

# Embedded System Projects

## I. EMBEDDED based ENVIRONMENTAL MOBILITY

1. *Waste Water Management for Smart Cities. (IEEE2018)*
2. *The Need of Multidisciplinary Approaches and Engineering Tools for the Development and Implementation of the Smart City Paradigm. (IEEE2018)*
3. *Animal Detection System in Farm Areas. (IEEE2018)*
4. *Advanced IOT Based Combined Remote Health Monitoring, Home Automation and Alarm System. (IEEE2018)*
5. *A Movement Decomposition and Machine Learning Based Fall Detection System Using Wrist Wearable Device. (IEEE2018)*
6. *Pollution Control using Internet of Things (IoT). (IEEE2018)*

## II. EMBEDDED based SALUTARY MANAGEMENT

1. *A Wireless Continuous Patient Monitoring System for Dengue; Wi-Mon (IEEE2018)*
2. *A Low Cost Intelligent Smart System for Real Time Infant Monitoring and Cry Detection. (IEEE2018)*
3. *Continuous Health Surveillance System for Cattle. (IEEE2018)*
4. *Smart Pilgrim: A Mobile-Sensor-Cloud based System to Safeguard Pilgrims through Smart Environment. (IEEE2018)*



### IEEE 2018

5. *A Knowledge-Based Approach to Automatic Detection of Equipment Alarm Sounds in a Neonatal Intensive Care Unit Environment. (IEEE2018)*
6. *Health Monitoring and Tracking System for Soldiers Using Internet of Things (IoT). (IEEE2018)*
7. *Interoperable End-to-End Remote Patient Monitoring Platform based on IEEE 11073 PHD and ZigBee Health Care Profile. (IEEE2018)*
8. *Toward Better Management for Asthma. (IEEE2018)*
9. *Wearable Medical Sensor Based System Design: A Survey. (IEEE2018)*
10. *Smart Phone-Based Peak Expiratory Flow Meter. (IEEE2018)*

### III. EMBEDDED based DIGITAL TWIN

1. *An IoT Approach for an AAL Wi-Fi-Based Monitoring System. (IEEE2018)*
2. *A Conceptual Framework for Supporting UAV based Cyber Physical Weather Monitoring Activities.(IEEE2018)*
3. *Internet of Things for Smart Railway: Feasibility and Applications.(IEEE2018)*
4. *IoT Based Smart School Bus Monitoring and Notification System.(IEEE2018)*
5. *RFID based Women Safety System with Automatic Street Light Control System. (IEEE2018)*
6. *IoT-Based Sensing and Communications Infrastructure for the Fresh Food Supply Chain. (IEEE2018)*

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### IEEE 2018

7. *Mobile Security Monitor: A Wearable Computing Platform to Detect and Notify Falls. (IEEE2018)*
8. *Smart Parking Guidance Monitoring and Reservation: A Review. (IEEE2018)*
9. *IOT Based Controlling of Hybrid Energy System using ESP8266. (IEEE2018)*
10. *A Review on Different Techniques of Fire Detection for Emergency Management.(IEEE2018)*
11. *Wearable Wireless Sensor System with RF Remote Activation for Gas Monitoring Applications. (IEEE2018)*

## IV.EMBEDDED based SELF GOVERNING VEHICLE

1. *An Uphill Safety Controller with Deep Learning based Ramp Detection for Intelligent Wheelchairs. (IEEE2018)*
2. *Sensor Motes for the Exploration and Monitoring of Operational Pipelines. (IEEE2018)*
3. *A Distributed Control Framework of Multiple Unmanned Aerial Vehicles for Dynamic Wildfire Tracking.(IEEE2018)*
4. *Virtue: Video Surveillance for Rail-Road Traffic Safety at Unmanned Level Crossings. (IEEE2018)*
5. *Battlefield Assistive Robot. (IEEE2018)*
6. *Multiple Distance Sensors Based Smart Stick for Visually Impaired People. (IEEE2018)*
7. *Mine Detection for Defence Using GSM. (IEEE2018)*
8. *Voice Recognition Controlled Wheel Chair. (IEEE2018)*

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## V. EMBEDDED based HAPTIC COMPUTING

