social and cultural development while addressing the complex issues on the agenda.

I wish all the members involved a successful program ahead

With best wishes.....

M.Ramakrishna

Convener, Assoc Prof, ECE

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MESSAGE

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

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

Ramachandra College of Engineering (RCE) understand the social relevance of research and its contribution in developing a body of knowledge and therefore gives immense importance to the research output. In order to encourage the researchers in various fields relating to Engineering Ramachandra College of Engineering (RCE) is organising the national level conference in association with Anveshana Educational and Research Foundation with different contemporary themes on a regular basis. The focus here is on blend of academics & cutting edge research and innovation through inter-disciplinary activities.

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

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

I wish the Conference a fabulous success.

R.Durga Prasad

Co Convener, Assoc Prof, ECE

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MICROCONTROLLER BASED SELF BOOKING CYLINDER

Paper ID - 1001

A Paper Presented by: Prof.S. Jagan Mohan Rao¹, K. Yaraswini², M.Pooja³,
N.M.V.SaiKumar⁴, M.Hemanth⁵

¹Professor, Department of ECE, Ramachandra college of Engineering, Vatluru, A.P, India
^{2, 3, 4, 5}Student, Department of ECE, Ramachandra college of Engineering, Vatluru, A.P, India

ABSTRACT:

LPG is a need of every household, the rapid development in technology made human life easier but, we don't know exactly the status of LPG gas completion which leads to inconvenience. It will automatically book the new LPG cylinder and detect the gas leakage. Usually, the capacity of LPG within the Cylinder isn't determined, so we are getting to display the extent of LPG. The level of LPG is measured using the load sensor. Many accidents happen per annum because of domestic gas leakage, so it should be used carefully. As safety and security is the most important factor, we have proposed a gas leakage detection system.

Keywords: Node MCU, gas leakage detection, booking system, load cells.

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NCRCEST2020

Date :- 29th Feb 2020

**DESIGN & PARAMETRIC ANALYSIS OF BAND REJECT ULTRA WIDEBAND
(UWB) ANTENNA USING STEP IMPEDANCE RESONATOR**

Paper ID - 1002

A Paper Presented by: ¹J Prasanth Kumar, ²N Lavanya, ³M Tiresha, ⁴K. Sandeep

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ABSTRACT:

The design and analysis of step impedance resonator (SIR) based, compact and band-notch UWB antenna, to minimize the potential interference between wide-band (UWB) and narrow-band (WLAN), has been presented in this paper. The notched band covers the 5.15 GHz to 5.85 GHz WLAN range. The frequency band has been obtained by embedding a SIR near the radiating patch of the antenna. The empirical relationship between the SIR design and band-notch characteristics has also been included in the paper. The UWB patch antenna structure is feed by micro-strip line. The parametric-analysis by varying the parameters the SIR as well as the substrate has been performed, to observe the optimal performance the proposed antenna. The design and functional simulation of the proposed antenna structure is performed by using HFSS-v14. A close agreement between simulated and experimental results for the proposed design has been observed and presented in this paper. The design and results provide ample justification for compatibility and application of the structure in UWB communication over the entire frequency range.

Keywords: Step Impedance Resonator (SIR); Ultra Wide-Band (UWB); Wireless Local Area Network (WLAN); patch antenna

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**INTEGRITY AUDITING AND DATA SHARING WITH SENSITIVE
INFORMATION HIDING IDENTITY-BASED FOR SECURING CLOUD STORAGE**

Paper ID - 1003

A Paper Presented by: ¹Dr.L.Bharathi, ²K.Kusuma Priya, ³K.Manikanta, ⁴N.Naga Pavani,
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India.

ABSTRACT:

In order to address this problem, we propose a remote data integrity auditing scheme that realizes data sharing with sensitive information hiding .In this scheme, a sanitizer is used to sanitize the data blocks corresponding to the sensitive information of the file and transforms these data blocks signatures into valid ones for the sanitized file. These signatures are used to verify the integrity of the sanitized file in the phase of integrity auditing. As a result, our scheme makes the file stored in the cloud able to be shared and used by others on the condition that the sensitive information is hidden, while the remote data integrity auditing is still able to be efficiently executed. Meanwhile, the proposed scheme is based on identity-based cryptography, which simplifies the complicated certificate management. The security analysis and the performance evaluation show that the proposed scheme is secure and efficient.

Keywords: Cloud storage, data integrity auditing, data sharing, sensitive information hiding.

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**VEHICLE IMMOBILISER FOR THEFT AND
ALCOHOL DETECTION**

Paper ID - 1004

A Paper Presented by: R.Vijaya Lakshmi¹, K.Sai Divya², K.Iswarya³, K.Deepika⁴

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ABSTRACT:

The objective of this paper is to prevent the vehicle theft which is a main problem now-a-days and also to reduce the road accidents caused due to drink and drive. In this paper a fingerprint module is used to provide access to the person to drive the vehicle. The access is given only to the person whose fingerprint is already registered. If the fingerprint does not match the vehicle will not start. An alcohol sensor is used to reduce the accidents due to drink and drive in such a way that the vehicle will not start if the person consumes alcohol.

Keywords: Arduino UNO, R307 fingerprint, MQ3 alcohol sensor.

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A SECURE INTEGRITY CHECKING SYSTEM FOR SRAM

Paper ID - 1005

A Paper Presented by: P.Bala Krishna¹, Komal Kumari², K.Sowmya³, M.Jahnavi⁴, K.Raghu Babu⁵.

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ABSTRACT:

Recent advances in static random access memory (SRAM) as high density, non-volatile, low power, and faster memory systems drive the requirement for devising a more lightweight integrity checking system for SRAM. During this paper, we design a brand new tag generation system for integrity checking of SRAM. An analytical approach to model such a tag generation process is described during this paper. Security results predicted by the analytical model provide various design options resulting in an optimal system from the angle of considered security properties. The proposed design is simulated to research and verify the protection properties of the system for variety of optimal design options predicted by the analytical model.

Keywords: SRAM, tag generation, non volatile, low power.

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EMERGENCY ALERT FOR WOMEN'S SAFETY WITH LOCATION TRACKING

Paper ID - 1006

A Paper Presented by: D. Venkanna Babu¹, M.Durga Bhavani², N. Sai Sindhu³,
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ABSTRACT:

This Project exhibits a ladies security location framework utilizing GPS and NodeMCU. The framework can be interconnected with the caution framework and alarm the neighbors. This identification and informing framework is made out of a GPS recipient, Microcontroller, and a Wi-Fi module. GPS Receiver gets the area data from satellites as scope and longitude. The Microcontroller forms this data and this handled data is sent to the client utilizing the Wi-Fi module. Here A Wi-Fi module is inbuilt with the MCU. The Wi-Fi module sends a notice to the IoT cloud. At the point when a lady is in harm's way and requirements self-preservation then she can press the switch which is allocated to her. By squeezing the switch, the whole framework will be initiated then promptly a warning will be sent to a worry individual with an area utilizing IoT and GPS.

Keywords: NodeMCU, GPS Module, physical button, buzzer.

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SOLUTION FOR BIKE RIDER ALCOHOL DETECTION WITH AUTOIGNITION

Paper ID - 1007

A Paper Presented by: CH. Naga Srinivas¹, M.Kalyani², M.Dhanalakshmi³, M.Bhargav⁴,
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ABSTRACT:

An accident is an unexpected action, which occurs in a particular situation and place. Carelessness is the major factor for such accident. The government is forcing the drivers to wear helmet during driving. But many of them are not following the rules. We are introducing a smart helmet system which detects that, the person wearing helmet or not and also the system detect the person is drunk. Here we have transmitter in the helmet and receiver at the bike. A switch will be there to ensure that the person is wearing the helmet or not. And also an alcohol sensor is placed in the helmet near the mouth of the driver to check whether the driver is drunk. In this system there is a switch ensures the placing of the helmet in proper manner Alcohol sensors detect the alcoholic content in the rider's breath. If the rider is not wearing the helmet or there is alcohol content found in rider's breath, the bike remains off. The bike will not start until the rider wears the helmet and there if there is no alcoholic content present stating that rider did not consume alcohol. A motorcycle helmet is a type of helmet used by motorcycle riders. The primary goal of a motorcycle helmet is motorcycle safety - to protect the rider's head during impact, thus preventing or reducing head injury and saving the rider's life. Some helmets provide additional conveniences, such as ventilation, face shields, ear protection, intercom etc.

