IEEE PROJECTS ON EMBEDDED SYSTEMS / µ CONTROLLER / ARM / RASPBERRY PI - LINUX HARDWARE / ANDROID HARDWARE : 2014 - 2015

EMS 2001. Take Photo & Mark Me : INTEGRATION OF RFID & ULTRASONIC BASED USER ATTENDANCE AND BEHAVIOUR MONITORING SYSTEM USING IMAGE CAPTURING

ARCHITECTURE DIAGRAM

DESCRIPTION: In the **EXISTING SYSTEM**, Attendance is System is pretty Old Technology to call the names of the Students Manually. Proxy Attendance is quiet comfortably happening .In the **PROPOSED SYSTEM,** RFID system used to monitor the student attendance but has some drawback. In the **MODIFICATION** part , RFID based Attendance System of every user is implemented. Two types of implementation is integrated here. First one is student will be showing RFID tag in front of the Door, which initiates the camera and Photo is Captured & Send it to Department Head, where Attendance is marked. The second part is during the class hours Ultrasonic sensor is activated instead of RFID someone leaves in between the Class Hours or Someone comes Late to the Class, Ultrasonic is Triggered & Automatically Camera is Initiated which Captures the Image and sent to the Department Head. Student Behavior is monitored.

DOMAIN: Raspberry Pi, Linux Hardware, WiFi, Society Based

IEEE REFERENCE: IEEE Paper on ICISA, 2014.

EMS 2002. Wireless Charge Me : IMPLEMENTATION OF WIRELESS POWER TRANSFORMATION VIA WIFI / BLUETOOTH FOR PHYSICALLY CHALLENGED WHEEL CHAIR & MOBILE

ARCHITECTURE DIAGRAM:

DESCRIPTION: Wireless power transfer (WPT) is an emerging wireless battery charging technique that does not require plugs or wires to charge the batteries of mobile devices. When two devices are tuned to the same resonant frequency, electric power is transferred from one to the other with high efficiency. Using this concept we have implemented a topic to wirelessly charge the mobile phone and the wheel chair battery of a physically challenged person. The wheel chair will be controlled from the user's mobile using Bluetooth technology. A WiFi / Bluetooth module in the wheel chair will receives the commands from the user's mobile. These commands will then send to the microcontroller and controller will controls the motion of the wheel chair.

DOMAIN: Wireless Power Transmission, Robotics, WiFi / Bluetooth, Society Based

IEEE REFERENCE: IEEE Transactions on Magnetics, 2014

EMS 2003. Bluetooth Password : ANDROID & BLUETOOTH BASED PASSWORD – USER AUTHENTICATION SYSTEM FOR CASH VEHICLE LOADING SYSTEM IN ATM

ARCHITECTURE DIAGRAM:

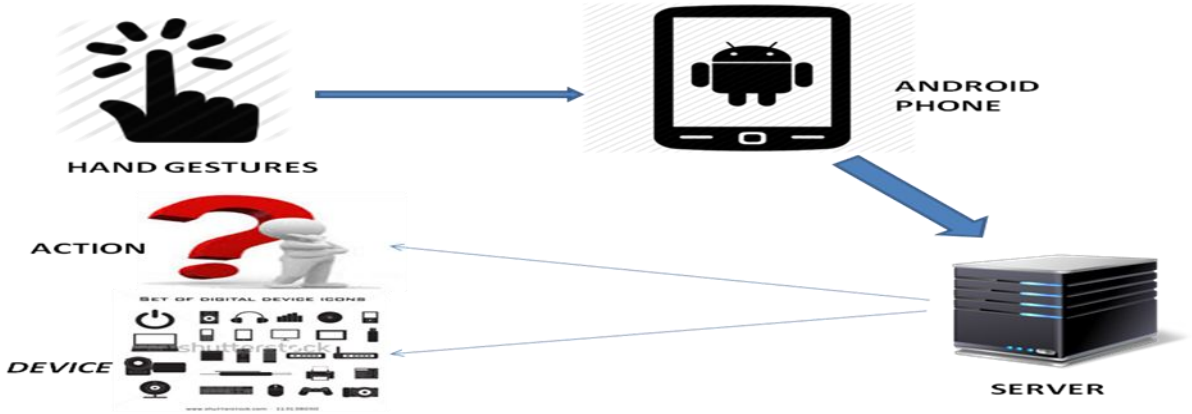
DESCRIPTION: In the **EXISTING SYSTEM**, User Access & Authentication System functions using Personal Identification (or) Touch Panel based Signature in the form of Password / PIN for Access. In the **PROPOSED SYSTEM**, Android based Application is Developed for Bluetooth based Authentication. Android user is authenticated by Processing the Password Provided through Bluetooth Communication. In Our **MODIFICATION**, same Android & Bluetooth based Password Authentication is achieved for ATM Money Loading Vehicle. One Bluetooth is attached with the Money Loading Vehicle & another is with ATM Machine. Authenticated person's Phone Bluetooth coordinates with the ATM Bluetooth if both the locations are matched; the Password is Generated and Verified by ATM Bluetooth via Vehicle Bluetooth.

DOMAIN : Raspberry Pi, Wireless, Security, Society / Social Cause

IEEE REFERENCE: IEEE Paper on ICECI, 2014

EMS 2004. Hand Speak : MATLAB BASED HAND GESTURE RECOGNITION WITH CORRESPONDENCE VOICE PLAY BACK / COMMUNICATION & HEART BEAT MONITORING SYSTEM

ARCHITECTURE DIAGRAM:



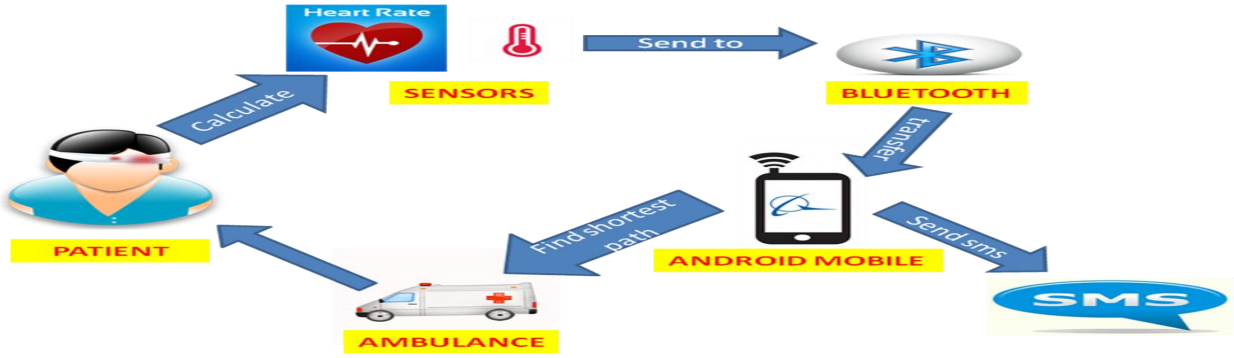
DESCRIPTION: In the **EXISTING SYSTEM** there is no hand recognition system to indicate the actions. In the **PROPOSED SYSTEM**, Matlab Application is deployed to capture Images through Camera. Main Idea of the Project is to understand the communication of the Deaf People. Deaf People will show their Hand Gesture to the Camera and communicates to the Normal Persons. In the **MODIFICATION**, Deaf Person will show the Hand Gesture to the System Camera and Communicates to the Server to process the Hand Gesture Images. Server will Transmit the corresponding Values and the Voice is Played accordingly to the Normal Person and Heart Beat Sensor is also attached to Track the Patient's Health.

DOMAIN : Image Processing, Matlab, Society / Social Cause

IEEE REFERENCE: IEEE Paper on CSNT, 2014

EMS 2005. Call Ambulance : IDENTIFICATION OF NEAREST AMBULANCE VIA GPS SHORTEST PATH FOR PATIENT MONITORING WITH MEMS, HEART BEAT USING ANDROID & BLUETOOTH

ARCHITECTURE DIAGRAM:



DESCRIPTION: In the **EXISTING SYSTEM**, patient has to be monitored by the person present in the home or by the helpers. There is no automatic alerting system is implemented so far. In **PROPOSED SYSTEM**, Patient with MEMS sensor is connected to the Android phone through GSM Communication. In case of emergency automatically Mobile GPS is triggered sent to the Server. Server will calculate the shortest path to reach the Ambulance and also Alert SMS to send to relatives. In the **MODIFICATION** part of this project, is along with the MEMS Sensor, Heart Beat and Temperature Sensor are connected. Instead of GSM communication we are implementing Bluetooth Communication.

DOMAIN : Raspberry Pi, Linux Hardware, Android, Wireless, Society / Social Cause

IEEE REFERENCE: IEEE Paper on ICACT, 2014

EMS 2006. Exam Monitor : STUDENT BEHAVIOR & ATTENDANCE MONITORING WITH AUTO SMS AND NFC BASED SPEEDY EXAMINATION SYSTEM USING ZIGBEE

ARCHITECTURE DIAGRAM:

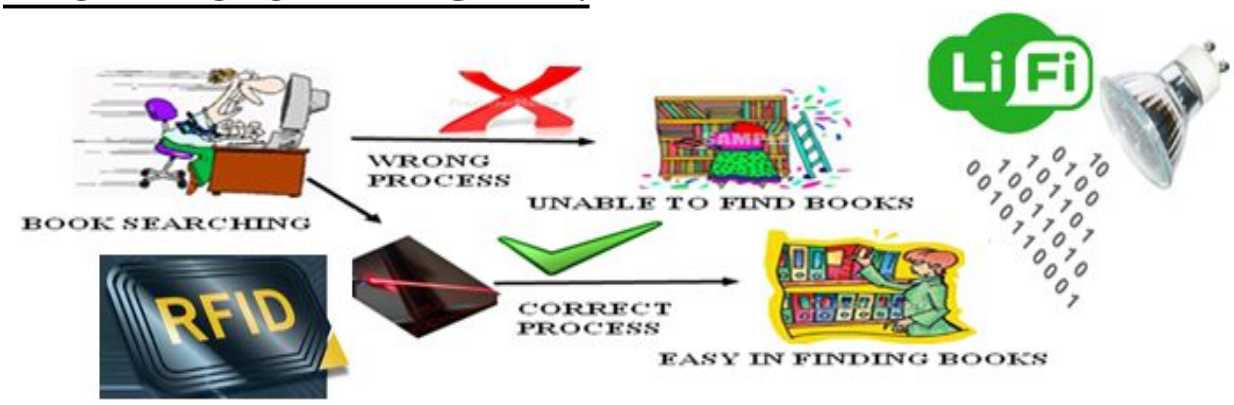
DESCRIPTION: The main Aim of the Project is to Detect any Malpractice is happening in the Examination Hall, NFC based Attendance System, Emergency Support for the students and NFC based Examination Valuation. We design a Touch Panel for both Invigilator and the Student. In the Invigilator part Rows and Column of the Students placed in the Examination is displayed to choose in case of Malpractice by any Student. In the students part NFC based Attendance is calculate along with the Answers Validation & Health based emergency is also processed using Zigbee Communication. Answers are Stored in the NFC tags which is retrieved for Valuation. SMS Alerts are send to the parents and Teachers for Attendance system.