1. *An IoT cloud system for traffic monitoring and vehicular accidents prevention based on mobile sensor data processing. (IEEE2018)*
2. *Smart IoT based system for vehicle noise and pollution monitoring.(IEEE2018)*
3. *Prototype of fire symptom detection system. (IEEE2018)*
4. *A probabilistic approach for forecasting the allowable current of oil-immersed transformers. (IEEE2018)*
5. *A data parasitizing scheme for effective health monitoring in wireless body area networks.(IEEE2018)*
6. *Online obstructive sleep apnea detection on medical wearable sensors.(IEEE2018)*
7. *Bridge monitoring and alert generation system using IoT.(IEEE2018)*
8. *Design and development of an IoT based wearable device for the safety and security of women and girl children.(IEEE2018)*
9. *Intelligent medicine box for medication management using IoT.(IEEE2018)*
10. *Internet of things in smart ambulance and emergency medicine.(IEEE2018)*

## VI. EMBEDDED based ENERGY SALVAGE MANAGEMENT

1. *LPG Level Monitoring, Booking and Gas Leakage Detector. (IEEE2018)*
2. *Smart Meter Privacy: Exploiting the Potential of Household Energy Storage Units.(IEEE2018)*

### **VII. EMBEDDED based RACKET CONTROL AND PREVENTION**

1. *SEAT: Secure Energy-efficient Automated Public Transport Ticketing System.*

*(IEEE2018)*

2. *SMS Based Banking Security System. (IEEE2018)*

### **VIII. EMBEDDED based VOCATION DATA PREVENTION**

1. *Centralized Automation of Petrol Bunk Management and Safety using RFID and GSM Technology. (IEEE2018)*

2. *ATM Transaction without Debit Card. (IEEE2018)*

### **IX. EMBEDDED based LIGHT AND RADIO WAVES**

1. *Smart Shopping Cart. (IEEE2018)*

2. *On Human to Database Interface Based on Visible Light Communication. (IEEE2018)*

3. *A Health Remote Monitoring Application based on Wireless Body Area Networks.*

*(IEEE2018)*

4. *A Methodology for Reliability of WSN Based on Software Defined Network in Adaptive Industrial Environment. (IEEE2018)*

5. *Secured and Green Data Processing and Transmission in a Human-Vehicle Interaction ADAS System. (IEEE2018)*

## X. EMBEDDED based SELF-PROPELLED DEVICES

1. *Automated Vehicle Parking System and Unauthorized Parking Detector. (IEEE2018)*
2. *Wearable Device-Based System to Monitor a Driver's Stress, Fatigue, and Drowsiness. (IEEE2018)*
3. *A Smart System for Garden Watering using Wireless Sensor Networks. (IEEE2018)*
4. *LPG Monitoring and Leakage Detection System. (IEEE2018)*
5. *SMS Based Industrial Disaster Intimation System. (IEEE2018)*
6. *A Review on Human-Centered IoT-Connected Smart Labels for the Industry 4.0 (IEEE2018)*

## XI. EMBEDDED based REAL WORLD ENVIRONMENT

1. *EATS: Enhanced Automatic Tollgate System Powered by IoT and Big Data. (IEEE2018)*
2. *Technology-Assisted Decision Support System for Efficient Water Utilization: A Real-Time Testbed for Irrigation Using Wireless Sensor Networks. (IEEE2018)*
3. *WiFi Sensing Based Real-time Bus Tracking and Arrival Time Prediction in Urban Environments. (IEEE2018)*
4. *Real-Time Flood Water Level Monitoring System with SMS Notification. (IEEE2018)*
5. *Accident and Alcohol Detection in Bluetooth enabled Smart Helmets for Motorbikes. (IEEE2018)*

### *IEEE 2018*

6. *Protocol Implementation for Wireless Sensor Network for Anti-Poaching of Trees. (IEEE2018)*
7. *Design and Implementation of Real Time Transformer Health Monitoring System Using GSM Technology. (IEEE2018)*
8. *SmartBath: Water Temperature Control System. (IEEE2018)*
9. *Monitoring Physiological variables Of Mining Workers at High Altitude. (IEEE2018)*
10. *Towards Fourth Industrial Revolution Impact: Smart Product Based on RFID Technology.(IEEE2018)*
11. *Automated Medical Waste Segregation Machine Using Arduino Controller.(IEEE2018)*
12. *Multi-sensor Integrated System for Wireless Monitoring of Greenhouse Environment.(IEEE2018)*

## **XII. EMBEDDED based 2D PROCESSING**

1. *Super-pixel Based Single Nighttime Image Haze Removal. (IEEE2018)*
2. *Automatic Detection of Tomato Diseases and Pests Based on Leaf Image. (IEEE2018)*
3. *Fully Convolutional Networks with Sequential Information for Robust Crop and Weed Detection in Precision Farming. (IEEE2018)*
4. *An Automatic Fire Detection and Warning System under Home Video Surveillance. (IEEE2018).*
5. *Fusion of structural and textural features for melanoma recognition. (IEEE2018)*



