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Siruseri IT Park, Egattur, Chennai - 603 103

### 3.3.3 Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years

Sl. No.	Name of the teacher	Title of the paper	Name of the conference	Year of publication	Name of the publisher
1	Mohideen Abdul Kader	Smart Home Automation with Hybrid Application	International conference on Information, Embedded and Communication System	2018-2019	St.Joseph College of Engineering
2	E.Dhiaravidachelvi	Portable Heart Disease Detector	National Conference on Innovative Trends in Engineering & Technology (NCITET 18)	2018-2019	Jeppiaar Institute of Technology, Chennai
3	Mrs.Jayanthi.E	The Development Of Intelligent Home Security System Using Raspberry Pi	National Conference on Innovative Trends in Engineering & Technology (NCITET 18)	2018-2019	Jeppiaar Institute of Technology, Chennai
4	Mrs.Suganthi.I.S	Diagonizing Diseases By Retinal Images Using Image Processing	National Conference on Innovative Trends in Engineering & Technology (NCITET 18)	2018-2019	Jeppiaar Institute of Technology, Chennai
5	Ms.Sabitha Banu.K	Speed Control Of Road Vehicles Using Internet Of Things	National Conference on Innovative Trends in Engineering & Technology (NCITET 18)	2018-2019	Jeppiaar Institute of Technology, Chennai

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MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
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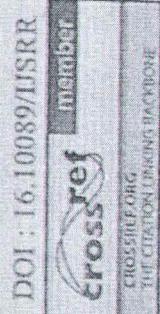
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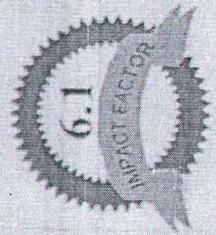
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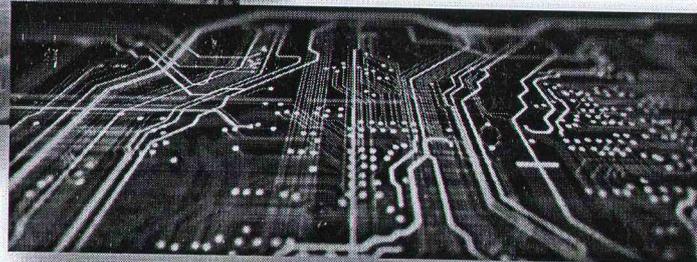
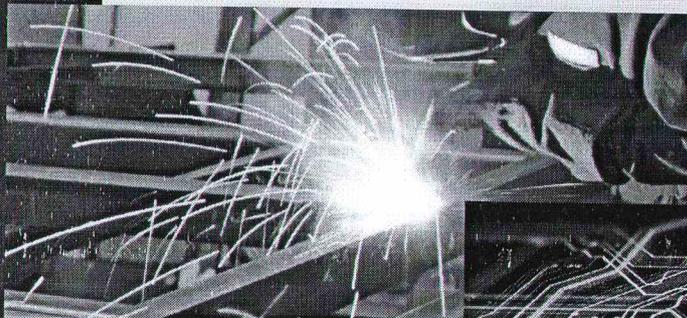
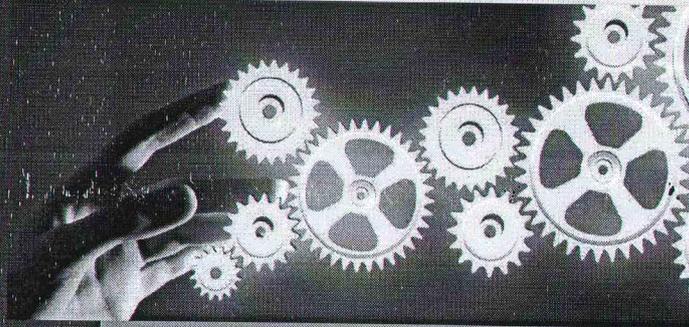


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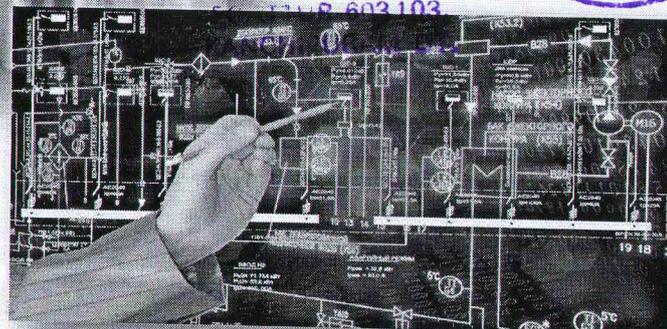
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*Mohamed Sathak A.J.*  
PRINCIPAL  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
KUNNAM, SUNGUVARCHATRAM, SRIPERUMPUDUR, CHENNAI - 631604



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Dr. L.M. Merlin Livingston M.E. Ph.D., Principal, Jeppiaar Institute of Technology  
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**MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING**  
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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 these cracks.

#### 79. OFFLINE INTERNET SOLUTION THROUGH SHORT MESSAGE SERVICE

Shalini Singh, idya.K.B, Supretha.S, K. Suriyakraishnaan<sup>1</sup>UG  
Scholar ssitant Professor, ECE Department, Easwari  
Engineering College  
[shalinikrishma1997@gmail.com](mailto:shalinikrishma1997@gmail.com), [vidyabalakrishnan96@gmail.com](mailto:vidyabalakrishnan96@gmail.com),  
[om\\_supretha1996@gmail.com](mailto:om_supretha1996@gmail.com),

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 web browser.