DOMAIN: Wireless, NFC, Society / Social Cause

IEEE REFERENCE: IEEE Paper on REV, 2014

EMS 2007. Find The Best Book : IDENTIFICATION OF BEST BOOKS IN A LIBRARY WITH RFID BASED USER ACCESS & AVOIDANCE OF BOOKS MISPLACEMENT

ARCHITECTURE DIAGRAM:



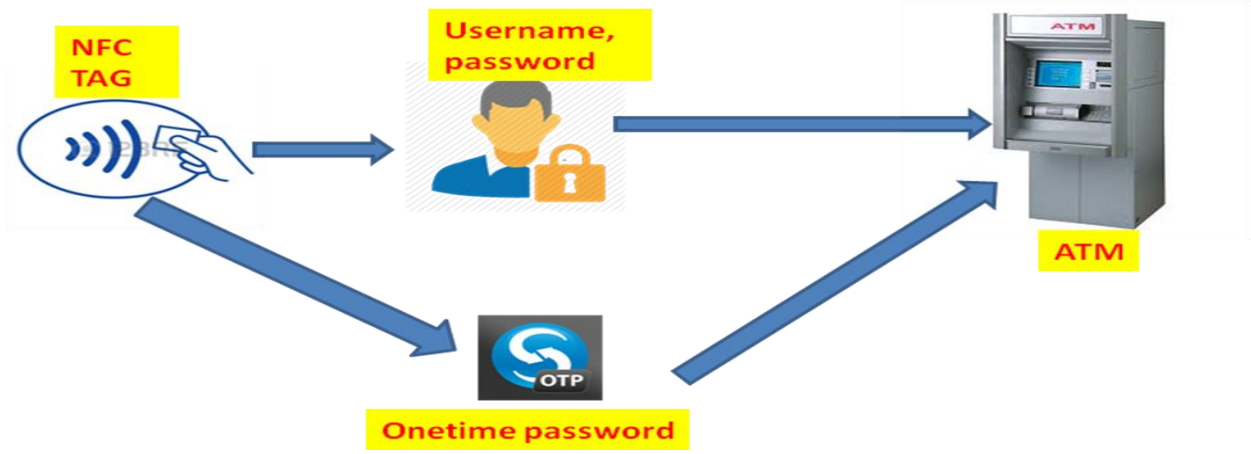
DESCRIPTION: In the **EXISTING SYSTEM**, Library Management System is only Manual Process. Some libraries have RFID based Authentication for User Access of Books. In the **PROPOSED SYSTEM,** colour based Book Segmentation is achieved by constructing a Robot. Books are placed on the Arm of the Robot and Web Camera captures the Book and stores the Colour of the Book. The **MODIFICATION** part of this Project is our Implementation. Mere capturing the Book Front & Back Wrapper alone does not going to Serve the People. Our Major implementation is Identification of Best Books based on Keyword based Filtering Technique. We use Stemming Algorithm to Extract Key Terms & Frequency pattern Algorithm is used to Detect Maximum numbers of Input Term appearance in a Book. we also use RFID for User Access control & also to detect Book Misplacement also.

DOMAIN: Raspberry Pi, Linux Hardware, Society Based, LiFi

IEEE REFERENCE: IEEE Paper on ICARSC, 2014.

EMS 2008. ATM Guard : SMART ATM GUARD IMPLEMENTATION WITH NFC BASED OTP DETECTION WITH USER BEHAVIOUR MONITORING USING ZIFBEE

ARCHITECTURE DIAGRAM:



DESCRIPTION: In the **EXISTING SYSTEM**, RFID based Entrance System is implemented. NFC is not included. In the **PROPOSED SYSTEM**, User is authenticated through NFC via Zigbee for opening the Door. In our **MODIFICATION**, same NFC & Zigbee is used to ATM Application. User's BFC Tag is transmitted to the ATM Machine via Zigbee Network. We also monitor Time taken in ATM Machine, Withdrawal of Money, and Sequence Pattern. If any of the above said Parameters are Varied, OTP is generated to the Users Mobile. Even is n the normal Transaction, OTP is Generated to write in the NFC Tag for Next Transaction.

DOMAIN: Security, Wireless, NFC, Society / Social Cause

IEEE REFERENCE: IEEE Paper on ICMTMA, 2014

EMS 2009. Park Me Safe : ANDROID FRAMEWORK FOR AUTOMATIC PARKING RESERVATION SYSTEM WITH BEST POSSIBLE ROUTES

ARCHITECTURE DIAGRAM:

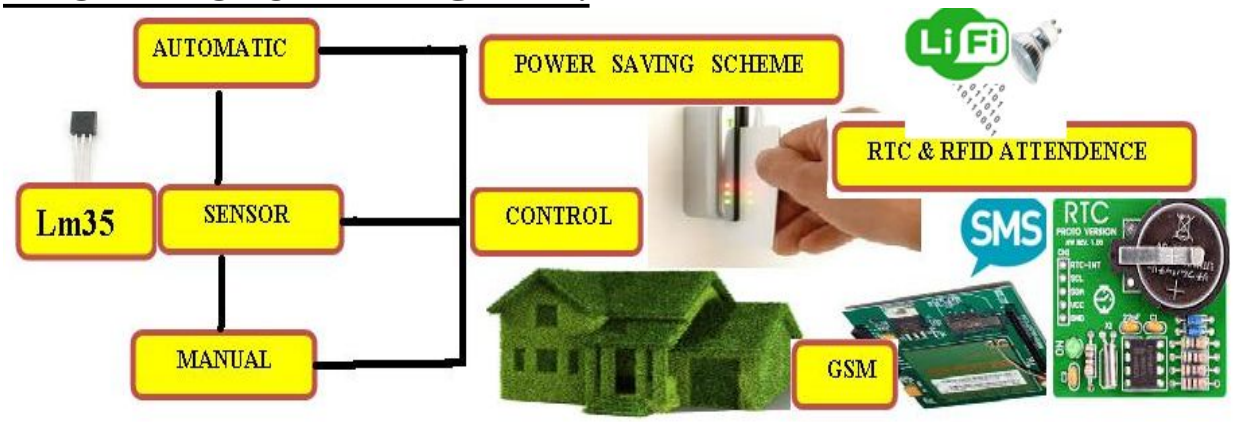
DESCRIPTION : In the **EXISTING SYSTEM**, Parking is the major Problem nowadays. Many of us gets disturbed easily of not parking the Vehicles. In the **PROPOSED SYSTEM**, user can park the Vehicle through Android Application in advance itself. Android user can choose the Route based on the Parking Space availability. On the Embedded Hardware end, an Intelligent Parking is implemented based on Slot Allotment. In our **MODIFICATION**, Android User can book Advance & Current Parking Space and also can pay the Money through Application itself. Server is authorized to cancel the Slot in case of arrival of Vehicle beyond the Threshold Time Frame.

DOMAIN: Raspberry Pi, Linux Hardware, LiFi / WiFi, Android, Wireless, Society / Social Cause

IEEE REFERENCE: IEEE Paper on ICMTMA, 2014

EMS 2010. Track Me Switch off: IMPLEMENTATION OF AUTO POWER CONTROL WITH USERS & SENSORS AND RFID BASED ATTENDANCE SYSTEM

ARCHITECTURE DIAGRAM:



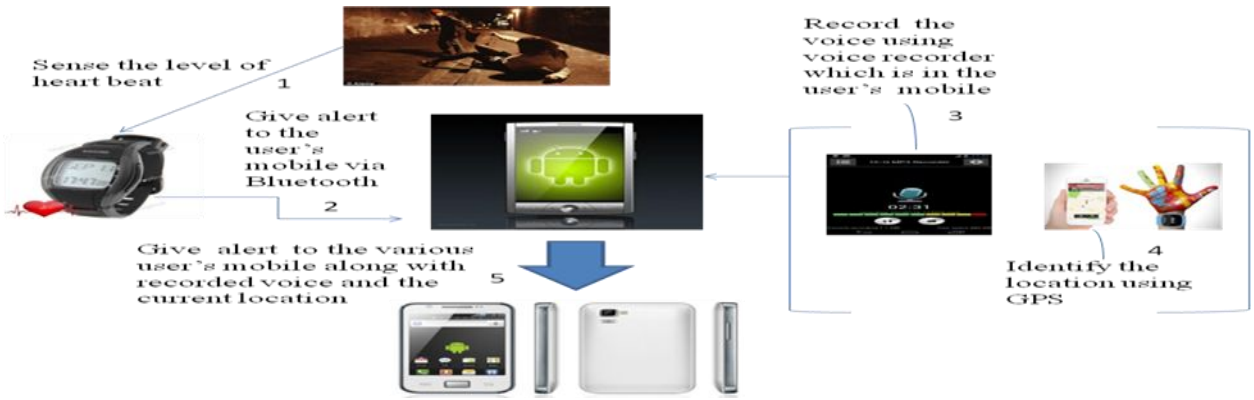
DESCRIPTION : The main objective of Project is to manage the Power Saver Scheme with Optimized Power Management. The Appliances here in this Project can be controlled using 3 ways. 1. Manual – we can control the Devices Manually. 2. Automatic – Devices are Switched On / Off based on Human Detection using RFID. 3. Devices are controlled based on the Sensor Values. RFID is attached in the Entrance to Track the Users. Once the RFID Tag is shown to the Reader corresponding Devices are Switched On in case of Automatic Mode and SMS is send via GSM to the Corresponding Authorities about the User's Presence. In the Sensor mode based on the Sensor values (Temperature) Devices are controlled. We implement Control of Devices, User Tracking and SMS based Attendance System.

DOMAIN : Raspberry Pi, Linux Hardware, Wireless, LiFi, Control System

IEEE REFERENCE: IEEE Paper on CSNT, 2014

EMS 2011. Girls Safety: ANDROID BASED GIRLS SAFETY APPLICATION WITH BLOOD PRESSURE MONITORING & LOCATION TRACKING, EMERGENCY SUPPORT SYSTEM

ARCHITECTURE DIAGRAM:



DESCRIPTION: In the **PROPOSED SYSTEM** the android application is used to track the location of the affected girls. The sensor is used to monitor the pulse rate of the girls. If the range of the pulse rate is changed from the normal condition for more than 15 mins, it will send a request to the server. The server will send an emergency alert emergency alert to the intern persons through gsm modem. Also it will send an alert to the nearest hospital if the pulse range is decreased and it will send an alert to the neatest police station if the pulse rate is increased. Then the intern person will track the location of the girl using GPS and they will take the remedial action for the affected persons. The mobile numbers of the intern person will be stored in the database. Each intern person will be provided with the authentication. Using that authentication they will access the corresponding application.

DOMAIN : Raspberry Pi, Linux Hardware, Wireless, Society Based

IEEE REFERENCE: IEEE Paper on ICMTMA, 2014

EMS 2012. Why To Wait : IMPLEMENTATION OF BUS TRACKING, SERVER REPORTING WITH BUIS QUERYING SYSTEM TO MINIMISE WAITING TIME

ARCHITECTURE DIAGRAM:

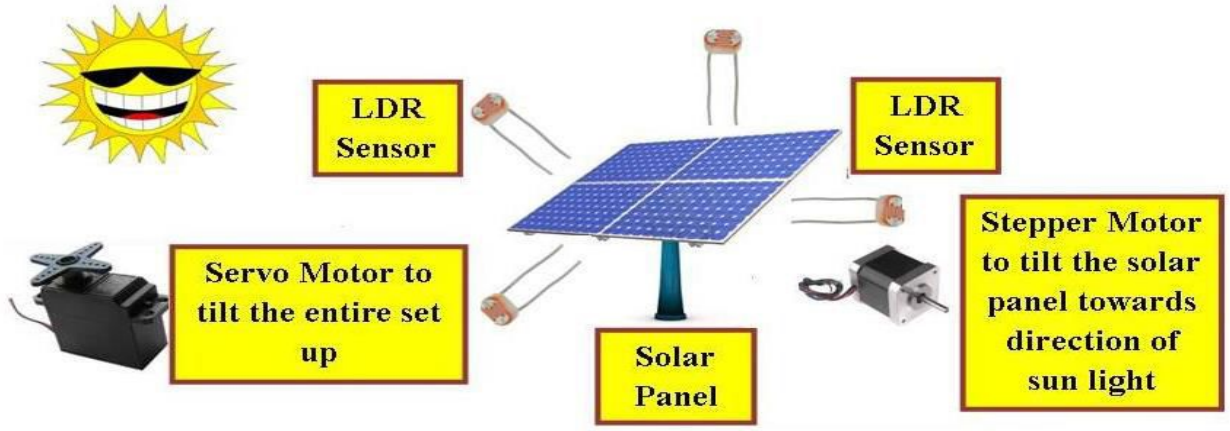
DESCRIPTION: The main objective of the Project is to Track the Bus using GPS and which is communicated to the Coordinated Node through Zigbee. User will send the request to the Coordinator Node through SMS. The Coordinator Node will store the Vehicle Location as well as it receives the User Query through GSM and responds back to the User regarding the Vehicle's Current Location. **OR** This Project can also be implemented by Fabricating a Robot Hardware with Zigbee and IR Receiver. At every Location IR Transmitter is Positioned, when the vehicle crosses the IR Transmitter, the Vehicle ID & IR ID is Transmitted to the Zigbee Coordinator via Zigbee Communication. Coordinator Zigbee will update all the details of the Bus. GSM is connected to the Zigbee Coordinator. User will send the request of Source to the coordinator about the Arrival of Bus.

DOMAIN : Raspberry Pi, Linux Hardware, Wireless

IEEE REFERENCE: IEEE Paper on ICMTMA, 2014

EMS 2013. Sun Vision : IMPLEMENTATION OF AUTOMATIC SOLAR TRACKING TO MAXIMIZE ILLUMINATION AND HIGH BATTERY STORAGE

ARCHITECTURE DIAGRAM:



DESCRIPTION: This paper describes the embedded solar tracking instrumentation system using microcontroller. The system consists of Light Dependent Resistor (LDR) sensor, microcontroller, motor and solar panel. The microcontroller is the main component for controlling the system. The LDR on four sides of the panel is used to detect the direction of sun rays. Based on the LDR sensor output, the controller will control the motor to change the direction of the solar panel to observe high amount of solar radiation. The solar system will track the location of the sun to ensure the solar panel is always perpendicular with the sun therefore optimizing power output.