Keywords: Helmet, Bike, Alcohol sensor, pressure sensor

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Date :- 29th Feb 2020

NIGHT VISION PATROLLING ROBOT USING RASPBERRY PI

Paper ID - 1008

A Paper Presented by: A.N.L.Harisha¹, G .Vamsi krishna², K .Sruthi³, MD Aftab⁴,

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ABSTRACT:

This paper we propose a security patrolling robot that uses night vision camera for securing any premises. The robotic vehicle moves at particular intervals and is equipped with night vision camera and sound sensors. It uses a predefined line to follow its path while patrolling. It stops at particular points and moves to next points if the sound is detected. The system uses IR based path following system for patrolling assigned area. It monitors each area to detect any intrusion using 360degree rotating HD camera. It has the ability to monitor sound in the premises. Any sound after company is closed and it starts moving towards the sound on its predefined path. It then scans the area using its camera to detect any human faces detected. It captures and starts transmitting the images of the situation immediately on sound or human face detection. Here we use IOT Local Area Network (LAN) for receiving transmitted images and displaying them to user with alert sounds. Thus, we put forward a fully autonomous security robot that operates tirelessly and patrols large areas on its own to secure the facility.

Keywords: Raspberry Pi, Robot, cameras.

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Date :- 29th Feb 2020

IOT BASED SPEED CONTROL, ACCIDENT DETECTION AND RESCUE SYSTEM

Paper ID - 1009

A Paper Presented by: Ch.Naga Srinivas¹, N.Mani Manjari², N.Pujitha³, K.Revanth⁴,
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ABSTRACT:

The main aim of the paper is to detect the road accidents and to provide immediate help for needy. This system is proposed to control speed of the vehicle, to detect vehicle accident and alert to family members as well as nearby police control rooms and hospitals. Vehicle detecting and alerting system sends a short message to registered mobile number using GPS modules. Speed monitoring is also done by using ultrasonic sensor in our device.

Keywords: Ultrasonic Sensor, node MCU, GPS module, vibration sensor.

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SMART ATTENDANCE USING RFID

Paper ID - 1010

A Paper Presented by: ¹Y.Naveen, ²M.Sai Ramya, ³M.Navya, ⁴M.Vamsi Srinivas,
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ABSTRACT:

Our Idea is to work with Smart attendance using RFID Sensor. Attendance is one of the major accept role plays in student, office and other work management. At present we have manual attendance system due to that we have a lot of time taking process to overcome that, reduce the manual work and to save time we came with this idea. In this project, we interfaced RFID Sensor with Arduino IDE and sent RFID data to Thing Speak. In this case, here we are just reading the data from Arduino IDE and then pushing that to Thing Speak from that we get the apt and design the webpage to store the data. So here our device is used to take data from the hardware and sends it in ot the webpage using Thing Speak API.

Keywords: Nodemcu (esp32), RFID Reader with Tag, Arduino IDE, Thing Speak.

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**ALCOHOL DETECTION WITH ENGINE LOCKING SYSTEM USING GPS AND
GSM MODULES**

Paper ID - 1011

A Paper Presented by: A.N.L.Harisha¹, Md. Asma Parveen², M.Prasad³, M.Anitha⁴,

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ABSTRACT:

The objective of this paper is to build a safety system which is integrated with intelligent bike to reduce the probability of two-wheeler accidents and drunk and drive cases. Alcohol sensors detect the alcoholic content in the rider's breath, there is alcohol content found in rider's breath, the bike remains off. There is no alcoholic content present stating that rider did not consume alcohol. When the rider crashes, helmet hits the ground and sensors detect the motion and tilt of helmet and report the occurrence of an accident and sends information of the location of accident to the family members of the rider and emergency numbers.

Keywords: Alcohol sensor, Arduino Uno, GSM sim900a, tilt sensor.

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**WIRELESS AUTOMATIC POWER METER READING WITH INSTANT
BILLING SYSTEM**

Paper ID - 1012

A Paper Presented by: P.Bhagya sri¹, K.Jeevitha², K.Hima sri³, M.Krishna mohan⁴,
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ABSTRACT:

AMR (Automatic Meter Reading) is a system in which the reading is taken automatically and the consumer directly comes to know how much electricity has been used. The microcontroller takes the reading from the energy meter and displays the reading on the LCD. The reading of the energy meter is also sent to the mobile the user by a message through GSM modem. Based on those values, the consumer should control the loads. The wireless energy meter reading with instant billing system replaces the normal meter reading with instant billing system is that it reduces the man power and displays the reading of electrical meter instantly by using an display methods and enhance a person to regulate or monitor the usage of electricity. Despite of using man power for billing energy meter this method introduce instant billing using GSM module where every person can check the electricity consumed in their own houses and the bill is directly sent to the mobile phone through GSM and can be paid in any way like as net banking.

Keywords: GSM sim900a, LCD, Energy meter

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**PREPAID ELECTRICITY ENERGY METER USING ARDUINO AND GSM
MODEM**

Paper ID - 1013

A Paper Presented by:¹Y. Lavanya, ²M.A.S Sri Lalitha, ³N.Karuna, ⁴N.Kiran,
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ABSTRACT:

This paper proposed and demonstrated pre-paid Smart Energy Meter that the users will be able to monitor their current power consumptions (bill) anytime from anywhere by using their mobile phone via Short Message Services (SMS). It would be a huge beneficial for the customers if they can monitor their energy meter's power consumptions (bill) on a real-time basis. Arduino UNO, main controller, was the interface between energy meter and Global System for Mobile communication (GSM) module. GSM module connects the energy meter to users' mobile phone. Real Time Clock (RTC) DS1307 was used to get the real time to count and store the usage into the EEPROM. The program developed in C language with the Arduino syntax in the Arduino IDE. The proposed system demonstrated its capability to check the current usage (bill), notify when reaching the limit, and reset the usage (bill) successfully, only via accessing GSM-based mobile phone.

Keywords: Energy meter, Global System for Mobile Communication (GSM), Arduino UNO, Liquid Crystal Display (LCD) and Relay.

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REAL TIME WATER QUALITY MONITORING USING WSN

Paper ID - 1014

A Paper Presented by:¹N. V. D. P. Murthy, ²Md. Raheela, ³Md. Abdul Ahad, ⁴M. Anil Kumar, ⁵N.Sai Pavan Nagireddy.

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ABSTRACT:

The conventional method of testing water quality is to collect samples of water manually and send to the lab to check and analyze. This method is time taking process, wastage of man power and not economical. The water quality measuring instrument that we've implemented checks the standard of water in real time through various sensors (one for every parameter: pH, TDS, Conductivity) to live the quality of water. Smart solutions for water quality monitoring are gaining importance with advancement in communication technology. This system can keep a strict check on the pollution of the water resources and be able to provide an environment for safe beverage.

Keywords: Real Time water quality monitoring system; wireless sensor network.

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SRSS JAMMER

Paper ID - 1015

**A Paper Presented by: Dr. Dola Sanjay S¹, S.C.G.Shravani², P. Ramsai , M . Sai Vineeth⁴,
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ABSTRACT:

The SRSS Jammer is a device designed to inhibit most common Wi-Fi radio frequencies. The most commonly used Wi-Fi frequencies are 2.4 GHz to 5 GHz. The existing Wi-Fi jammers were able to limit the signals ranging from 2.4GHz to 5.3GHz. The proposed system would be able to limit the Wi-Fi radio frequencies ranging from 2.1 GHz ~ 2.5 GHz and 6.1 GHz ~ 6.9 GHz. This jamming device can be used either indoor or outdoor. These frequencies are used by most of the routers and video surveillance devices.

This SRSS Jammer act more like a Band Stop Filter which limits certain band of frequencies mainly the Wi-Fi radio frequencies. This compact SRSS Jammer will be designed and simulated using HFSS (High Frequency Structure Simulator). This project was developed in version of ANSYS 2018.0.