#### 80. PORTABLE HEART DISEASES DETECTOR

Durga A1, Meena Kumari R <sup>2</sup>, Dhiravidachelvi  
E<sup>31,2</sup> Student of ECE department <sup>3</sup> Professor of ECE department  
Mohamed sathak A.J college of engineering  
[durga03081996@gmail.com](mailto:durga03081996@gmail.com), [meenaanew1997@gmail.com](mailto:meenaanew1997@gmail.com),  
[dm2\\_ecehod@msajce.edu.in](mailto:dm2_ecehod@msajce.edu.in)

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 the ECG 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 INTELLIGENT HOME SECURITY SYSTEM USING RASPBERRYPI3

Ranjith V<sup>1</sup>, Sajid Ali S<sup>2</sup>  
Mrs. E. Jayanthi<sup>3</sup> (Assistant professor/ECE)  
Mohamed Sathak A. J. College of Engineering  
34, Rajiv Gandhi Road (OMR) ; IT highway ; Egattur-603103  
[ranjithvasu1996@gmail.com](mailto:ranjithvasu1996@gmail.com), [sajid241997@gmail.com](mailto:sajid241997@gmail.com)

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 the snap



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**

Ms.V.Surya<sup>1</sup>, Ms.A.Vajitha Parveen<sup>2</sup>, Mrs. I.S. Suganthi<sup>3</sup>  
 Department of Electronics and Communication,  
 Mohammed Sathak A J College Of Engineering  
 suryavaratharajan@gmail.com<sup>1</sup>  
 vajitha6@gmail.com<sup>2</sup>, ece.suganthi@msajce-edu.in<sup>3</sup>

Digital image processing plays a vital role in medical field for detecting and identifying various diseases through digital processing techniques. Retinal images are used 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**

R.Ranajeetha<sup>1</sup>, M.Benisha<sup>2</sup>, R.Thandaiah Prabu<sup>3</sup>,  
 Dr.V.Thulasi Bai<sup>4</sup>

<sup>1</sup>Assistant Professor, Prince Dr K Vasudevan College of Engineering and Technology, Chennai.

<sup>2,3</sup> Assistant Professor, Jeppiaar Institute of Technology,

<sup>4</sup>Professor, KCG College of Technology, Chennai.

<sup>2</sup>benishaxavier@gmail.com<sup>3</sup>thandaiah@gmail.com,

<sup>4</sup>thulasi\_bai@yahoo.com

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 UWB applications.

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

Mr.V.Yokesh<sup>1</sup>, Mr.R.Thandaiah Prabu<sup>2</sup>, Ms.Benisha<sup>3</sup>,  
 Ms.Revathy<sup>4</sup>,

Assistant Professor, Department of ECE, Jeppiaar Institute of Technology, Sriperambuthur, Chennai

The designed antenna is placed on a material called FR-4(flame retardant) whose dielectric constant  $\epsilon_r$  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 resonant frequency.

**85. CONTROLLING AND MONITORING ELECTRICALS OVER INTERNET(IOT)**

Dr.L.M.Merlin Livingston<sup>1</sup>, S.Revathy<sup>2</sup>,  
 G.Merline<sup>3</sup> Professor<sup>2</sup> Assistant Professor, <sup>3</sup> Associate

Professor, Department of Electronics and Communication Engineering, Jeppiaar Institute of Technology, Chennai, TamilNadu, India.

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 control 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 a communication 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,



Handwritten signature and stamp: **PRINCIPAL** MOHAMMED SATHAK A.J. COLLEGE OF ENGINEERING, KANCHI. Page 605/603.

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

*Ms.K M Preetha, Ms.K Nadhiya, Ms.K Sabitha Banu*  
*ug Scholar, Department of Electronics And*  
*Communication Engineering*  
*Assistant Professor, Department Of Electronics And*  
*Communication Engineering*  
*Mohamed Sathak A.J.College Of Engineering Chennai*  
*Kmpreetha97@gmail.com, nadhiyakhaleel2096@*  
*gmail.com, ece.sabitha@msajce-edu.in*

#### ABSTRACT:

In our daily life, enhancement 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, in order 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. Nowadays, the drivers drives the vehicles at very high speed and traffic police are not able to control and monitor them through. In this project, these road vehicles are controlled automatically using Internet Of Things(IOT).

### 97.SMART ENVIRONMENTAL MONITORING SYSTEM

*D.Balasubramaniam, N.Priya,*  
*P.Santhiya, M.Sivaranjinigkm College Of Engineering*  
*And Technology*

#### 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 hazardous 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

<sup>1</sup>L.M.Merlin Livingston, <sup>2</sup>V.Angayarkanni  
<sup>1</sup>Professor, <sup>2</sup>Assistant Professor, Department of  
 ECE, Jeppiaar Institute of Technology

#### 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

<sup>1</sup>L.M.Merlin Livingston, <sup>2</sup>Dr.S.Arul  
<sup>1,2</sup>Professor, Department of ECE, Jeppiaar  
 Institute of Technology

#### 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