DOMAIN: Renewable Resources, Mechanical, Electrical

IEEE REFERENCE: IEEE Paper on ICONCE, 2014

EMS 2014. Wireless Charger Hunt : VEHICLE THEFT IDENTIFICATION RFID BASED VEHICLE ID DETECTION IN A WIRELESS CHARGING APPLICATION

ARCHITECTURE DIAGRAM:

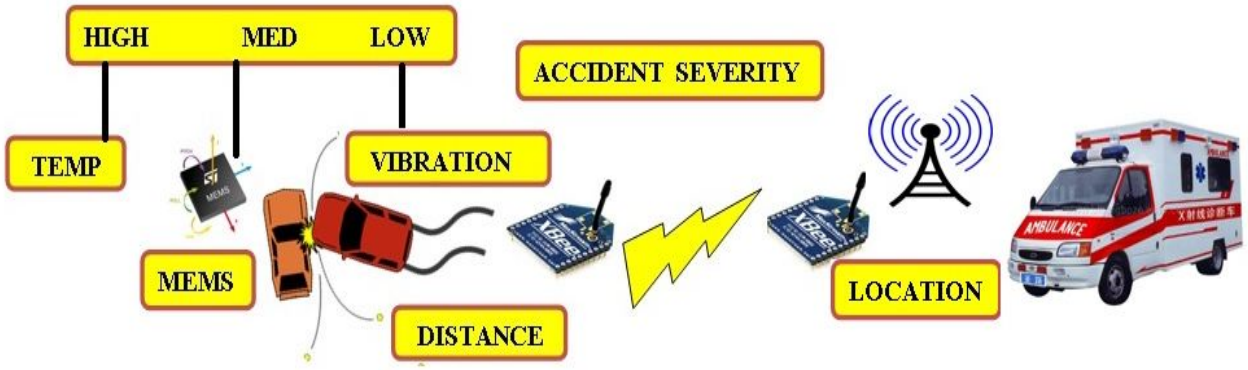
DESCRIPTION: In the **EXISTING SYSTEM** there is no proper payment system for the electric chargeable vehicles. Also there is no very effective system to track the stolen vehicles; still police job is finding the lost vehicle is very difficult. In the **PROPOSED SYSTEM** the electric chargeable vehicle will be monitored by the server if the vehicle will be stolen. The owner will give the request to the server when the stolen vehicle get charged it will send request to the police station and send alert to the vehicle owner. **MODIFICATION** of the Project is Stolen Request is given via Android Application or through System to the Server. We also include Wireless Power Transmission (WPT) in this Project to charge the Vehicle. We use RFID for Vehicle Number Authentication.

DOMAIN : Raspberry Pi, Linux Hardware, Wireless, Society Based

IEEE REFERENCE: IEEE TRANSACTIONS on Vehicular Technology, 2014

EMS 2015. Auto Accident Track : IMPLEMENTATION OF AUTO LOCATION TRACKING OF ACCIDENT VEHICLE WITH EMERGENCY SUPPORT USING ZIGBEE COMMUNICATION

ARCHITECTURE DIAGRAM:



DESCRIPTION: The **PROPOSED** system of the Project is to identify the Severity of the Accident and Place of Incident occurred. We Deploy Ultrasonic, Vibration, Speed, Gas, Temperature Sensor for this process. Zigbee is used for Communication. One Zigbee is connected in the Vehicle and another is with the Street. Based on the Street Zigbee ID Location is Tracked and immediate Support is Provided. **MODIFICATION** of the Project is to take Snap Shot and which is send to the Server, so that we can add up another Proof to Identify the reason of the Accident.

DOMAIN: Raspberry Pi, Linux Hardware, Wireless, Society Based

IEEE REFERENCE: IEEE TRANSACTIONS on Mobile computing, 2014

EMS 2016. Finger Print Poll : RFID AND FINGER PRINT BASED USER RECOGNITION SYSTEM FOR SECURED VOTING IN AVOIDANCE OF RECASTING & PROXY CASTING MICROCONTROLLER

ARCHITECTURE DIAGRAM:

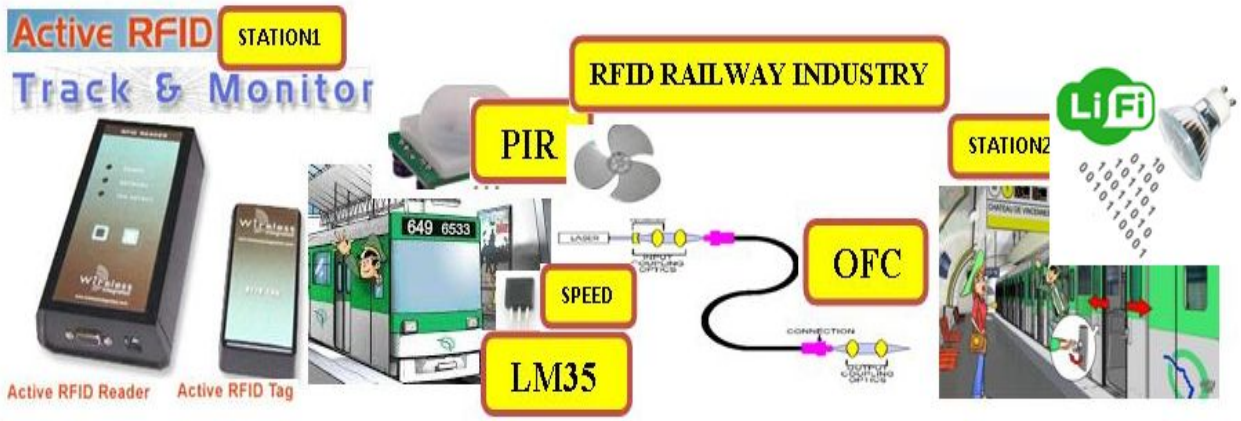
DESCTIPTION: In the **EXISTING SYSTEM**, Voters are Verified using Voter's ID only. Recasting & Proxy Voting is unfortunately irreversible in Real-time. In the **PROPOSED SYSTEM**, RFID is used instead of manual Voter's ID and Results are Announced as per schedules. In Our **MODIFICATION**, both RFID & Finger Print is used for User Authentication. Casting of vote is Achieved using Touch Panel. Results are announced on the day of Election itself .

DOMAIN: Security, Society / Social Cause

IEEE REFERENCE: IEEE Paper on Indiacom, 2014

EMS 2017. Train Track : INTEGRATION OF PIR BASED DEVICE CONTROL, SPEED CONTROL & FIBRE OPTIC BASED AUTO ALERT OF TRAIN

ARCHITECTURE DIAGRAM:

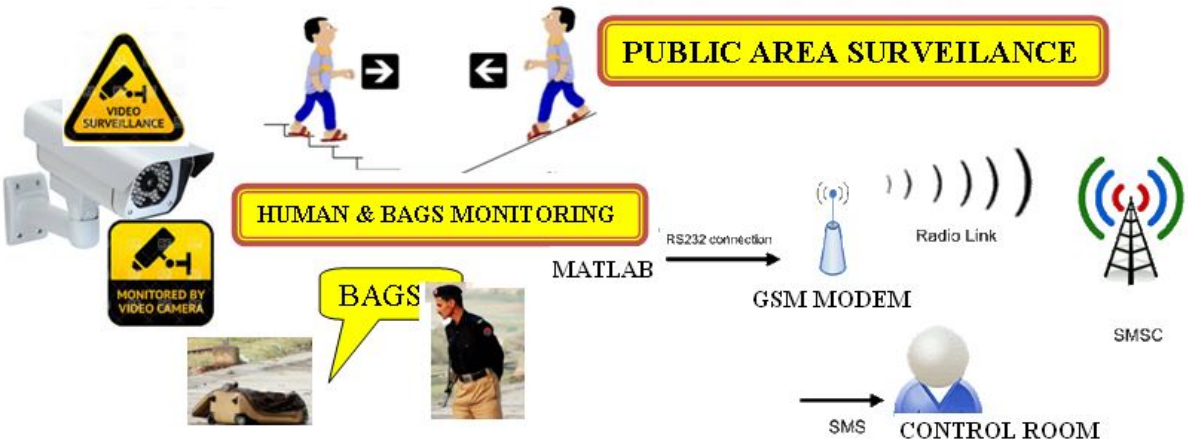


DESCRIPTION: The main Aim of the Project is to communicate the Train Arrival to the next Station using Active RFID, to control the Speed of the Train and to control the Appliances in the Compartments using PIR Sensors. The Appliances in the Compartments are Switched ON based on the PIR Sensors Motion detection. Temperature Sensor is used to measure the Temperature of the Wheel, so that the speed is controlled. We also include Speed Sensor to control the speed of the Train. We communicate to the next Station about the Train's Arrival by the current Station using LiFi / Optical fiber Communication. We also announce about the forth coming Station Names in the Compartments for the passengers understanding.

DOMAIN : Raspberry Pi, Linux Hardware, LiFi / Fiber Optics, Control System

IEEE REFERENCE: IEEE Paper on ACES, 2014

EMS 2018. Techno Police : MATLAB BASED HUMAN MONITORING AND IMAGE TRACKING WITH SMS ALERT ARCHITECTURE DIAGRAM

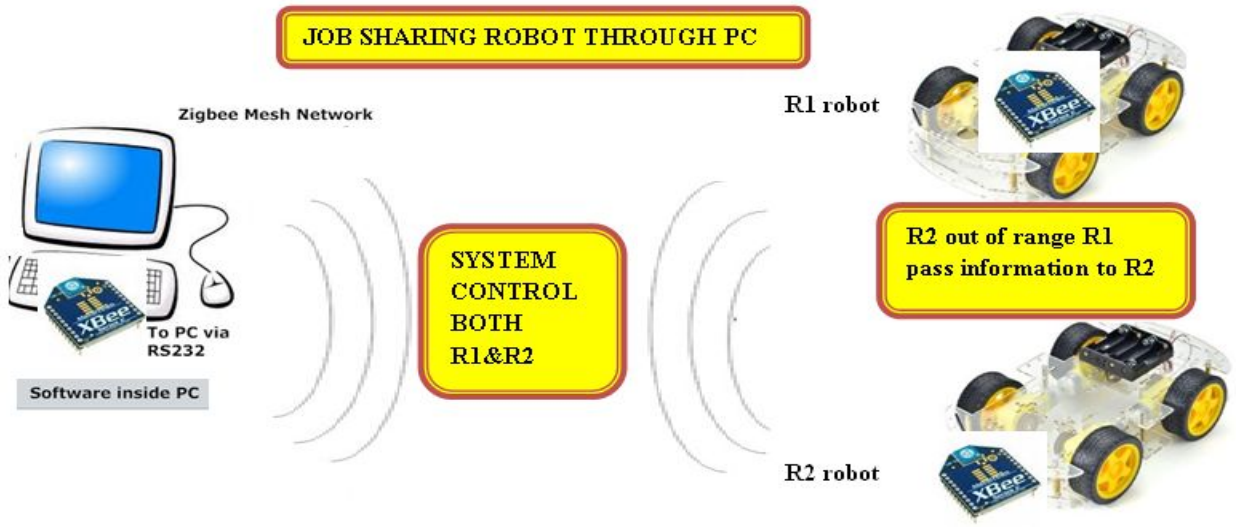


DESCRIPTION :. In **PROPOSED SYSTEM,** Home Security is implemented. If any interrupt occurs, immediately it is detected and controller communicates to the Phone via SMS. In the **MODIFICATION** phase of the project is our Implementation. Webcam is connected to a System and which Tracks the Human Movements in a Public Moving Areas. Our System will Track an Object as well as a Person Staying for a Long Time. If Either of these Two are Staying for a Quiet a Long Time then automatically Our System sends a Request to the GSM to send a SMS Alert for the corresponding Authorities. So that We can Scan any Illegal Activities or Bomb Threat in those Areas.