Keywords: Band stop filter, Gain, Microstrip line.

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**MATLAB/SIMULINK BASED DESIGN AND SIMULATION OF SQUARE
PATCHMICROSTRIP ANTENNA**

Paper ID - 1016

A Paper Presented by: ¹J. Prasanth kumar, ² P. Stella Bright, ³M. Siva Lavanya, ⁴S.Akhil,
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ABSTRACT:

This project implements the design and simulation of square patch microstrip antenna operating at 5 GHz used for 5G mobile communication and satellite communication. The advantage of square patch is that, it can be easily fabricated and simplicity in modeling as well as impedance matching. This design implemented using MATLAB software by using Simulink and antenna tool boxes. The return loss, gain, radiation pattern, bandwidth and efficiency are calculated for the proposed antenna and have better results than existing models.

Keywords: wireless communication system (WCS), Antennas, Microstrip patch antenna (MSPA), Directivity, Beam width.

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**IMPLEMENTATION OF SYNCHRONOUS CIRCUIT FOR LOW POWER
APPLICATIONS**

Paper ID - 1017

A Paper Presented by: ¹Sridhar Done, ²R.V.R.N.S.Ramya, ³P. Sai Likhitha,
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ABSTRACT:

Pulsed-latches came out as an ideal succession that replaces for low power digital circuit, as an alternative of flip-flops low power synchronous circuit is developed by using registers. In this paper, This register is built by using low power latches and the pulse for this circuit is provided by using a pulse generators which is designed to consume less power i.e., 22.0mW and the total power consumed by the proposed design is 16.8mW which makes the proposed design as power efficient design. Moreover, the potency consumption of the clock distribution network is reduced and layout area is reduced with the projected n-bit pulsed-latches as compared to the flip-flop predicated designs.

Keywords: Flip-flop, pulse generators, power efficient, registers.

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Date :- 29th Feb 2020

**HEXAGONAL MICROSTRIP PATCH ANTENNA FOR WIRELESS
APPLICATIONS**

Paper ID - 1018

A Paper Presented by: ¹Dr.B.S.Sathish, ²P Satya Sai, ³N.MaheshBabu,

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ABSTRACT:

A hexagonal micro strip patch antenna is designed to operate at different frequencies. This antenna is designed on a FR4 epoxy material. The overall size of structure is 28*28mm². For easy simulation coplanar waveguide structure is used. In this paper we can go through about different structures of antenna which are in the range of ultra wide band, tri band and penta band. The proposed ultra wide band antenna resonates at 7.09GHz. The proposed tri band antenna resonates at 1.36GHz, 5.74GHz and 8.8GHz. The proposed penta band structure resonates at 2.38GHz, 3.64GHz, 6.76GHz, 7.36GHz and 8.98GHz with good radiation characteristics. These antennas are useful for S -, C - and X – band applications.

Keywords: CPW feed, UWB, Triband, Pentaband.

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INDIGENOUS WASTE SORTING MACHINE

Paper ID - 1019

A Paper Presented by: ¹Dr N. Sangeetha Priya, ²T. Shruti Patricia, ³P. Gayathri,
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ABSTRACT:

A Garbage segregation system using pic microcontroller is design in this paper. Advance mechanism for the separation of waste material like metal, glass, paper and plastic is designed. The Sensor Metal detector is used to detector metals. Sensor like LDR and IR with lancer is used to detect waste materials like metal, glass, plastic and paper. Indigenous waste sorting machine is designed by these sensors with pic microcontroller. This system has many advantages like reduction of manpower and also cost. For segregating glass and metal conventional sensors are used and for sorting paper and plastic a sensor using LASER and LDR is developed. A weight sensor and counter is employed to seek out out the quantity of sorted materials. By using the right recycling system, the curse of waste will become blessings for the civilization. The sorting procedure will make recycling more efficient. By means of this waste sorter, the traditional waste management systems are going to be transformed into SMART system. This SMART system will help to form our surroundings more suitable for living, reducing heating and making the planet healthier.

Keywords: Automatic Sorter Machine; Smart waste management, Indigenous waste.

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NCRCEST2020

Date :- 29th Feb 2020

**ANTHROPOID SAFETY CAUTION SYSTEM FOR OBSTACLE AND MASSIVE
FOG**

Paper ID - 1020

A Paper Presented by: Durga Prasad Rajulapati ¹, Srirama Moulika Preethi ²,
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ABSTRACT:

Dense snow, pollution, and fog in these days in metropolitan cities have been increased; it becomes a major cause of accidents on roads since it becomes unable to predict the arches and vehicles which are forward and back, though which people are missing their lives. The proposed system ASCOMF (Anthropoid Safety Caution System For obstacle and Massive Fog) deals with the concept of alerting the humans to protect themselves from certain unfortunate incidents, and also make them warn about obstacles which are invisible in heavy mist.

Keywords: LDR Sensor, MQ2 gas sensor, Arduino Uno, GPS, GSM Module, IOT

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AN IOT BASED WIRELESS PATIENT HEALTH MONITORING SYSTEM

Paper ID - 1021

A Paper Presented by: M. Rama Krishna¹, Sk. Dilshad Begum², P. Durga Dedeepya³, U. Naga Ravi Krishna⁴, P. Venkata Ramanuja⁵

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ABSTRACT:

Wireless technology is increasing for the need of upholding various sectors. In these recent years, IoT is the major industrial area especially in automating and also in control. Not only in hospitals but personal health are caring systems developing by IoT technology. According to this smart system, In the general method, doctors play an important role in health checkups for the patients. This process requires a lot of time for registration, appointment, and check-up regularly. Also, reports are to be generated later. Due to this time taking process many people tend to ignore the checkups or will postpone it which may cause a severe condition. This modern system approach reduces time consumption in the process. In recent years, the use of this wireless technology is increasing for the need in various sectors. The body temperature and heart rate are prime parameters that need to be checked. This project gives temperature, heart rate values and also for the patient's tablets are reminded.

Keywords: Health, Internet of Things, Sensors, Arduino UNO, WiFi.

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**A CIRCULARLY POLARIZED SELF SIMILAR WIDEBAND ANTENNA FOR
RECENT WIRELESS APPLICATIONS**

Paper ID - 1022

A Paper Presented by: G. Sandeep¹, P. Sudeepthi², T. Sudheer³, T. Suneeta⁴, P. Naresh⁵
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ABSTRACT:

A minimized wideband radio wire with round polarization qualities structured on Rogers RT/ Duroid 5870(tm) substrate with steady 2.33 is proposed. This structure comprising of four self-comparable twofold blended symmetrical triangles with hexagonal displayed opening recorded in it. This receiving wire covers IEEE C-band (4-8GHz) frequencies for ground based and airborne climate radar applications. The reproduced and registered parameters of this proposed reception apparatus are displayed in this paper. This radio wire is ease, littler in size and high radiation productivity. Proposed structure keeps up stable radiation attributes in the whole wideband.

Keywords: Equilateral triangle patch, hexagonal slot, self-similar structure, wideband, circular polarization.

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DESIGN OF ADVANCED PROTECTIVE SYSTEM FOR WOMEN

Paper ID - 1023

A Paper Presented by: M.Sivaji¹, S Chandana², T Suma³, P Vijay Durga⁴, N Jagadeesh⁵.

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ABSTRACT:

An advanced protective system for women using AURDINO is high secured system not only for women's can also be used by children. It is a simple and compactable device designed with low cost. This device is used to provide security in real time dangerous situation when women are facing. This device has many advantages like providing alerts to authorised numbers and also shares the geographical location in dangerous situation. So this security system will be very help full to women now a day. GPS module is used for tracing location and GSM for getting information to authorised numbers as message.

Keywords: Women safety, GSM module, GPS module.