### IEEE 2018

6. *Deep multiple instance learning for automatic detection of diabetic retinopathy in retinal images. (IEEE2018)*
7. *Colour Image Segmentation for Malaria parasites Detection using Cascading Method. (IEEE2018)*
8. *Integrated Approach for Bone Tumor Detection from MRI Scan Imagery. (IEEE2018)*
9. *A Face Recognition Attendance System with GSM Notification. (IEEE2018)*
10. *Gesture Recognition and fingertip detection for Human Computer Interaction. (IEEE2018)*

### XIII. EMBEDDED based MAN MACHINE COMMUNICATION

1. *Verifiable Classroom Voting in Practice.(IEEE2018)*
2. *A proposed framework for biometric electronic voting system.(IEEE2018)*
3. *Design, Characterization and Implementation of a Two-DOF Fabric-based Soft Robotic Arm.(IEEE2018)*

### XIV. EMBEDDED based MINI COMPUTER (RASPBERRYPI)

1. *Improving Smart Home Security; Integrating Logical Sensing into Smart Home.(IEEE2018)*
2. *A Driver State Detection System—Combining a Capacitive Hand Detection Sensor with Physiological Sensors. (IEEE2018)*
3. *A Temperature Compensated Smart Nitrate-Sensor for Agricultural Industry.(IEEE2018)*

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4. *Bi-Directional Passing People Counting System based on IR-UWB Radar Sensors. (IEEE2018)*
5. *Automated Blood Donating And Managing System Using Raspberry Pi B+. (IEEE2018)*
6. *A Raspberry Pi Controlled Cloud Based Air and Sound Pollution Monitoring System with Temperature and Humidity Sensing. (IEEE2018)*

## **XV. EMBEDDED based EDIFICE MANAGEMENT**

1. *Internet of Things Enhanced User Experience for Smart Water and Energy Management.(IEEE2018)*
2. *Prototype Development of a Wireless Embedded System for Bridge Monitoring.(IEEE2018)*
3. *Smart Innovation Applications for a Green House Using Sustainable and Renewable Energy in the UAE.(IEEE2018)*
4. *Road safety in the age of mobile phones: IoT and Milgram. (IEEE2018)*
5. *Intelligent Condition Monitoring System for Distribution Transformer and Health Status Diagnosis. (IEEE2018)*
6. *Internet of Things for Flame Monitoring Power Station Boilers. (IEEE2018)*
7. *Monitoring Earthquake through MEMS Sensors (MEMS project) in the town of Acireale (Italy). (IEEE2018)*
8. *A Complete Internet of Things (IoT) Platform for Structural Health Monitoring (SHM).(IEEE2018)*

### **XVI. EMBEDDED based GREEN IOT**

1. *Lifetime Optimization of Wireless Sensor Networks for Gas Monitoring in Underground Coal Mining. (IEEE2018)*
2. *Design and Implementation of an Agricultural Monitoring System for Smart Farming. (IEEE2018)*
3. *IoT based Smart Home Automation System using Sensor Node. (IEEE2018)*
4. *IoT Solutions for Crop Protection against Wild Animal Attacks.(IEEE2018)*
5. *Physical sensors for precision aquaculture: A Review. (IEEE2018)*

### **XVII. EMBEDDED based WEB EMPIRE**

1. *Redundant robot localization system based in wireless sensor network. (IEEE2018)*
2. *Automatic Dangerous Driving Intensity Analysis for Advanced Driver Assistance Systems from Multimodal Driving Signals. (IEEE2018)*
3. *Semi-supervised Deep Reinforcement Learning in Support of IoT and Smart City Services. (IEEE2018)*
4. *Energy-efficient border intrusion detection using wireless sensors network. (IEEE2018)*
5. *Quantifying the Effects of Increasing Mechanical Stress on Knee Acoustical Emissions Using Unsupervised graph mining. (IEEE2018)*

### **XVIII. EMBEDDED based HOMINOID**

1. *Development of Data Acquisition Robot for Toxic Environmental Monitoring Using WSN. (IEEE2018)*
2. *Development Of WSN Based Water Level Monitoring And Control System Using Android. (IEEE2018)*
3. *Smart Home Automation. (IEEE2018)*
4. *Speech Recognition Based Voice Command Notice Board. (IEEE2018)*
5. *Greenhouse Environment Controlling With Monitoring On Android Application (IEEE2018)*
6. *Weather Report Information System. (IEEE2018)*