DOMAIN : Matlab, Image Processing, Security, Society Based

IEEE REFERENCE: IEEE Paper on ICICT, 2014

EMS 2019. Reach Me When Out Of Reach : INTEGRATION OF MULTI ROBOT SYSTEM FOR EFFECTIVE JOB SHARING & RELAY BASED COMMUNICATION SYSTEM



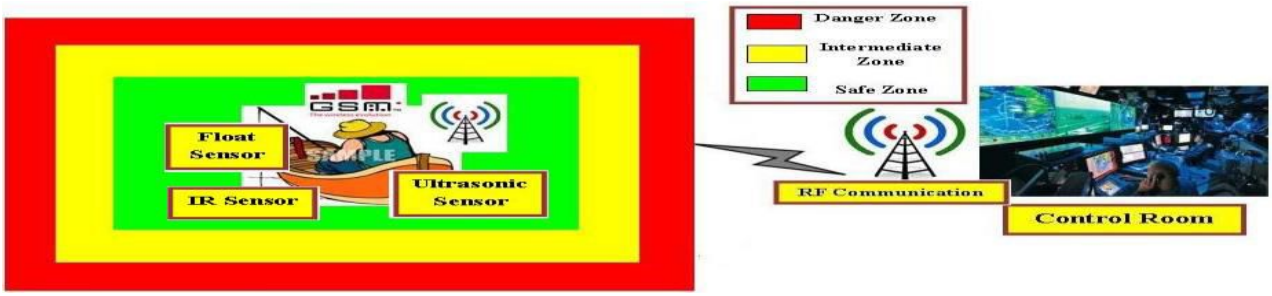
DESCRIPTION : In the **PROPOSED** System, three Zigbees are interconnected, where one is connected to the System, another Two Zigbees are connected to Two Robots. Sensors are connected to the Robots to Monitor. In the **MODIFICATION** part of the Project is our Implementation. Two Robots are Connected with same or Different Sensors Unit along with Zigbee for Communication. System is also connected with 1 Zigbee Unit. System would Pass a Command to Robot 2 to Perform a Task. If Robot 2 is Out of Range, then System Communicates to Robot 1 to pass the information to Robot 2. If Robot 1 and Robot 2 rare in the same Range of Communication, then Robot 1 Transmits the Command to Robot 2. We are using Job Scheduling Process to divide the Jobs among two Robots of Effective Communication.

DOMAIN : Robotics, Wireless

IEEE REFERENCE: IEEE Paper on CCDC, 2014

EMS 2020. Save Fishermen : DEVELOPMENT OF SAFETY ZONE DETECTION WITH PREVENTION OF FISHERMEN OUT OF RANGE TRAVEL USING RFID WITH GSM ALERT

ARCHITECTURE DIAGRAM



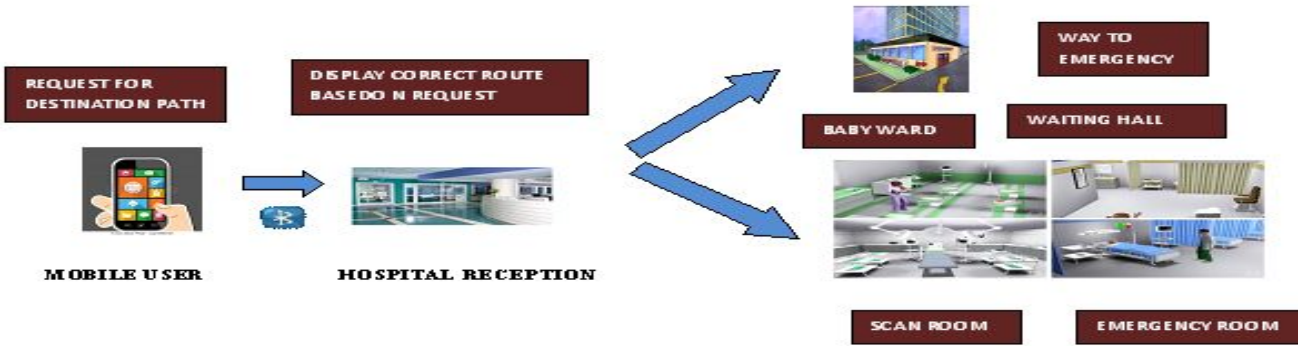
DESCRIPTION: This project describes various problems during the navigation of a boat for fishing and provides solutions to overcome these problems. The most important problem for the fishermen during fishing is to track their location in the sea. For this, the sea area is divided into three zones as Safety, Intermediate and Danger Zones for security purposes. The boat's location is tracked using GPS location of the boat. For prototypic model, RFID Reader is used instead of GPS. RFID reader is used to read the tag values of each zone. The boat is allowed to roam anywhere within the safety zone. A buzzer alert will be given to the fishermen if the boat crosses the intermediate zone and danger zone. If the boat crosses the danger zone, the boat will be stopped and reversed back to the safety zone automatically Various sensors in the boat are used for safe journey in the sea. Ultrasonic sensor is used to find out presence of icebergs , float sensor is used to monitor the fuel level in the boat, IR sensor is used to monitor speed of the propeller fan. If any problem occurs to the boat in the sea, then an alert SMS will be sent to the control room using GSM in the boat.

DOMAIN: **Raspberry Pi, Linux H/W, Control System, Society Based**

IEEE REFERENCE: **IEEE Paper** on **ASEE,** 2014

EMS 2021. Blue Track : BLUETOOTH & ANDROID-BASED INDOOR TRACKING & NAVIGATION WITH AUTO APPOINTMENT

ARCHITECTURE DIAGRAM



DESCRIPTION: In the **EXISTING SYSTEM**, GPS signals are blocked by walls. So tracking of indoor navigation is really tough. In the **PROPOSED SYSTEM**, a new real-time indoor guidance system using Personal Handy-phone System (PHS) and Android device for visitors in hospitals to estimate a user's indoor position in hospital. But the communication cost is high. In the **MODIFICATION PROCESS**, we are using Bluetooth in mobile for communicate the hospital system. So user gives a request to hospital reception for reach the destination via Bluetooth. And the user gets the Map Image to reach the destination. For example, if the user would select emergency room and will get the graph image to reach that room. During the path, user would be crossing Scan room means, Bluetooth installed in that scan room will send it's ID automatically to the user, even user can to fix appointment if he requires. This process will reduce waiting time spend on every room.

DOMAIN : Raspberry Pi, Hardware, Android, Wireless, Society Based

IEEE REFERENCE: IEEE Paper on ICACT, 2014

EMS 2022. Remind Me : ANDROID IMPLEMENTATION OF LOCATION REMAINDERS WITH DETECTION OF IMPLACABLE ITEMS VIA BLUETOOTH

ARCHITECTURE DIAGRAM:

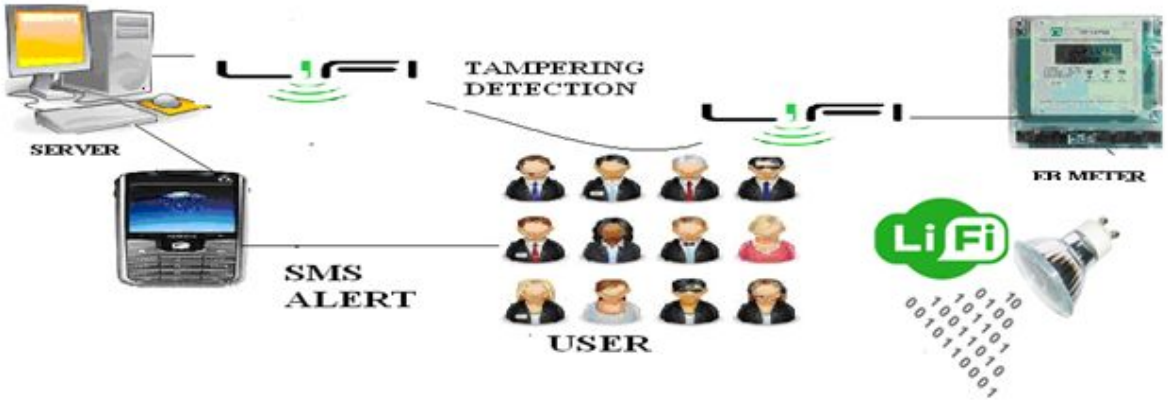
DESCRIPTION: The main aim of the Project is to remind Users when they reach the Destiny. We all travel in very busy schedules where we are not fulfilling all our Activities and works. This Android based Reminder has been initiated. We deploy Bluetooth Devices for the Areas and Android user's Bluetooth Device will Start Reminding our Tasks when we reach the Destiny. Along with this implementation, we also include Bluetooth based Searching of most forgettable items. Those Valuable things are attached with Bluetooth device and an Alarm. Android User will find out easily those misplaced Items very easily.

DOMAIN : Raspberry Pi, Linux Hardware, Android, Wireless

IEEE REFERENCE: IEEE Paper on PERCOM, 2014

EMS 2023. Lifi EB Check : INTEGRATION OF REMOTE EB MONITORING, TAMPERING WITH ANDROID BASED AUTO PAYMENT SYSTEM

ARCHITECTURE DIAGRAM



DESCRIPTION: In the **EXISTING SYSTEM**, Traditional electro-mechanical meters, still Widely used today, are prone to drift over temperature and time. EB Person has to come home and take the Meter Readings manually. In the **PROPOSED SYSTEM**, GSM network is used to detect the EB Meter Readings and Automatic SMS Alert is send to the Customer. In the **MODIFICATION** Part, We implement Zigbee Technology instead of GSM as it is cheaper and will be useful even Not Reachable Tower Accessibility Areas also. One Lifi is connected to the EB Server and another is connected to the Home EB Meter. EB Meter Readings are obtained using Zigbee Network as well we are detecting Neutral Tampering

DOMAIN: Raspberry Pi, Linux H/W, LiFi, Wireless, Society Based

IEEE REFERENCE: IEEE Paper on SCEECS, 2014

EMS 2024. Duplicate Control 3 Axis Robo: IMPLEMENTATION OF GESTURE BASED 3 AXIS ROBOT WITH PICK & PLACE OPTIONS

ARCHITECTURE DIAGRAM:

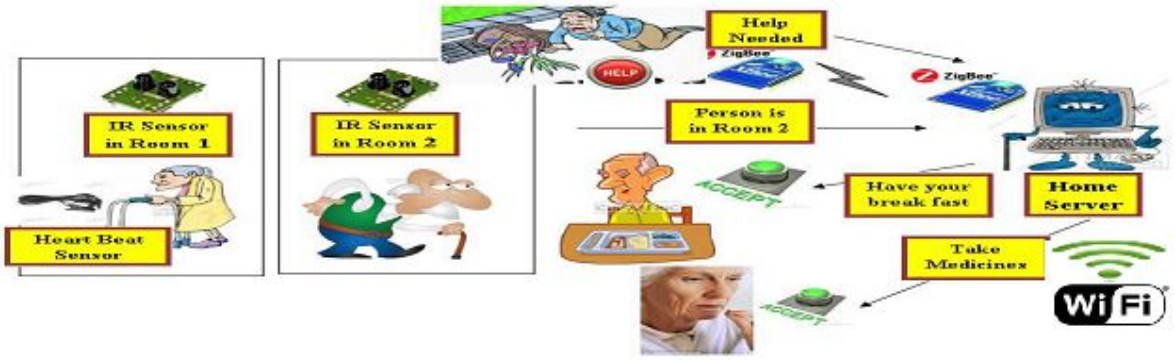
DESCRIPTION: The main Objective of the Project is to control the Robot through Human gesture Recognition. Matlab Software is used for User Gesture Recognition via Web camera. Data is collected to Extract the Feature of Gestures from the User. Clustering is achieved for Gesture Recognition. Once the Gesture is recognized corresponding Data is communicated with the Robot via RF Communication. Modification Part of the Project is build a 3 Axis Robot where by Robot action are controlled using Gesture Recognition. Controls are Left, Right, Forward, Backward, Rotate Clockwise, Rotate Anti Clockwise, Arm Up, Arm Down, Grabber open & Grabber Close.