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**QUALITY AND QUANTITY SURVIALENCE OF WATER RESERVIOUR USING
IOT**

Paper ID - 1024

A Paper Presented by: ¹P. Bhagyasri, ²V. Sai Mounika, ³V.B.S.Simha Nandini,

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ABSTRACT:

In Now-a-days water is a very important role in our daily life like drinking water and agriculture purpose etc., According to Human Rights Watch, twenty million people in our country are still beverage water contaminated with arsenic. To reduce the water related diseases and stop water population, we've to measure water parameters like ph, turbidity, conductivity, temperature etc. Afterwards samples are going to be sending to laboratory for testing and analyzing. So as to save lots of time consumption and reduce manual effort my testing equipments are going to be placed in any water source. As a result this model can detect pollution remotely and take necessary actions. This project a Sensor-based Water Quality Monitoring System uses Arduino UNO act as a base station and data from sensor nodes are going to be send there to. Here this project presents a little prototype of sensor networks consisting of temperature, water level, flow and ph. Then ph and temperature sensor values were sent cloud platform and displayed as a graphical representation on an area PC or User mobile. Moreover Wi-Fi is connected to Arduino which compares sensor values to threshold values and sends an alerts to the agent if they obtained value is above or below the edge value.

Keywords: Arduino, PH sensor, level sensor, flow sensor, microcontroller, Buzzer.

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Date :- 29th Feb 2020

**A MINIATURIZED STAR HEXAGONAL FRACTAL ANTENNA FOR DUAL
BAND APPLICATIONS**

Paper ID - 1025

**A Paper Presented by: R.Vijaya Lakshmi¹, R.Neeharika², P.Pavithra³, S.Lavanya⁴
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ABSTRACT:

A reduced double band reception apparatus with fractal structure on Rogers RT/Duroid 5870(tm) substrate with consistent 2.23 is proposed. This structure comprising of two squares which are pivoted in a star style with hexagonal displayed space recorded in it. This radio wire covers IEEE C-band (4-8GHz) frequencies for short range following, rocket direction and airborne catch applications. The reproduced and processed parameters of this proposed reception apparatus are introduced right now. This radio wire is minimal effort, littler in size and high radiation proficiency. Proposed structure keeps up stable radiation qualities at these two groups.

Keywords: Square fix, hexagonal space, double band.

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IoT APPLICATION ON SECURE SMART SHOPPING SYSTEM

Paper ID - 1026

A Paper Presented by: Y.Lavanya¹, V.Niharika², V.Kumari³, R.J.Sandhya⁴, U.SuryaTeja⁵

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ABSTRACT:

The Internet of Things (IOT) is changing human lives by interfacing regular items together. For instance, in a supermarket all things can be associated with one another, shaping a shrewd shopping framework. In such an IOT framework, a modest RFID tag can be connected to every item which, at the point when set into a shrewd shopping basket, can be naturally peruse by a truck furnished with a RFID per user. Accordingly, charging can be led from the shopping basket itself, forestalling clients from holding up in a long line at checkout. Also, brilliant racking can be included into this framework, furnished with RFID per users, and can screen stock, maybe additionally refreshing a focal server. Another advantage of this sort of framework is that stock administration turns out to be a lot simpler, as all things can be naturally perused by a RFID per user rather than physically filtered by a worker. To approve the possibility of such a framework, right now recognize the structure prerequisites of a brilliant shopping framework, fabricate a model framework to test usefulness, and plan a safe correspondence convention to make the framework pragmatic. As far as we could possibly know, this is the first run through a savvy shopping framework is proposed with security viable.

Keywords: IOT, Smart Shopping, RFID, Security.

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Date :- 29th Feb 2020

**IMPLEMENTATION OF 1-BIT FULL ADDER USING FULL SWING GATE
DIFFUSION INPUT TECHNIQUE FOR LOW POWER APPLICATIONS**

Paper ID - 1027

**A Paper Presented by: V.Sushma¹ , U.Roja² ,R.Sri Manoj³ , P.Saimounika⁴ P.Edward
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ABSTRACT:

This paper introduces a plan which gives full swing output for logic 1 and logic 0 for 1-bit full adder cell also; decreases power utilization, delay, and area. Right now configuration full adder comprises of two XOR gate cells and one cell of 2x1 multiplexer (MUX). The exhibition of the proposed configuration contrasted and the diverse logic style for full adders through Digital schematic and micro wind software based on 90 nm technology with 1.2v power supply voltage at 1GHz the simulation result has good speed and accuracy.

Keywords: Full adder, Gate Diffusion Input (GDI), multiplexer.

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Date :- 29th Feb 2020

**IMPLEMENTATION OF LOW POWER 12T-SRAM CELL AND COMPARE ITS
PARAMETERS**

Paper ID - 1028

**A Paper Presented by: Dr.L.Bharathi¹, R.Divya Sree²,S. Kinnera³,P.Sai Pavan Reddy⁴,P.
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ABSTRACT:

The development of versatile battery worked has made low power IC design. The SRAM cell units turned into vital part in current system on chip. SRAM is a semiconductor memory used to store each bit, it is a volatile memory. SRAM cells are used in many applications like micro core processors. SRAM cell improves the both read stability and write ability at low supply voltages. This reduces a static dissipation of cell. The fast development of versatile battery worked gadgets has made low power IC design for SRAM power, stability; delay and area are the real concerns. This implementation is developed in mentor graphics software tool. This paper represents an improved 12T SRAM cell with the following advantages like reduced leakage current and enhanced performance of transistors reduction in power consumption and increases in data transmission. The SRAM cell is the need of high speed computing system. The switching of transistors and leakage current during results is less power consumption in this cell. In this paper we focused on power, low voltage, and reduced leakage current and an upgraded for the development of 12T-SRAM cell for low power consumption.

Keywords: low voltage, low power, reduces leakage current.

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MRP JAMMER B.O

Paper ID - 1029

A Paper Presented by: Dr.Dola Sanjay S¹, B. Bhavani², B. Manisha Sai³, B. Ramya Tejaswi⁴, A. Sai Puneeth⁵

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ABSTRACT:

This Paper presents a planar Microstrip Bandstop filter with the utilization of ellipse structure. The bandstop filter has been designed with the use of step impedance microstrip line on the highest of substrate. It produces stop band from the frequency range of 1.8GHZ to 2.3GHZ with the stop band attenuation quite 30dB. It provides relative 3dB bandwidth response. The tuning of frequency has been administered with the change in dimension of ellipse. A simulation has been performed on ANASOFT High frequency structure simulator (HFSS) and therefore the design has been verified with ANASOFT designer 8.0 Software

Keywords: **Attenuation, Band stop filter, Ellipse structure, Microstrip line, Patch.**

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**MICRO CONTROLLER MONITORING SYSTEM FOR EMPLOYEES' SAFETY
USING SMART HELMET**

Paper ID - 1030

A Paper Presented by: Prof. Dr. Jagan Mohan Rao.S¹, Kadha Sruthy², Chelakanti Harathi³, Kadali Kalyan Narasimha⁴, Dasari Hemanth Kumar⁵.

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ABSTRACT:

In work place environments such as industrial or construction sites to shield the head from injury, due to falling objects or impact with other objects. For saving worker's life we have to make a tool with smart actions to keep worker's life safe. Many techniques were offered before based on different technologies like Arduino, 3A Accelerometer, IOT. The Smart helmet is that the proposed solution which can keep track the worker health conditions, and locate his place within the location by using ARM microcontroller, GSM modules and a group of sensors.

Keywords: Microcontroller, GSM, 3A Accelerometer, Node MCU, Battery.

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MRI BRAIN TUMOR DETECTION BY USING CLUSTERING TECHNIQUES

Paper ID - 1031

**A Paper Presented by: Dr.L.Bharathi¹, K.B.S. Siva Rama Raju², B. Vinay Kiran Teja³,
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ABSTRACT:

Segmentation of various images while processing the images is a very crucial technique nowadays. In recent years the field of image segmentation on MRI brain images while gives us more information that is used for the detection of tumours and irregularities in the brain. Image segmentation knowledge separates the image into various defining areas, and needed data is extracted. General segmentation technology is based on the threshold segmentation method, based on the region segmentation method, the segmentation method based on the edge, and the segmentation method based on the specific theory. In this paper study, the different clustering methods in image segmentation are explained. The pre-processing stage involves noise addition and removal. While the traditional clustering image segmentation algorithm is applied for image segmentation where accuracy is low, this put forward a kind of fuzzy control based on C-means clustering image segmentation method that provides the best accuracy while detecting tumours and irregularities in MRI brain images. Here the comparison of K-Means along with Fuzzy C-Means segmentation technique. That clearly shows the difference between both K Means and Fuzzy C-Means technique. The experimental results show that the algorithm in clustering optimizes the performance while imaging segmentation, edge clear.