DOMAIN: Robotics, Image Processing, Matlab, Mechanical

IEEE REFERENCE: IEEE TRANSACTIONS on Human - Machine Systems, 2014

EMS 2025. Watch Me : ANDROID & WiFi BASED REMOTE M - PATIENT TRACKING WITH HEALTH MONITORING, MEDICINE ALERTING & INDOOR NAVIGATION SYSTEM

ARCHITECTURE DIAGRAM:



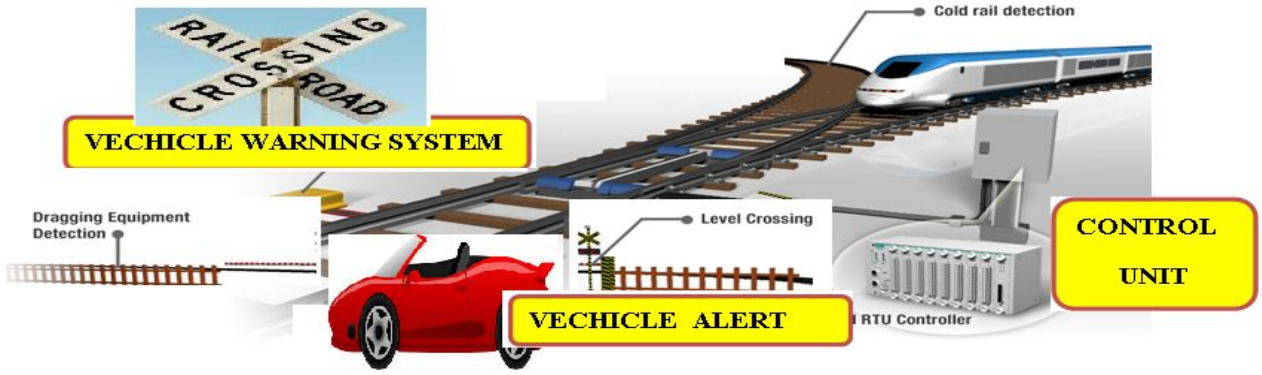
DESCRIPTION: Medical Monitoring system using a pervasive computing has the potential to improve the quality of health care of an individual. Our model provides an approach of mobile computing technology for improving the communication among the patients, physicians and other health care organizations. Patient's health conditions will be monitored using HB sensor fixed with the patient's body. IR sensor on each room is used to track the location of the elderly people in home. The server PC in home is used to monitor the health condition and to give timely alert to take medicines, food, etc. Emergency switches are provided to intimate doctor or the relatives about an emergency situation of the elderly patients at home.

DOMAIN: Biomedical, Android, WiFi, Society / Social Cause

IEEE REFERENCE: IEEE Paper on ITNG, 2014.

EMS 2026. Auto Close & Control Me : INTEGRATION OF AUTOMATIC RAILWAY GATE CONTROL USING ZIGBEE COMMUNICATION AND ROAD TRAFFIC CONTROL USING DENSITY BASED APPROACH

ARCHITECTURE DIAGRAM:



DESCRIPTION : The **MAIN OBJECTIVE** of the Project is to close the Railway Gate Automatically if Train is arriving near the Station in order to avoid the Accidents. Train , a Roadside Vehicle and the Station are Connected with Zigbee with each other. If Train reaches a certain Distance close to the Station, both Train & Station Zigbee will Communicate and also the Gate is closed Automatically. If a Road side Vehicle is coming near the Station both the Zigbees will coordinate and Vehicle Speed is Automatically Controlled. **MODIFICATION** of the Project, is for Road side Traffic Management. IR based Density Sensors are deployed across the Road to Detect the Traffic in that Route, If queue of vehicles is long then automatically Traffic Signal is made green rather following Traditional Time based Signal Control.

DOMAIN: **Raspberry Pi, Linux Hardware, Transportations, Wireless**

IEEE REFERENCE: **IEEE Paper on IET, 2014**

EMS 2027. Sleepy Driver : PROACTIVE INTEGRATED DETECTION OF EYE BLINKING, YARNING & ALCOHOL INTAKE TO IDENTIFY SLEEPY DRIVER AND RFID BASED AUTO ZONE DETECTION FOR SPEED CONTROL

ARCHITECTURE DIAGRAM:

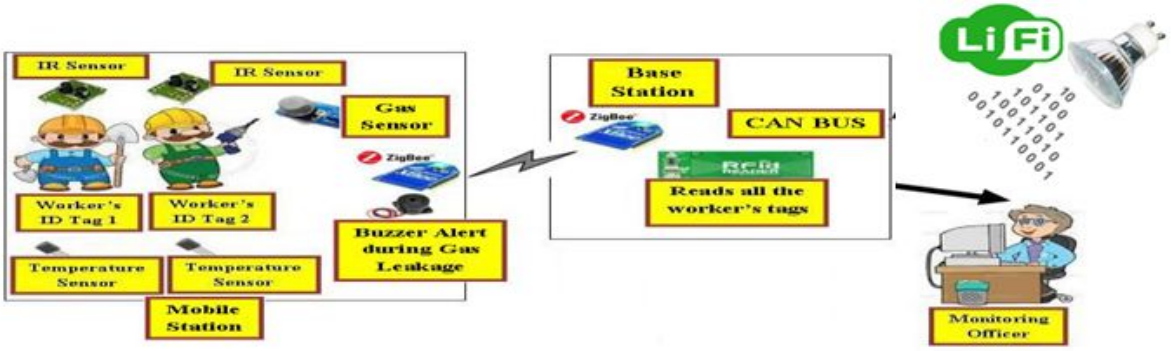
DESCTIPTION: The **PROPOSED** System of the Project is to avoid Accidents by Detecting Driver Drowsiness and Yarning through Matlab via Image Processing. Web Camera is Placed in the Vehicle in Real-time but as per our Implementation, Web Camera is connected to the PC used to detect the Driver's Eye & Mouth Status for Drowsiness & Yarning. As per the Procedure Image is Captured then Face is Detected. Facial Features are extracted toward Eye & Mouth. Eye Winking & Yarning is Detected and used for controlling the Vehicle via RF Communication. In the **MODIFICATION** of the Project, Alcohol Sensor & RFID based Zone Safety System is also is also interfaced to Embedded Hardware for controlling the Vehicle.

DOMAIN: Matlab, Image processing, Sensors, Control Systems

IEEE REFERENCE: IEEE Paper on CSPA, 2014

EMS 2028. *Mine Safe - LiFi :* INTEGRATED SYSTEM TO MONITOR WORKER'S HEALTH AND GAS LEAKAGE FOR WORK PLACE SAFETY IN A MINING ENVIRONMENT

ARCHITECTURE DIAGRAM:



DESCRIPTION: Large Industrial Environments specifically mines are inherently very complex systems to be monitored and controlled. In this context, a centralized control system for monitoring, reporting and preventing workplace risks have been developed. A wearable embedded device will be fixed with the body of the workers. The main purpose of this device is to monitor the workers wearing the safety devices like helmet, gloves, shoes, etc. using IR sensors. The health condition of the workers is also monitored using temperature sensor. The mining environment is monitored using gas sensor to monitor the gas leakage . The sensor nodes will be placed at regular intervals within the mining environment. The values from the various sensor nodes will be transmitted to the base station node via zigbee. The RFID reader in the base station node is used to take workers attendance. The attendance and the sensor information will be transmitted to the control server node using LiFi Protocol for further processing.

DOMAIN: Raspberry Pi, Linux Hardware, Wireless, Communication, LiFi / Fiber optics / CAN

IEEE REFERENCE: IEEE Paper on IWECA, 2014

EMS 2029. Best Route : ANDROID BASED BEST ROUTE DETECTION WITH RFID IMPLEMENTATION OF VEHICLE COUNTING AND TIME FRAME BASED APPROACH

ARCHITECTURE DIAGRAM:

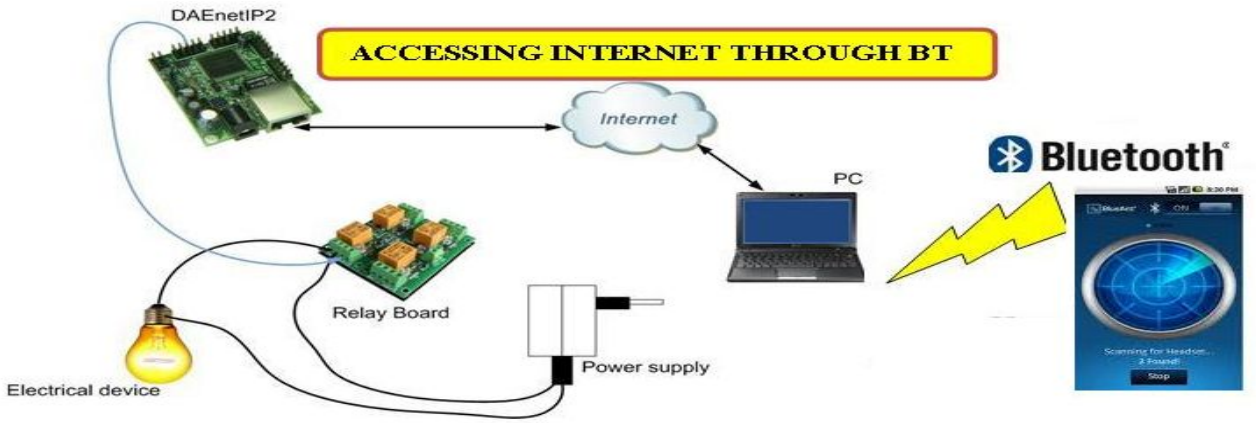
DESCRIPTION: The Main Implementation of the Project is to find the Traffic of the Route using Portable Sensors. Rather using Traditional IR Sensors for Vehicle Counting, As the Part of **MODIFICATION** in the implementation, We are Using RFID Reader & Tag based Vehicle Counting. We Deploy RFID Readers in the Road side and RFID Tag in the Vehicles. Every Zone is deployed with the Local Server. Once the Vehicle crosses the RFID Reader the Time is Communicated o the Local Server via RF Communication. sane all the Zone's local Server will maintain it's Database of Vehicles Mobilization. Before user Plans the Travel, Android user can communicate with the Server for the Best Route based on the Frequency of Time Frames of Vehicles Movement.

DOMAIN: Android, Transportation, Automation, Society Based

IEEE REFERENCE: IEEE Transactions on IET, 2014

EMS 2030. Hybrid Connect : INTEGRATION OF HYBRID COMMUNICATION TECHNOLOGY USING GSM & BLUETOOTH TO ESTABLISH REMOTE CONTROL MECHANISM

ARCHITECTURE DIAGRAM



DESCRIPTION: The main Objective of the Project is to achieve Hybrid Communication System, to fulfill the Process in the Remote Place. The Hybrid Communication which means Bluetooth & GSM Communication. Android User can control the remote Electrical Appliances through Bluetooth Communication without Internet. Android user will send the request the Nearest Bluetooth Embedded Device to control the remote Devices, GSM which is connected with the Bluetooth Device will Communicate to the Remote Devices Section's GSM Modem to control the Derives. Thus we Achieve Hybrid Communication Channel.

DOMAIN: Android, Wireless, Control System

IEEE REFERENCE: **IEEE Paper on ICMU, 2014**

EMS 2031. *Check Me* : RFID BASED OBJECT TRACKING IN A CONVEYOR BELT MECHANICAL SET UP WITH FINGER PRINT BASED USER AUTHENTICATION

ARCHITECTURE DIAGRAM:

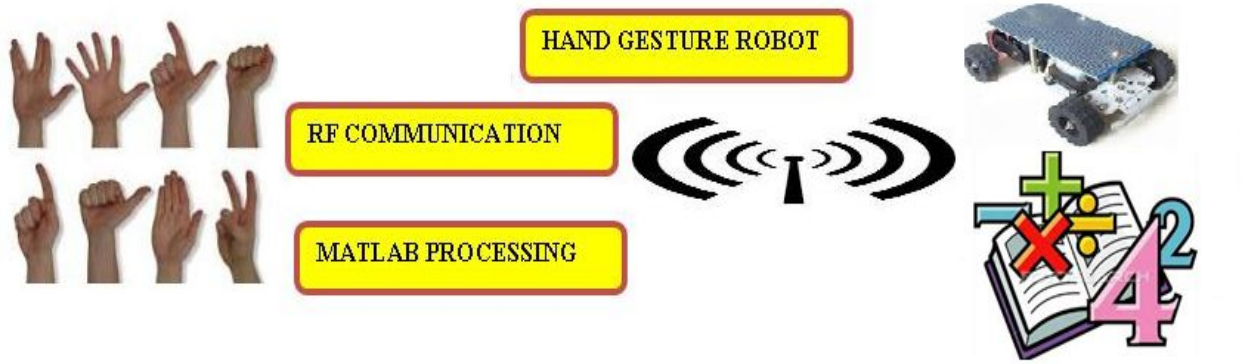
DESCTIPTION: The **PROPOSED** System of the Project is to Product Progress from one Zone to another. **MODIFICATION** & Implementation Process of the Project is to build a Mechanical Set up of Rotary Belt. RFID is Placed in Between, Products or Items are attached with the RFID Tags to Monitor the Movement of the Goods from one Point to another. We also implement Finger Print based Authentication, for the admin to Load the Goods as an Extra Feature from the base paper. Load is Monitored via RFID.

DOMAIN: **Mechanical, RFID**

IEEE REFERENCE: **IEEE Paper on Pervasive Computing, 2014**

EMS 2032. Calculate Maths : INTEGRATION OF GESTURE RECOGNITION & INTELLIGENT MATHEMATICS CALCULATION SYSTEM VIA IMAGE CAPTURING & PROCESSING THROUGH MATLAB

ARCHITECTURE DIAGRAM:



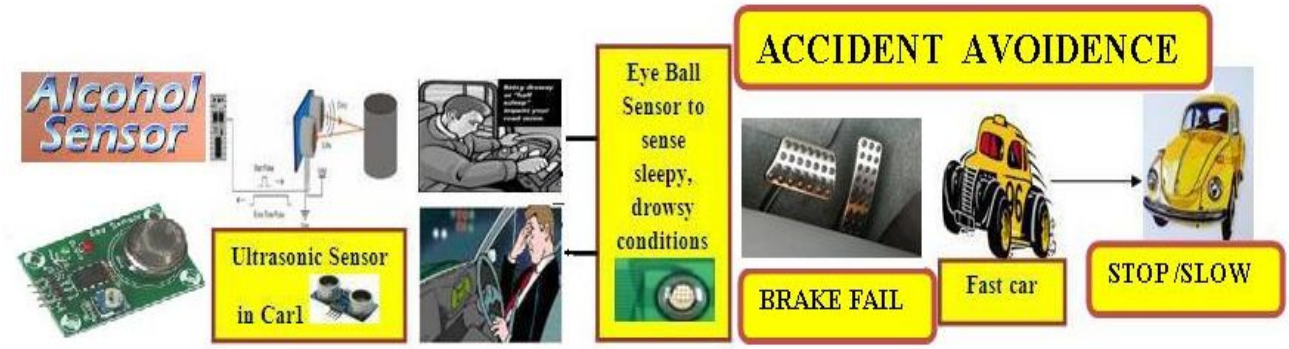
DESCRIPTION: In the **PROPOSED** System, aim of the Project is to control the Robot through Gesture Recognition via RF Communication. We Deploy Matlab based application for capturing, Processing & Recognition part of Gesture of the User. It is Very Normal Process. In the Modification Process, which is our Implementation Model, We are going to implement both Robot Control and Mathematics Calculation System. User shows the Gesture in Front of Camera and corresponding Action is Recognized by the Matlab Process. After Recognition we use Our System to Calculate some Mathematical Process and the Corresponding Results are Display. In the other part Robot control is implemented via RF Communication.

DOMAIN: **MATLAB, Robotics, Wireless**

IEEE REFERENCE: **IEEE Paper on SCEECS, 2014**

EMS 2033. Protect Me : DESIGN OF PROACTIVE ACCIDENT AVOIDANCE SYSTEM USING EYE BALL, ULTRASONIC, BRAKE SENSOR

ARCHITECTURE DIAGRAM



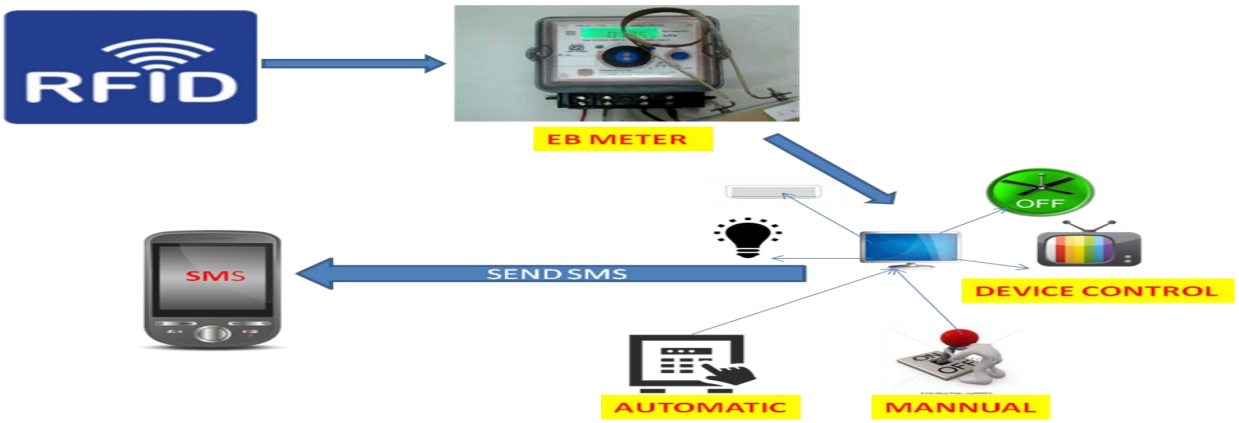
DESCRIPTION: In the **EXISTING SYSTEM,** there is no proper Predictive method to avoid the Traffic Accidents. .In the **PROPOSED SYSTEM**, If the owner is in the panic state and driving the without control in the steering, immediately an automatic control is provided to avoid the accident. Same way over speed would be automatically controlled. Ultrasonic Sensor is attached with the Vehicle to avoid the accidents. This Project is aimed to predictive to possible accidents, before it occurs. This Process is used to prevent those accidents. In **MODIFICATION** process, Eye Ball Sensor is attached to the vehicle, if driver sleeps, this sensor will detect the automatically apply brake in order to avoid Accident

DOMAIN : Raspberry Pi, Linux Hardware, Society / Social Cause

IEEE REFERENCE: IEEE Paper on GHTC-SAS, 2014

EMS 2034. Prepaid Eb : INTEGRATION OF RFID BASED PREPAID EB SERVICES WITH ANDROID BASED APPLIANCES CONTROL

ARCHITECTURE DIAGRAM:



DESCRIPTION: In the **EXISTING SYSTEM**, Smart Grid Technologies in only in Research Process, it is very costly to Experiment. In the **PROPOSED SYSTEM**, Android based Application is deployed to Control Electrical Appliances through Manual (Internet) & Automatic Process. In Automatic Process IR based Human Monitoring is used. RFID is used for Prepaid EB Card. EB Mater is used to measure the Electricity consumed. Our **MODIFICATION** is to create an Android Application for Recharge System of RFID Tag.

DOMAIN : Raspberry Pi, Linux Hardware, Android, Society based

IEEE REFERENCE: IEEE Paper on SCEECS, 2014

EMS 2035. AGRI EYE : AUTOMATED IRRIGATION CONTROL AND SECURITY SYSTEM WITH WIRELESS MESSAGING

ARCHITECTURE DIAGRAM

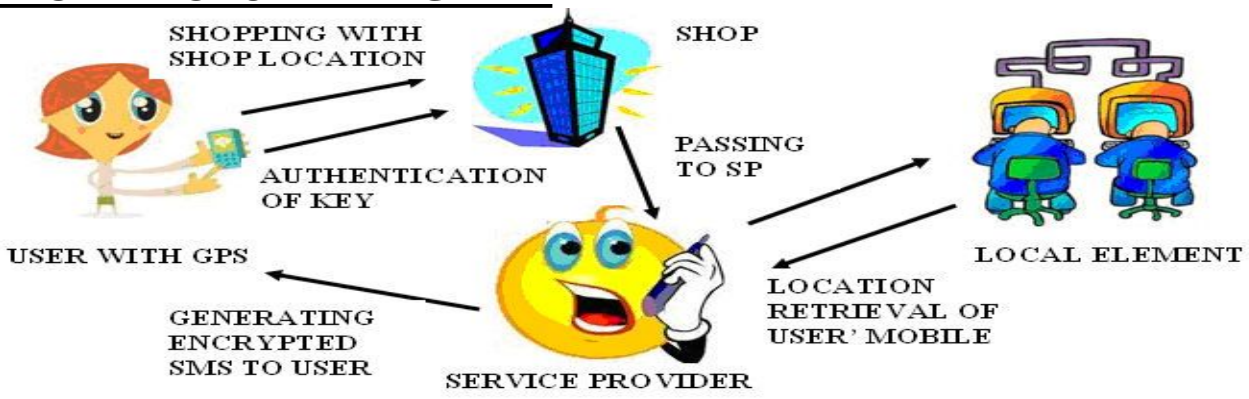
DESCRIPTION: This work is designed to operate as an Automated Irrigation Control and Security System with Wireless Messaging option. The main objectives of our work are to maximize proper use of water, to minimize the cost of labor and to provide security. This project maintains the required water level in the field and throws up excess water due to heavy rain fall by controlling water pumps. A wireless system is designed to provide information to the owner of the land. To ensure the security of the pumps and other equipments, there is a password protecte3d lock system allowing the control of the authorized person only. We use LiFi Technology for Communication.

DOMAIN : Raspberry Pi, Linux Hardware, Wireless, LiFi, Society / Social Cause

IEEE REFERENCE: **IEEE Paper** on Informatics, Electronics & Vision, 2014

EMS 2036. Credit Card Fraud : PREVENTION OF CREDIT CARD FRAUD WITH USER LOCATION DETECTION AND USB BASED AUTHENTICATION

ARCHITECTURE DIAGRAM



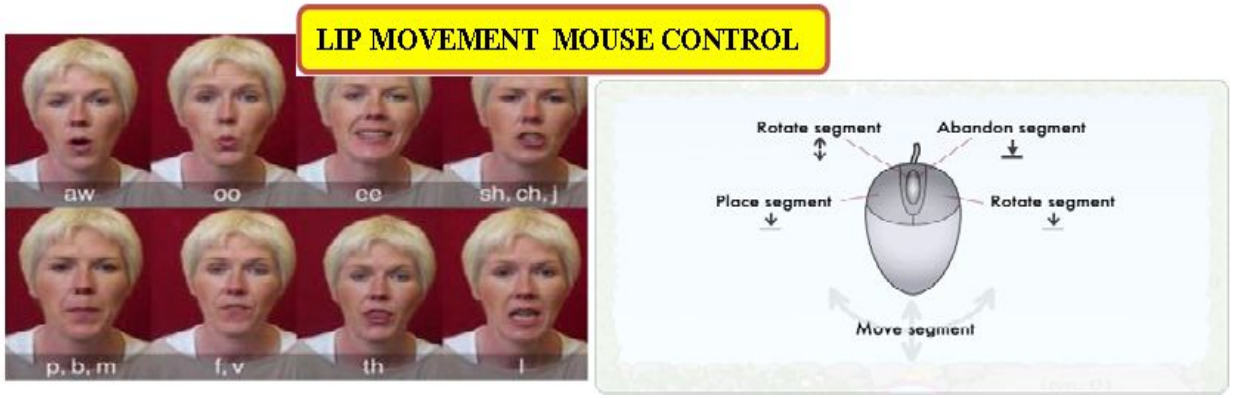
DESCRIPTION: In the **EXISTING SYSTEM**, Credit Card Fraud is the most common occurrence. There is no authenticated step to control Credit Card Fraud in real time. In the **PROPOSED MODEL**, Location based Verification Scheme is implemented by comparing the User's Credit Card Location with the User's Mobile Location. This is very effective to identify the Real User. USB Based Authentication is Used as User Authentication. The **MODIFICATION** we propose is to generate an Encrypted Data to the Real User's Mobile Number along with the Decrypting Key as SMS only when both the Location of Credit Card and Mobile of the User is Matched. So process would definitely filter credit card fraud totally. We also provide a Emergency Key to the Authorized User to use only twice or Thrice to Withdraw Money during Emergency Situation for only for Rs. 2000 – 3000.

DOMAIN: Security, Social Cause / Society Based

IEEE REFERENCE: IEEE Paper on IndiaCom, **2014**

EMS 2037. Lip Mouse : INTEGRATION OF LIP & HEAD BASED MOUSE CONTROL USING IMAGE PROCESSING TECHNIQUE FOR PHYSICALLY CHALLENGED PEOPLE

ARCHITECTURE DIAGRAM:



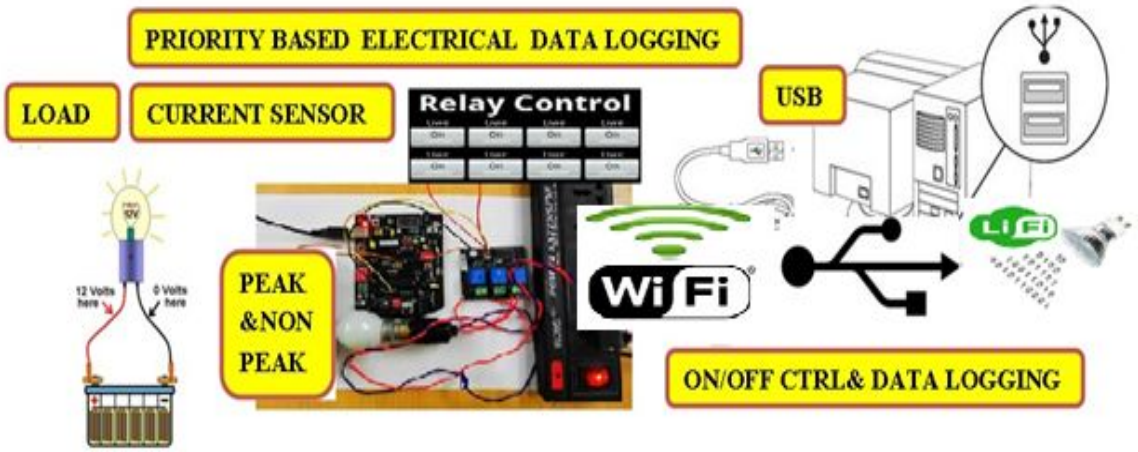
DESCRIPTION: The Main Objective of the Project is to Track the Movements of Lips or effective Mouse Pattern Control. As an Extra part of **MODIFICATION** of the implementation, so also use Head Movements. Both Head & Lip movements are Captured, Stored & Compared with the Predefined Training Set which is stored in the System. Input images are captured using Web Camera and compared with the Training Set. Based on the Result System's Mouse is controlled. the Directions are Right, Left, Up, Down, Single Click or Selection, Double Click.