Keywords: Image segmentation, K-Means, Fuzzy C-Means clustering algorithm, Optimization.

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SMART VEHICLE SECURITY SYSTEM USING ARDUINO

Paper ID - 1032

A Paper Presented by: Dr.B.S.Sathish¹, B .Anil kumar², D.Divya³, D.Chakravath⁴,
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ABSTRACT:

Vehicle theft is one of the significant issues looked by regular society today. Bits of knowledge show vehicles that get taken only 1 /4 of them recovered. Current structures use key and remote to jolt the vehicle. On basic level territories, CCTV cameras are accessible which are used to locate the taken vehicle. In any case, at various spots, CCTV cameras are missing. Control of vehicles and data on their region a lot after a theft can help the recovery of the taken vehicle quickly. The proposed structure helps with finding the zone of the vehicle using GPS also the vehicle speed is a tiny bit at a time diminished by reducing the pace of turn over motor using a GPS. It assists with finding the vehicle following understanding its taken. As GPS is used, the region is moreover known. The request sent from adaptable goes to the GSM system which is interfaced with a controller which decreases the speed of the turn over motor and immobilizes it. The made structure is trustworthy, ease and in the event that it gets taken.

Keywords: GPS Module, Arduino Uno R3, GSM SMS 800L.

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**UNSUPERVISED SEGMENTATION OF MEDICAL IMAGES USING LOCAL
CENTER OF MASS & SLIC ALGORITHM**

Paper ID - 1033

A Paper Presented by: Dr.N.SangeethaPriya¹, Chandini neeraja Akula², Venkata sesha
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ABSTRACT:

Now days segmenting medical images is a region of interest for many researchers that always makes the image processing an important research area this always facilitated by automatic computational techniques? In general the supervised methods, although highly effective, require large training datasets of manually labelled images that are labour-intensive to produce. Unsupervised methods, on the contrary, can be used in the absence of training data to partition new images. Hence the introduction of a novel approach for supervising image segmentation that based on the computation of the local centre of mass with SLIC algorithm. We propose an efficient method to group the pixels of a 2D X-ray image of knee image. The proposed method outperforms the previous method in an efficient way by segmenting the image based of region.

Keywords: LM, SLIC, Segmentation, unsupervised image.

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Date :- 29th Feb 2020

AN INNOVATIVE TECHNOLOGY FOR VISUALLY IMPAIRED PEOPLE

Paper ID - 1034

A Paper Presented by: Durga Prasad Rajulapati¹, Naga Nikitha Chennamsetti²,
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ABSTRACT:

This is an innovation for the blind people with the help of various subjects like programming building, equipment structuring and prosperity science which urges the visually impaired individuals to explore with speed and certainty by identifying the close by impediments upto the 3meters utilizing the assistance of ultrasonic waves and inform them with a signal sound or vibration. Utilizing this sensor, outwardly impeded can recognize the items around them and can travel effectively. At the point when the sensor recognizes any article it will tell the client by blare or vibration. This is a programmed gadget and battery is appending with the sensor and it sense the battery charging levels and gives the sign by sound to the client before 8hours that the charging would have been low. As a visually impaired additionally by hearing that sound the client will be modify and will be notice that to their relatives. At last gear implies our venture will append a walking stick.

Keywords: Ultra Sonic Sensor HC-SR04, Arduino, Buzzer, IR sensor.

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Date :- 29th Feb 2020

**IMPLEMENTATION OF LOW POWER SEQUENTIAL FINITE FIELD
MULTIPLIER USING DOMINO LOGIC**

Paper ID - 1035

**A Paper Presented by: Mr.D.Venkanna Babu¹, B.Meena², Ch.P.Sukanya³, M.Vanisri⁴,
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ABSTRACT:

In early times, the designers had a concern about area & speed of a circuit. Hence the designers adopted an IC technology. Now a days, there is a wide spread of portable electronic devices & evaluation of micro electronics technology. Portable devices require low power designs; it is possible by reducing power dissipation of components. This Paper presents an efficient low power sequential finite field multiplier. The main building block of a multiplier is designed using domino logic. Our main objective is to reduce power dissipation of a multiplier. By reducing power dissipation the overall efficiency of signal transmission increases, reduces the power losses. A multiplier plays an important role in digital signal processors, cryptography and logical operations.

Keywords: Domino logic, Cryptography, Power dissipation, Portability.

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**LOW-POWER AND MINIMISED FULL ADDER BY
INTRODUCING NEW XOR AND XNOR GATES**

Paper ID - 1036

**A Paper Presented by: D.Sridhar¹, G.Anitha², B.Sunandha³, A.Seshu Jayanth⁴,
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ABSTRACT:

In this paper, novel circuits for XOR/XNOR circuits and simultaneous XOR-XNOR circuits are designed. These circuits have effective utilization in the areas of low power dissipation and delay. Six new hybrid circuits are proposed using novel full swing XOR/XNOR functions. Every circuit has its own benefits in speed and power consumption. These circuits are designed using MENTOR GRAPHICS LICENSED tool. With this a new transistor measuring strategy is obtained.

Keywords: XOR/XNOR circuits, full swing XOR/XNOR, MENTOR GRAPHICS LICENSED TOOL, NMOS, PMOS, invertors, voltage sources.

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Date :- 29th Feb 2020

SMART IRRIGATION BASED ON SOIL MOISTURE USING IOT

Paper ID - 1037

**A Paper Presented by: M. Rama Krishna¹, K. Nanda Gopi Krishna², B. Sailaja³,
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ABSTRACT:

Agriculture is the backbone of all developed countries. It uses 3/4th of available freshwater resources on the earth and this percentage continues to be dominant in water consumption because of the increase of population count and increased need for food. Due to this, efficient water management is the major concern in many cropping systems in arid and semi-arid areas. An automated irrigation system is required to optimize the utilization of water for agricultural crops. The need for an automated irrigation system is to overcome over-irrigation and under irrigation. So irrigation is utilized in the agriculture field. In an irrigation system, depends on the soil type that is provided to the plant. In agriculture, two things are very important, first to get information about the fertility of the soil and second to measure moisture content in the soil. Now a day, for irrigation, different techniques are available which are used to reduce the dependency of rain. And mostly this technique is driven by electrical power and on/off schedule. In this technique, a water level indicator placed in a water reservoir and soil moisture sensors is placed in the root zone of a plant.

Keywords: Water Management, Agriculture, Irrigation, Water quality, IoT, Node MCU, Arduino

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Date :- 29th Feb 2020

SMART INTERACTIVE OFFICE AUTOMATION

Paper ID - 1038

**A Paper Presented by: P.Bala Krishna¹, CH.Lakshmi Durga², B.Deepthi³,
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ABSTRACT:

In today's world automation plays a crucial role in human life. Automation increases the work efficiency and luxury of person. Lately we will find people hanging with mobiles and smart devices, electronic gadgets all the time. However, with the assistances of this companion (mobile or smart devices) most of the tasks are becoming accomplished. Office Automation System (OAS) has been designed for the devices having android base. Thus, the devices with android platform won't to automate an 8 bit Bluetooth that controls the house or office appliances. For that control as a as witch we use an ON/OFF Relay. The automated approach of controlling the devices/appliances is presented during this paper. This presentation paves thanks to ease the overall method of switch by automation. The subtle technology for brief range wireless communication i.e. Bluetooth is employed here. A maximum of 24 appliances within the range are often controlled using this OAS.