DOMAIN: MATLAB, Image Processing, Control System, Society Based

IEEE REFERENCE: IEEE Journal on Biomedical and Health Informatics, 2014

EMS 2038. Calculate & Unload Me : INTEGRATION OF LOAD MEASUREMENT WITH PRIORITY BASED CONTROL, PEAK HOUR - LOAD MANAGEMENT WITH USB DATA LOGGING

ARCHITECTURE DIAGRAM:



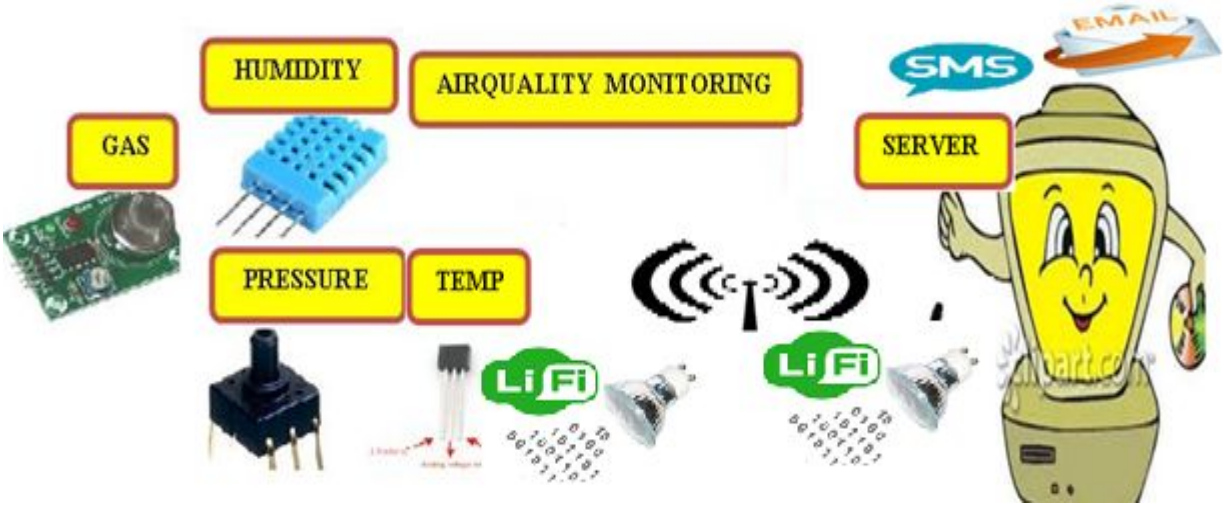
DESCRIPTION: The **PROPOSED** System of the Project is to measure the Power Consumption of Every Devices. This will yield the Electric Power Consumption by Every Devices so that Individual Power Consumption is calculated. Data Logging is also Implemented. As the **MODIFICATION** part, we are including Peak Hour & Non Peak house based Device Control. This Process will reduce the Load in the Transformer. We are using USB / WiFi / LiFi Communication for Data Logging.

DOMAIN: Automation , Electrical, Control System, WiFi / LiFi

IEEE REFERENCE: IEEE TRANSACTION on MECHATRONICS, 2014

EMS 2039. Air Check - LiFi: IMPLEMENTATION OF LiFi BASED AIR QUALITY AND CONTROL SYSTEM

ARCHITECTURE DIAGRAM:



DESCRIPTION: The main Aim of the Project is to Monitor Air Sensor Values from Remote Place. The Sensors that we deploy in this Project is Temperature, Gas, Humidity & Pressure. All these Sensors are monitored through Zigbee Communication wirelessly. The Values of these Sensors are Stored in the Server for further research. SMS & E mail Alert is achieved in case of abnormality.

DOMAIN: Control Systems, Wireless, LiFi

IEEE REFERENCE: IEEE Paper on ICNC, 2014

EMS 2040. Bomb Detect : AUTONOMOUS & MANUAL OPERATED ROBOT WITH OBSTACLE & BOMB DETECTION

ARCHITECTURE DIAGRAM:

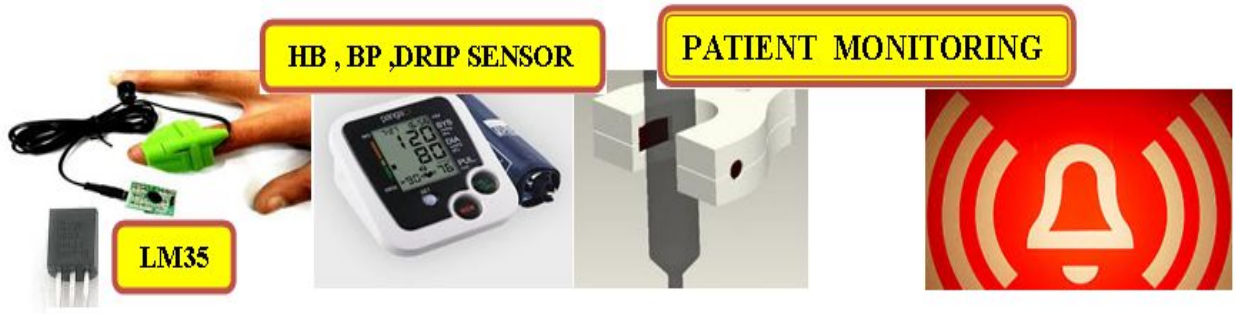
DESCRIPTION: The Main aim of the Project is to set Automatic Direction control of the Wireless Robot. In addition to the base Paper we also implement both Automatic & Manual control of Robot via Android Application. In the Automatic mode, the direction of the Robot is controlled using IR Sensor. IR Sensor will detect the Obstacles and control the Robot accordingly. In Manual mode Android user will control the Robot via Bluetooth Communication.

DOMAIN: ROBOTICS, Wireless

IEEE REFERENCE: IEEE Paper on ICROIT, 2014

EMS 2041. Drip See : AUTONOMOUS MONITORING & CONTROL SYSTEM OF TEMPERATURE, BLOOD PRESSURE & DRIP FOR REMOTE PATIENT USING ZIGBEE

ARCHITECTURE DIAGRAM:

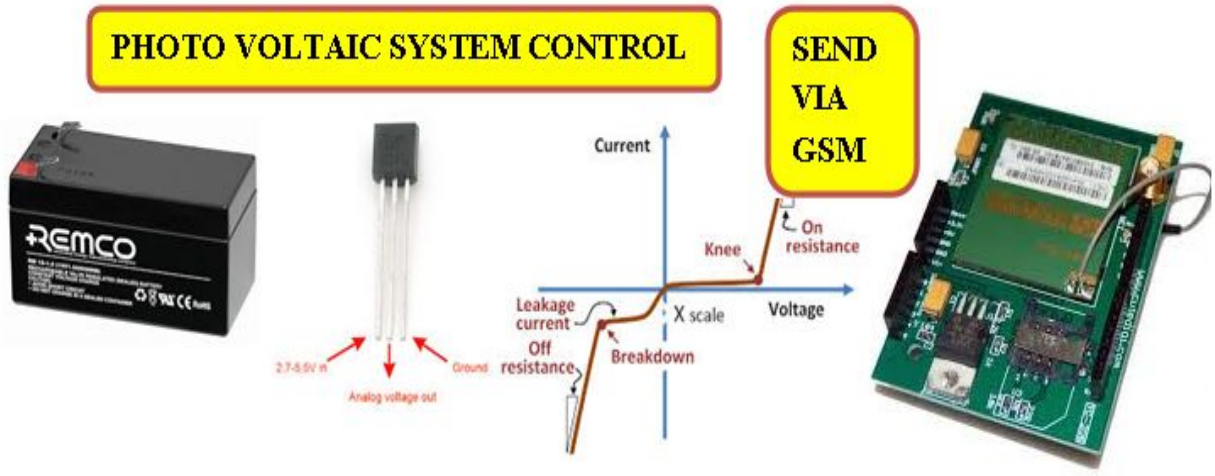


DESCRIPTION: The main Objective of this Project is to increase the life of the patient. In the hospital atmosphere the patient is fully monitored by the relatives. To avoid this, and the patient is monitored by the devices. In this project the heartbeat sensor is attached LM35 and it will also sense the blood pressure of the patient and the saline drip sensor will be attached to that when the drip level is increased below its range the drip sensor will alarm sound to create an alert to the hospital person.

DOMAIN : Raspberry Pi, Linux Hardware, Biomedical, Wireless

IEEE REFERENCE: IEEE Paper on IACC, 2014

EMS 2042. Renewable check : INTEGRATION OF SENSORS BASED ANALYSIS AND CONTROL SYSTEM OF PHOTOVOLTAIC RENEWABLE HARDWARE FOR CONSISTENT SUPPORT ARCHITECTURE DIAGRAM



DESCRIPTION: The main Objective of this Project is to identify the state of Photovoltaic System through a Sensors Network in order to control from Remote Place. The Sensors are Temperature, Voltage, Current and Battery State are Analyzed and the Corresponding Values are Transmitted to the Remote Server via GSM Communication. Solar Panel is connected to these Sensors and along with GSM Modem. These Sensor Values are Transmitted to the Remote Server's GSM Modem.

DOMAIN: **Raspberry Pi, Linux Hardware, Renewable Energy**

IEEE REFERENCE: **IEEE Paper** on **Green Energy, 2014**

EMS 2043. Track Me : EFFECTIVE NUMBER PLATE CAPTURING & RECOGNITION USING MATLAB & IMAGE PROCESSING TECHNIQUE

ARCHITECTURE DIAGRAM:

DESCRIPTION: In the area of Traffic management and digital image processing license plate recognition is the main issue. To solve this issue automatic license plate recognition based on MATLAB is proposed. This method involves pre-process, edge extraction, automatic license location, character division and character recognition.

DOMAIN : Matlab, Image Processing

IEEE REFERENCE: IEEE Paper on FRUCT, 2014

EMS 2044. *Hand Drive* : IMPLEMENTATION OF WHEEL CHAIR / APPLIANCES CONTROL SYSTEM USING MEMS FOR PHYSICALLY CHALLENGED PEOPLE

ARCHITECTURE DIAGRAM

DESCRIPTION: This concept is proposed to improve the life of the disabled persons to control the home appliances and wheel chair by their own. MEMS based Hand Gesture Recognition is proposed in this technique for disabled persons. MEMS stand for Micro Electro Mechanical Systems used for motion detection. MEMS sensor will be fixed with the hands of the disabled person. They can control both the wheel chair and the appliances using MEMS sensor. The home appliances such as lights, fans and so on can be controlled. The wheel chair will be controlled to any direction as forward, reverse, right, left and stop. MEMS based concept will help to improve the life quality of the disabled peoples.

DOMAIN: **Robotics, Mechanical, Automation, Society Based**

IEEE REFERENCE: **IEEE Paper on ICCE, 2014**

EMS 2045. Sign Capture : DESIGN OF TRAFFIC SIGN RECOGNITION SYSTEM FOR AUTONOMOUS DRIVING ROBOT USING MATLAB

ARCHITECTURE DIAGRAM:

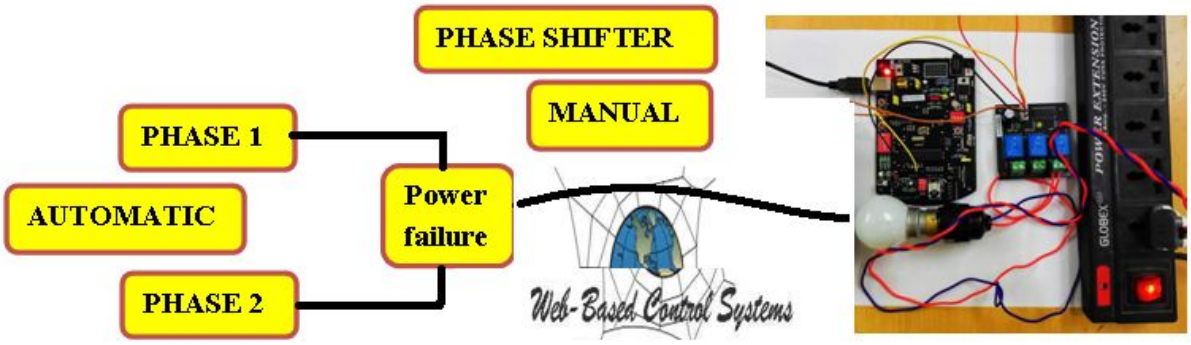
DESCRIPTION: The Main Objective of the Project is to Recognize Traffic Signal and Autonomous Navigation of Robot. Images that are shown on front of the Camera that are Recognized and compared with the Previous Stored Patterns & finally Corresponding Signals are Transferred to Control the Robot via RF Communication. We Connect a Web Camera with a Computer for Capturing, Processing and Transmitting Corresponding Signals. RF Transmitter connected to PC will Transmit the Control Signals to RF Receiver which is connected to Robot. Robot is controlled as per the Traffic Signs shown. In the Modification part of this Project, Destination of the Robot is given in the PC, so that the Robot is Navigated automatically to the Expected Destination through IR Communication. Robot will IR Receiver Unit and in the Road Side IR Transmitters are Deployed. Based on the IR Transmitter ID Robot reaches the Specified Destination.