Keywords: Office Automation, Intelligence, sensor system, Microcontroller, User-friendly Interface

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ELECTRONIC APRON FOR WOMEN SAFETY

Paper ID - 1039

A Paper Presented by: Dr.B.S.Sathish¹, Ch.Geetha Krishna Priyanka², A.Akhil babu³,
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ABSTRACT:

In global scenario, the prime question in every girls mind is about her safety and the harassment issues. The sole thought haunting every girl is once they are going to be ready to move freely on the streets even in odd hours without fear about their security. This project suggests a replacement technology to guard women. This project focuses on a security for ladies in order that they're going to never feel helpless. The system consists of various modules like Node MCU; android mobile with 4G SIM (GPS, GSM, and camera), shock circuit, buzzer, and camera. Today there's many cases which are happening about women. It had been time where we girls needed a change. This project is predicated on women security where women feel protected. This paper describes about safety electronic.

Keywords: **Emergency Button, BUZZER, Android (GPS Tracker, Camera and GSM Modules), Memory Card.**

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PERFORMANCE ENHANCEMENT OF UNDERWATER IMAGES
BY CLAHE AND DSIHE TECHNIQUES

Paper ID - 1040

A Paper Presented by: ¹Mr.G.sandeep ²B.payal, ³D.Balakrishna, ⁴ch.yamini, ⁵G.hariprakash

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ABSTRACT:

To study the various objects of underwater images is the most important topic to many research scholars nowadays. Even the study of vegetation and life plays a crucial role for much advancement of the future generations. The interaction of the light along with the medium with low and high intensities makes the whole study difficult task. The good quality of the images in any field is necessary for this we are proposing a new technique that enhances the quality of the underwater images in the best possible way. In RGB and HSV spaces, which is an innovative method to enhance the images of underwater? The limitation of the contrast due to poor illumination makes us to move toward the combination of two techniques that gives the best performance. The study of this technique out performs all the previous works that had been done by the researches till date.

Keywords: Digital Image Processing, Enhancing techniques, image performance increment.

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COMPLAINT REGISTER USING XAMPP SOFTWARE

Paper ID - 1041

A Paper Presented by: N.V.D.P. Murthy¹, Sai Neeharika Geddam², Upendra Bollina³
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ABSTRACT:

In recent times, it is becoming difficult for the people to communicate with government organizations to register their complaints about the situations happened in their areas like Harassment issues, city Problems, other issues. People are getting scared because their details will be published. Recently government launched Electronic India by taking it as example we launched for the safety of people “Complaint Register”. In this complaint will be send to cyber crime portal without knowing the details of the person. Then people will give complaints without any fear. It is user friendly. If anyone trying to misuse this, details will be stored in database in XAMPP software which is secured in the admin system. If cyber portal show valid proof to administrator then details will be visible.

Keywords: HTML, login, register, username, password, database, mail id

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**HEAT TRANSFER CHARACTERISTICS FOR MHD NANO FLUIDS UNDER
NUMERICAL CONDITIONS WITH DIFFERENT PARAMETRIC CONDITIONS**

Paper ID - 1042

A Paper Presented by: M. Ramanuja¹ V. Nagaradhika²

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ABSTRACT:

This paper researches the limit layer stream, warmth and mass exchange qualities over a vertical cone loaded up with nanofluid soaked permeable medium with the impact of attractive field, warm radiation and first request compound response subject to the convective limit condition. Likeness change procedure is utilized to change over non-straight incomplete differential conditions into the arrangement of complex normal differential conditions. The computational Finite component strategy has been utilized to tackle the stream, warmth and mass exchange conditions together with limit conditions. The effect of different appropriate parameters on hydrodynamic, warm and solutal limit layers is researched and the outcomes are shown graphically. Besides, the estimations of nearby skin-contact coefficient, pace of temperature and pace of focus is additionally determined and the outcomes are introduced graphically. The examination with recently distributed work is settled on and discovered great understanding. The thickness of warm limit layer is expanded with increment in the estimations of Brownian movement parameter (N_b) and thermophoresis parameter (N_t). To get non-comparative condition, progression, force, vitality and focus conditions have been non-dimensionalised by common change. The non-comparative arrangements are considered here. The got conditions have been fathomed by express limited contrast strategy with security and union examination.

Key words: Thermophoresis, function of Brownian motion, consistency, focus.

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A STUDY OF DIFFERENT WEB MINING TYPES

Paper ID - 1043

A Paper Presented by: Lalitendrasingh S. Payal¹ & Dr. Yogesh Kumar Sharma²

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Abstract

The World Wide Web is repository where extremely huge amount of information is available and the useful information is mined for making knowledge. Web mining is a data available on internet. Web mining for web pages is a process of discovering and extracting useful and relevant information from extremely large web data. The web is rapidly updating and expanding day by day and huge amount of data are there. In such case web mining is becoming a very challenging task. This paper covers different types of web mining and there usage for retrieving web pages.

Key words— Mining, Data Mining, Web Mining, Web Content Mining, Web Structure Mining, Web Usage Mining

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**HIGH PERFORMANCE VEDIC MULTIPLIER DESIGN USING VARIABLE
PRECISION**

Paper ID:1044

A Paper Presented by: Hemanth. J, ¹Dr. Dola Sanjay. S ²

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Abstract

The most computationally intensive component of any processor is multiplier. The design of multiplier especially for floating point architecture is quite difficult. This brief focuses on evaluating the multiplier using the concepts of array multiplier, Vedic multiplier, booth multiplier and carry save multiplier. The designs are evaluated using Xilinx ISE 14.5 Tool and functional verification is performed using ISIM Simulation Tool. Among the various variable precision multipliers used, the vedic multiplier yields highest performance and modified booth multiplier utilizes least area.

Index Terms - Booth Multiplier, Vedic Multiplier, Variable Precision, Floating Point Multiplication.

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**EXPERIMENTAL STUDIES ON SOIL STABILISATION BY USING ALKALI
ACTIVATED PALM OIL FUEL ASH**

Paper ID:1045

A Paper Presented by: Narendra Kumar Adapa^a, Dr.T.V.S. Varalakshmi^b
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Abstract: *Clay soil covers a large portion of land India. To improve various properties of these soils, soil stabilization has to be carried out. As we are aware that stabilization of soil improves its engineering properties, chemical and mechanical properties. In the present study clayey soils are stabilized with geopolymer by the combination of Palm Oil Fuel Ash(POFA). Palm oil fuel ash is a by product from the oil palm industries and the Sodium based alkaline activators and sodium silicates are used as a geopolymer. The effectiveness of geopolymer with palm oil fuel ash is studied in terms of unconfined compressive strength (UCC), California bearing ratio test(CBR). The UCC and CBR values has been compared with soil stabilized with cement. From results of UCC and CBR it is observed that 10% Palm Oil Fuel Ash, 12% sodium silicate, 5% sodium hydroxide mix gave better results compared to that of soil stabilized with cement*

Keywords : *caly soil, palm oil fuel ash, geopolymer, unconfined compressive strength, California bearing ratio.*

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**FEATURE EXTRACTION METHODS & SALIENT OBJECT DETECTION
METHODS IN IMAGE CLASSIFICATION**

Paper ID:1046

A Paper Presented by:T. Venkata Ramana & K.Venugopal Rao
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Abstract

Identifying the objects in the image is one of the challenging tasks. There exist different types of object with general features like color, shape, size, orientation, intensity etc. With these features if the objects in the images are classified, then the maximum accuracy is not achieved by this kind of classification of the objects by using the primary visual features. By considering all these things, after careful analysis of different papers it was observed that two new areas are concentrating on these types of issues and they are cross traditional retrieval process and the algorithmic process. Apart from the primary visual features, there will be the other features which helps the system to improve the prediction accuracy in the classification of the objects in the image. This paper explains 3 different types of feature extraction methods and compares their accuracy of classification.

Keywords: Image classification, pixel based, region based, global level, deep learning.

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MAP REDUCE APPROACH IN BIOLOGICAL DATA SET

Paper ID:1047

A Paper Presented by: Jagannadha Rao D B, Dr. K. E. BalaChandrudu, Dr. Prasadu Peddi

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ABSTRACT

Bioinformatics research is characterized by voluminous and incremental datasets and complex data analytics methods. The machine learning methods used in bioinformatics are iterative and parallel. These methods can be scaled to handle big data using the distributed and parallel computing technologies. Usually big data tools perform computation in batch-mode and are not optimized for iterative processing and high data dependency among operations. In the recent years, parallel, incremental, and multi-view machine learning algorithms have been proposed. Similarly, graph-based architectures and in-memory big data tools have been developed to minimize I/O cost and optimize iterative processing. However, there lack standard big data architectures and tools for many important bioinformatics problems, such as fast construction of co-expression and regulatory networks and salient module identification, detection of complexes over growing protein-protein interaction data, fast analysis of massive DNA, RNA, and protein sequence data, and fast querying on incremental and heterogeneous disease networks. This paper addresses the issues and challenges posed by several big data problems in bioinformatics, and gives an overview of the state of the art and the future research opportunities.

Keywords —Big data, Bioinformatics, Machine learning, MapReduce, Clustering, Gene regulatory network

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A Deep Machine Learning based Recruitment Scheme for Massive MIMO-OFDM Data in 6G-based IoT networks

Paper ID:1048

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Dr. Y. Chalapathi Rao, Associate Professor, Department of ECE, VNR VJIET, Hyderabad, Telangana, India
Dr. Anupama Desh Pande Professor, Department of ECE, JITU, Vidya Nagar, Rajasthan, India

In this research work, we investigate robust analysis of 6G technology, trends and applications. Recently, fast organization on fifth-generation (5G) networks has brought incredible freedoms for the empowering data-intensive applications, and welcomes a broadening assumption on the developments of 6G. An essential prerequisite to create 6G organizations is to arrive at information with low inactivity, ease and high inclusion in smart IoT. Subsequently, this paper proposes a novel AI based way to deal with gather information from various sensor gadgets by collaboration among vehicle and UAV in IoT. Initially, low complexity algorithm calculation is used to choose vehicular gatherers to gather huge information from sensor gadgets, which means to boost inclusion proportion and to limit work cost. Secondly, we plan a novel Deep Reinforcement Learning (DRL) method-based course strategy to design assortment courses of UAVs with compel energy, which works on the organization model, speeds up preparing speeds and acknowledges dynamic arranging of flight ways. The ideal assortment course of a UAV is a progression of yields dependent on the proposed DRL-based route strategy. Finally, our extensive analyses show that the proposed plan can exhaustively improve the inclusion proportion of massive data collections and lessen collection costs in smart IoT for the future 6G networks.

Index Terms: 6G technology, Massive MIMO, Data collection, smart IOT

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**AN OPTIMIZED PROBABILISTIC APPROACH FOR OPTIMAL ECONOMIC
DISPATCH, A CASE STUDY OF GESCOM**

Paper ID:1049

A Paper Presented by: HANUMANTHA RAO A & Dr.K.VIJAYA BHASKAR REDDY

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Professor, Department of EEE, BVRIT Vishnupur, Narsapur, Telangana 502313

Abstract

The concept of probabilistic analysis has been gaining momentum in recent years as opposed to the more passive approach of the 19th century. A broad variety of complex strategies has been established for probabilistic modeling. A common theory behind each factor mentioned is that power systems are basically stochastic, a concept illustrated by the formulation and analysis of both input condition and case parameters as probability variables. The Optimisation Approach in the power system research reflects a primary examination of the importance of power systems for the future development of power resources, reliability and quality. In order to carry out the case study of the Gulbarga Electricity Supply Company Ltd. (GESCOM), a standard approach for economic dispatch with possible load variations has been suggested for this study.

Index Terms- Power system Optimization, Economic Dispatch (ED), GESCOM, PAVAGADA solar park

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**PERFORMANCE STUDY ON AXIAL FLOW GAS TURBINE AT HIGHER
TEMPERATURES**

Paper ID - 1050

A Paper Presented by: K. Chandra Sekhar & B. Sudheer Prem Kumar

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Abstract:

A parametric study is carried out for aerodynamic performance of turbines including geometrical requirements, thermal requirements, mechanical integrity and manufacturing requirements. Life cycle costs, product cycle time and weight are additional, possible criteria during the parametric study. Preliminary design plays an important role in reaching the final design of the turbine. This research work thoroughly focuses on how the blade configuration are designed to achieve the desired output. Development of the axial flow gas turbine was hindered by the need to obtain both a high-enough flow rate and compression ratio from a compressor to maintain the air requirement for the combustion process and subsequent expansion of the exhaust gases. The profile generation, in addition to aerodynamic performance, additional constraints for castability, structural requirements and thermal requirements need to be considered. Thus profile generation is a trade-off between contradicting requirements of aerodynamic performance, structural and thermal performance.

Key Words: Axial, Blade, Combustor, Efficiency and Reaction Turbine.

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Date :- 29th Feb 2020

**EFFICIENT SECURE ACCESS CONTROL AND PROTECTION DATA IN
BIGDATA ENVIRONMENT**

Paper ID - 1051

A Paper Presented by P.Latha, Dr. P.Niranjan
Research scholar mewar university , Chittorgarh, Rajasthan
Research supervisor mewar university, Chittorgarh, Rajasthan

ABSTRACT:

In our method, we provide a data protection system secures information, gives your data access authority, and also supplies that control with privacy for your information. To preserve the data, it is necessary to use encryption and key control. Letting only the users with allowed access to this information access the information. Only a secret key holder (approved user) can view the plaintext. Once the data is organized, the suggested method separates the raw set of data into some chunks using principles. In the process of clustering, we utilized the Rule system. Because various data sets are analyzed using different conditions, various rules will apply. Data sets on huge scales are effective since there are no strict rules that must be followed by all datasets. There are three layers for accessing the data in our Analysis Technique. Security is of the utmost importance, which is why all layers of data must be protected and some authorized person must have access to the information. Every member of the organization has a unique public key, which enables everyone to see their own data, and each layer inside the organization has one digital signature depending on which they can access or see the information.

Keywords: *BigData, hadoop, MapReduce, Cryptography.*

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MAP REDUCE WORKLOADS IN TOOLBOX USING HADOOP

Paper ID - 1052

A Paper Presented by:- J.SRAVANTHI & DR. P.NIRANJAN
Research scholar mewar university Chittorgarh Rajasthan
Research supervisor mewar university Chittorgarh Rajasthan

ABSTRACT:

Map Reduce toolbox is used for analysing and modelling for assignments making and copying the implementation of artificial assignments. This paper a distinct toolbox for Map Reduce replication using super-computers has developed. The depict work-flows of the Map Reduce Analysis and the Imitation tool-boxes has describes the aptitudes of this tool-box counting how it allows the user to change suggestions of Map-Reduce implementations into a consistent arrangement to perform analysis on workload traces to model the workload to create realistic synthetic workloads and to simulate the execution of these artificial assignments.

Keywords: Parallel Programming distributed system Hadoop map reduces

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**EFFICIENT APPROACH FOR BIG DATA APPLICATIONS TO IMPROVE
PERFORMANCE IN NETWORK**

Paper ID - 1053

A Paper Presented by:- B.Swathi, &Dr. P.Niranjana
Research scholar mewar university, Chittorgarh, Rajasthan
Research supervisor mewar university, Chittorgarh, Rajasthan

ABSTRACT: Map Reduce is a method for produce and trying to manage massive amounts of data in a decentralized cluster environment. It's been applied to systems such as data handling. Clustering, creating lookup index values, and analyzing log files and a variety of other data analytical methods. Within the having existed throughout the system, medium data is partitioned using a hashing algorithm. Distributing data among reduced tasks. Throughout this Endeavour, the system suggested a new optimization technique on decomposition for address the issue of huge enhancement for huge consequently, a data application and an internet algorithm are included. Designed to improve the partitioning and data aggregation in a in a dynamic fashion. Cost of internet traffic both in online and offline modes and internet based cases, as proved, are effectively diminished. By the general motivation outcome by the different proposals taken and applied

Keywords: Map phase, Reduce phase, distributed system, traffic analysis

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Date :- 29th Feb 2020

**MODELING AND ANALYSIS OF FIVE LEVEL INVERTER FOR RENEWABLE
ENERGY SOURCES**

Paper ID - 1054

*A Paper Presented by: Mr. Durgam Srinivas & Dr. Amith Kr. Jain
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Professor, Shri Venkateshwara University, U.P, India*