DOMAIN: Matlab, Image Processing, Robotics

IEEE REFERENCE: IEEE Paper on ICARSC, 2014

EMS 2046. Auto Phase Shift : DESIGN OF SMART GRID WITH HYBRID CONTROL MECHANISM AND AUTO POWER SHIFT USING WEB BASED APPROACH

ARCHITECTURE DIAGRAM:



DESCRIPTION : The **PROPOSED** System of the Project is to Extract Power through Solar Panel and to monitor the Electrical Appliances from the Remote Place. EB Meter is also attached with the Hardware to monitor the Billing System from the Remote Place. The aim objective is to control the Electrical Appliances through Web based Application and also should control the Phase Shifting Process. In the **MODIFICATION** we Develop Hybrid Control System, both Manual & Automatic. In Manual control all these above said in Proposed will happen and in Automatic Mode the System will Automatically control the Electrical Appliances based on Human Entry and Phase Shift is made if one phase is filed.

DOMAIN: Electrical, Control system, Raspberry Pi, Linux Hardware

IEEE REFERENCE: IEEE Paper on SCEECS, 2014

EMS 2047. Sun Shadow : DESIGN OF INTELLIGENT LIGHTING SYSTEM USING IR, INDOOR & OUTDOOR ILLUMINATION SENSORS

ARCHITECTURE DIAGRAM

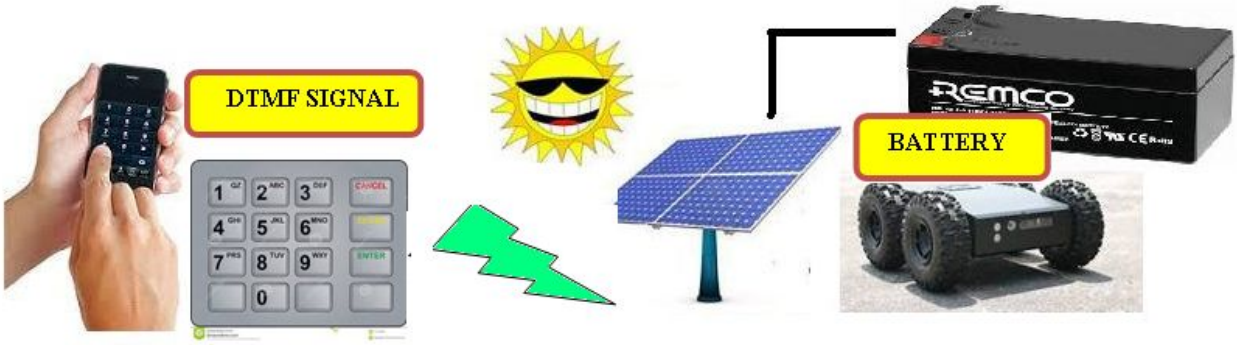
DESCRIPTION: The Main Objective of the Project is to implement a Intelligent House Lighting Control System using Zigbee via Deployment of IR, Indoor & Outdoor Illuminating Sensors. We apply Fuzzy Logic rule for effective Illumination Control System. Our System Monitors Brightness of Out Door , In Door (Rooms) & Number of Persons inside the Room via IR Sensors are Calibrated and Illumination of Lights are Controlled accordingly through Zigbee Communication. The Lights are controlled in three ways, Full Brightness, Mild Brightness and Off according to the Sensors Values by applying Fuzzy Logic.

DOMAIN: Electrical, Raspberry Pi, Linux Hardware, Wireless

IEEE REFERENCE: IEEE Paper on IS3C, 2014.

EMS 2048. CHARGE ME : SOLAR CONTROL CHARGED ROBOT WITH DTMF BASED CONTROL SYSTEM USING GSM

ARCHITECTURE DIAGRAM:



DESCRIPTION: In this project the user mobile is connected with the vehicle mobile phone and it is attached with the DTMF and fabricated robot along with this the solar panel is connected with it for charging. The user gives the request through the mobile phone it will control the direction of the fabricated robot.

DOMAIN: **Renewable Energy, Robotics, Wireless**

IEEE REFERENCE: **IEEE Paper** on EICT, 2014

EMS 2049. Auto Ride : AUTONOMOUS NAVIGATION OF ROBOT WITH INTEGRATION OF LOW-COST SENSOR BASED SUPERVISORY CONTROL

ARCHITECTURE DIAGRAM:

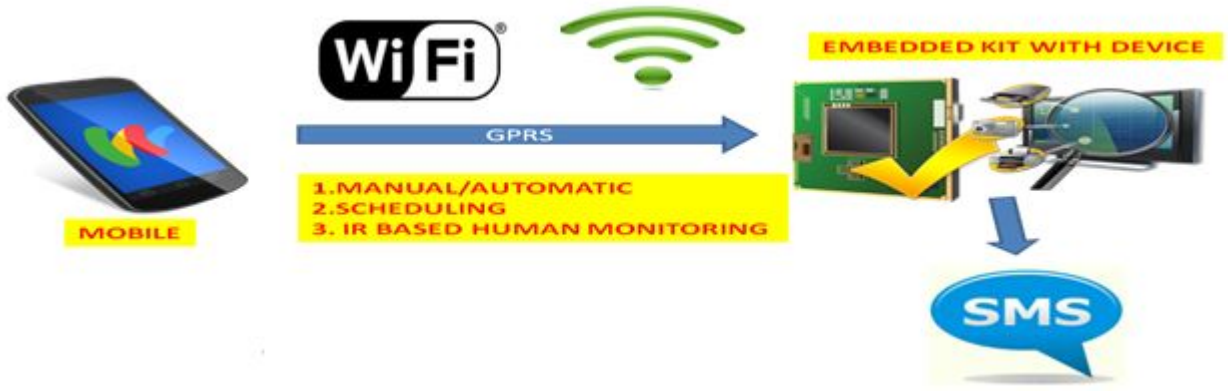
DESCRIPTION: The main Concept of the Project is Autonomous Route Guidance using Ultrasonic with Obstacle Avoidance. We Construct a Robot with Temperature, Humidity, LDR, PIR & Ultrasonic Sensors. Robot will Detect the Temperature, Humidity, Motion using PIR. Bluetooth acts for Data Communication Medium and the Vehicle is Navigated using Ultrasonic Sensor.

DOMAIN: Robotics, Control System, Wireless

IEEE REFERENCE: IEEE Paper on iCREATE, 2014

EMS 2050. Android Device : IMPLEMENTAION OF VOICE BASED DEVICE CONTROL WITH AUTOMATIC IF BASED AND PEAK HOUR BASED SCHEDULED CONTROL USING ANDROID

ARCHITECTURE DIAGRAM:



DESCRIPTION: In **EXISTING SYSTEM,** GSM based device control is implemented through GSM communication. In the **PROPOSED SYSTEM**, Android based device control is implemented through GPRS communication. Android App is created in the user's phone to control devices. In **MODIFICATION** part we implement same device control using three steps. 1. Manual and Automatic control 2. Peak Hour Scheduling based control 3.IR Control Person based control. EB meter is also included to monitor meter reading.

DOMAIN : Raspberry Pi. Linux Hardware, WiFi, Android, Wireless

IEEE REFERENCE: IEEE Paper on ICACT, 2014

IEEE PROJECTS : 2013

EMS 2051. *VeSec* : SMART CARD & BIOMETRICS BASED SECURITY LAYER FOR SAFE BIKE RIDERS

DOMAIN: Automobile, Biometrics, Imaging, Social Cause / Society Based

EMS 2052. *Rural Doctor : AMM* - AN AUTOMATED MEDICAL MACHINE ENABLING ENHANCED FEATURES FOR TELEMEDICINE USING CLOUD COMPUTING

DOMAIN: Bio-Medical, Social Cause / Society Based

EMS 2053. *M – Track :* ARM & BLUETOOTH BASED TEEN MOBILE BEHAVIOR TRACKING & ATTENDANCE SYSTEM

DOMAIN: Mobile Communication, Wireless, Society Based,

EMS 2054. *Zone Alert :* INTELLIGENT ZONE AWARE SPEED AND HORN CONTROL SYSTEM WITH AUTOMATIC DIMMING OF DOOM LIGHT

DOMAIN: Society / Social Cause, Wireless,

EMS 2055. *E-Trolley* : DESIGN OF TOUCH ENABLED SHOPPING CART WITH AUTOMATIC BILLING IN RETAILS

DOMAIN: **Wireless Communication, Social Cause / Society Based**

EMS 2056. *V – Safe Tracker* : AUTOMOBILE SECURITY AND ALERTING SYSTEM BASED ON DRIVER'S BEHAVIOR

DOMAIN: **Automobile, Security**

EMS 2057. *Book My Ticket* : DESIGN OF RFID BASED E - TICKET SYSTEM WITH VOICE ROUTE INTIMATION IN STOP

DOMAIN: **Wireless Communication, Social Cause / Society Based**

EMS 2058. *iFind* : AN EMBEDDED HARDWARE PLATFORM FOR IN-VEHICULAR MONITORING AND GPS BASED NEIGHBORHOOD TRACKING SYSTEM

DOMAIN: **Bluetooth, Social Cause / Society Based**

EMS 2059. *Blind Path* : INTEGRATED SYSTEM FOR EASY NAVIGATON OF BLIND IN HIGHWAYS

DOMAIN: **Communication (Social Cause / Society Based)**

EMS 2060. *Train Me* : DESIGN OF AUTOMATED SYSTEM OF RAILWAY INFRASTRUCTURE BASED ON PLCC

DOMAIN: Controller Area Network / PLCC / Fiber Optic Communication

EMS 2061. *E - Guide* : DESIGN OF ELECTRONIC GUIDANCE SYSTEM FOR ROUTE NAVIGATION IN AIRPORT

DOMAIN: Security, Communication, (Social Cause / Society Based)

EMS 2062. *SeweT* : A FAULT PREVENTIVE WIRELESS SENSOR SEWER SYSTEM FOR URBAN INFRASTRUCTURE MANAGEMENT USING EMBEDDED SYSTEMS

DOMAIN: Wireless, Social Cause

EMS 2063. *TraM* : OVER HEAD POWER LINE MONITORING USING LONG-DISTANCE TRANSMISSION

DOMAIN: Electrical, PLCC

EMS 2064. *iVeDet* : A NOVEL APPROACH TO IMPLEMENT GREEN WAVE AND DETECTION OF STOLEN VEHICLES

DOMAIN: Automobile, Wireless, Vehicle Security

EMS 2065. *iMedBox :* IN HOME DOCTOR CARING PATIENT'S HEALTH WITH AUTO UPDATE OF MEDICINES

DOMAIN: Bio- Medical, Communication

EMS 2066. *HomSec :* DESIGN OF SMART HOME MULTI LAYER CONTROL WITH SECURITY AND DOOR OPENING

DOMAIN: Automation, Security, Social Cause / Society Based

EMS 2067. *Weigh Me :* NFC BASED STOCK MAINTENANCE & BILLING WITH ALERT TO CONSUMERS

DOMAIN: NFC, Wireless, Social Cause / Society Based

EMS 2068. *Save Earth :* DESIGN OF DISASTROUS LANDSLIDE MONITORING WITH PROACTIVE CARING

DOMAIN: Wireless, Security, Society / Social Cause

EMS 2069. *Locate Me :* LOCALIZATION & DETECTION OF EFFECTIVE TRACKING OF CHILDREN

DOMAIN: Android, Wireless

YOUR OWN IDEAS ALSO