ABSTRACT:

A new solar toughness length device which contains a dc/dc power converter and a new seven-diploma inverter. The dc/dc electricity converter integrates a dc-- dc beautify converter in addition to a transformer to transform the final consequences voltage of the solar cellular choice into impartial voltage assets with numerous connections. This emblem-new seven-degree inverter is configured making use of a capacitor choice circuit and moreover a full-bridge electricity converter, related in cascade. A sun photovoltaic gizmo with dc-dc energy converter in addition to a 9 stage inverter, the nine level inverter geography consists of plenty lots less sort of switches on the identical time as contrasted to traditional cascaded H bridge inverter the output of sunlight PV panel tool will simply be fed to a MPPT set of regulations to fetch a most amount of power from a photograph electric powered gadget. This emblem-new seven level inverter is set up the usage of a capacitor preference circuit similarly to an entire bridge energy converter. The capacitor choice circuit converts the two output voltage resources of dc/dc electric power converter right into a three degree dc voltage, in addition to the complete bridge converter on pinnacle of that transforms this 3 section dc voltage into 7 level voltages. The proposed gadget generates sinusoidal final results present day that remains in section with the software voltage and is fed proper into the electricity.

Keywords: PV Array, MPPT, PV panels, multilevel inverter, 7 level inverter, DC to AC converter.

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**EFFICIENT MODEL FOR JOB SCHEDULING TO IMPROVE PERFORMANCE IN
BIG DATA**

Paper ID - 1055

*A Paper Presented by: G.Suhasini, & Dr. P.Niranjana
Research scholar mewar university, Chittorgarh, Rajasthan
Research supervisor mewar university, Chittorgarh, Rajasthan*

ABSTRACT

Using map reduction as a programming method for data-intensive cloud-based apps that demand vast quantities of data storage has become increasingly popular. Hadoop tasks are scheduled using the first-in-first-out (FIFO) approach by default, which means that tasks are scheduled in the order they are received. There are stringent deadlines associated with many map-reduce apps. This can make it difficult to use these apps effectively. Neither the Framework nor any of its components include a scheduler that is subject to a time constraint. Even with the best scheduling tools, there is no guarantee that a project will be completed by a particular date. Schedulers that are currently in use are listed below. While some schedulers are concerned with the issue of fulfilling deadlines, others are more concerned with improving the overall performance of the system as a whole. Because of our investigation, we have developed a approach that allows users to more easily set a project deadline and assess whether or not the job can be completed before that deadline expires. It is useful to guarantee that only jobs with realistic deadline are scheduled to execute using a deadline-based scheduling tool for Hadoop by utilizing this technique. If the node that was supplied does not match the deadline, the project can be finished with physical or virtual nodes that are constantly added to the network as needed.

Keywords: Bigdata, Hadoop, MapReduce, Job Schedule

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Date :- 29th Feb 2020

MODERN AGE PHYSICAL EDUCATION IMPORTANCE

Paper ID - 1057

A Paper Presented by - Shankarappa.C

Physical Education Director

Sri. Manjunatha Swamy First Grade College,

Sarswathi Nagara Davangere

Abstract:

In this day and age physical education is fundamental. Man can carry on with solid and better life exclusively by doing actual exercise. Today new and new infections are arising and have made enormous mischief to man's body. Man's life has become reliant upon prescriptions. For instance digest medication, medication for discharge, medication for rest, and so forth On account of these medications man has become like a mobile robot. In such condition is it reasonable for squander this body like this? How miserable it is that man has the opportunity to do the assistance of specialized devices like vehicle, freeze, TV however he doesn't have the opportunity to deal with his important body. Through actual training man can carry on with his everyday life strongly. Physical education assumes significant part in man's turn of events and demonstrates supportive for better physical, mental, social, passionate and otherworldly life. Here the creator needs to present the significance of actual schooling in our advanced life.

Keywords: Modern age, Physical Education, Social life.

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**PREPARATION OF ALUMINIUM FOOD FOILS WITH THE ADDTION OF BIO
DEGRADABLE PLA**

Paper ID - 1058

A Paper Presented by - M.Johnson¹, Dr: M. Ashok Kumar², Dr: K. Hemachandra Reddy³
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Abstract: In today's life, polymers form an integral part of day-to-day life due to their extensive desirable properties and ease in production. The worldwide production of plastics For many years, conventional plastics are manufactured and used for packaging applications in different sectors. As the food industries are increasing, the demand for packaging material is also increasing. Plastics have transformed the food industry to higher levels; however, conventional petroleum-based plastics are non-degradable which has created severe ecological problems to the environment like a threat to aquatic life and degrading air quality. Biodegradable polymers or bio-polymers emerged as an alternative approach for many industrial applications to control the risk caused by non-biodegradable plastic. According to the type of starting material, they have been categorized as polymers extracted from biomass, synthesized from monomers, and produced from microorganisms. The quality of bio-polymers depends on the physical, mechanical, thermal, and barrier properties.

Keywords: non-biodegradable and bio-polymers, food packaging applications

**Abstract Proceedings
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**AWARENESS AND BEHAVIORAL INTENTION OF MOBILE BANKING APPS
DURING OFFLINE SHOPPING**

Paper ID - 1059

A Paper Presented by: Dr. V. Venkateshwarlu,
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Abstract

The factors influencing mobile banking app usage during offline shopping had been assessed in this research work. An empirical investigation had been made (N = 160) with a measurement model through multiple regression analysis. The past experience had been considered as mediating variable so that the research gap is fulfilled in this area. Many studies have been conducted with technology acceptance model but none of them have used past experience as mediating variable. In this research it is found that past experience does not mediating effect between consumer attitude and behavioral intention during offline shopping. This study is helpful for information technology and marketing professional in banking sector.

Keywords: Consumer attitude, consumer behavioral, mediation analysis, mobile banking, behavioral intentions, technology acceptance model.

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**ROUGH SET APPROACH FOR NOVEL DECISION MAKING IN
MEDICAL DATA FOR RULE GENERATION AND COST
SENSITIVENESS**

Paper ID - 1060

A Paper Presented by: N Divya & VVSSS Balaram

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Abstract:

Clinical decision support systems (CDSS) often base on rules that are inferred from collected patients' histories, together with expert judgements and consented medical guidelines. This type of advisor system is known as rule-based reasoning system or expert system which classifies a given test instance into a particular outcome from the learned rules. The results clearly show that rough set approach is certainly a useful tool for medical applications. Relationships and patterns within this data could provide new medical knowledge. The genetic algorithms offer an attractive approach for solving the feature subset selection problem. The process of finding useful patterns or meaning in raw data has been called knowledge discovery in databases. The algorithms used for the present study are: Exhaustive search, Covering, and Genetic algorithms

Keywords: medical applications, Exhaustive search, Covering, and Genetic algorithms

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**PERFORMANCE IMPROVEMENT OF VERTICAL AXIS WIND
TURBINE WITH AIRFOIL GEOMETRY**

Paper ID - 1061

**A Paper Presented by: MOHD HASHAM ALI, DR. SYED NAWAZISH MEHDI,
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Abstract:

In this work, an airfoil geometry optimized for vertical-axis wind turbine applications is presented in the present studies, the effects of Gurney flaps on aerodynamic characteristics of a static airfoil and a rotating vertical axis wind turbine are investigated by means of numerical approaches. First, mesh and time step studies are conducted and the results are validated with experimental data in good agreement. Furthermore, mounting a Gurney flap at the trailing edge of the blade increases the power production of the turbine considerably. Increasing the Gurney flap height further increases the power production. The best performance found is obtained for the maximum height used in this study at 6% relative to the chord. This is in contrast to the static airfoil case, which shows no further improvement for a flap height greater than 0.5%*c*. Increasing the angle of the flap decreases the power production of the turbine slightly but the load fluctuations could be reduced for the small value of the flap height. The present paper demonstrates that the Gurney flap height for high solidity turbines is allowed to be larger than the classical limit of around 2% for lower solidity turbines.

Keywords: aerodynamics; CFD; flow characteristics; gurney flap; wind energy.