

Embedded Systems Projects

I. Embedded based ANDROID Mobile Systems

1. Monitoring of health using Automated Embedded sensor data for Mobile Apps (**IEEE 2015**).
2. Easy and Accurate pressure Assessment using simultaneous Electro cardiogram and oscillo metric Blood Pressure measurements (**IEEE 2015**).
3. Vehicular Applications based on novel energy saving technology using Bluetooth
4. Novel medical healthcare using WBAN Technology for Internet of things applications (**IEEE 2015**).
5. On-line control of Renewable Energy Sources using user friendly Android (**IEEE 2015**).
6. Intelligent visual search-based mobile shopping with machine intelligence (**IEEE 2015**).
7. Analysis of Occupancy Detection via ibeacon for smart Building management (**IEEE 2015**).
8. Monitoring of breath and breath flow rate using Android Devices for Asthma Patients (**IEEE 2015**).

II. Embedded based BIO-MEDICAL Systems

1. Enhanced Cardio respiratory Monitoring Device based on Sensor Principles (**IEEE 2015**).
2. Precise Insulin Bolus Advisor Based on R-To-R Control and CBR Techniques (**IEEE 2015**).
3. Monitoring and Assessment of Blood Leakage System for the Applications in



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IEEE 2015

- Hemodialysis Therapy (**IEEE 2015**).
4. Health Assessment Monitoring using Enhanced Wearable Sensors (**Parkinson's disease**). (**IEEE 2015**).
5. Experimenting wireless Power Transfer on capacitive coupling Human Body communication (**IEEE 2015**).
6. The patient-centric mobile healthcare system enhancing web sharing and standardized protocols (**IEEE 2015**).
7. Portable Microwave sensor for glucose level measurements and Condition Analysis (**IEEE 2015**).
8. An global Adaptive Sensing Framework for Human Gait Analysis Using Smart Insole. (**IEEE 2015**).
9. Healthcare Monitoring using Novel Near Field Communication Technology (**IEEE 2015**).

III. Embedded based Mobile Communication Systems

1. The application of wireless technology for intelligent bus surveillance. (**IEEE 2015**).
2. A Modern GSM based Voice Response System for Wireless Load Control and Monitoring. (**IEEE 2015**).
3. School Children Transportation Safety Enhancement using Radio frequency Identification (**IEEE 2015**).
4. Design of Petrol Bunk Automatic systems with prepaid cards and GSM Technology (**IEEE 2015**).

IV. Embedded based WIRELESS System

1. Electric vehicle wireless charging via capacitive power transfer through a conformal bumper (**IEEE 2015**).



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2. Online Weather Parameters Monitoring using high efficient wireless sensors (**IEEE 2015**).
3. Wireless Sensor Network for Sea Water Quality control & Analysis (**IEEE 2015**).
4. Portable Design for Distance Vision people to work at Industry using RFID technology (**IEEE 2015**).
5. Calculation of Electrical Parameters In Industries via Pc Using Wireless Data Transfer. (**IEEE 2015**).
6. A Enhanced system for the intelligent Analysis of faulty Street lights. (Intelligent wireless street lighting system) (**IEEE 2015**).
7. A Wireless network based Novel Animal health analysis system (**IEEE 2015**).
8. Automatic control system for residential PV system based on power line communication (PLC) (**IEEE 2015**).
9. Advanced Bus Ticketing for Intelligent Public transportation using communication protocols (**IEEE 2015**).
10. Design of Novel Water Management system via Embedded Web server for Real Time Analysis(**IEEE 2015**).

V. *Embedded based ROBOTICS*

1. Advanced Embedded wireless Data Acquisition system for unmanned vehicle in underwater conditions (**IEEE 2015**).
2. Automatic Control System for a Robot tracking via Artificial Neural network techniques (**IEEE 2015**).
3. A Hand gesture Tracking based design of Automatic Tele-operated UGV (**IEEE 2015**).



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4. Smart Robot Navigation for Weed Detection System and Herbicide Sprayer for corn fields (Non-linear model predictive control for constrained robot navigation in row crops) (**IEEE 2015**).
5. Speech activated robot with artificial intelligent using Wireless networks (**IEEE 2015**).
6. Robot Design for Automatic surface cleaning using Blowers and Electromagnet Techniques (**IEEE 2015**).
7. Gesture based signals processing for Enhanced & secure silent spybot (**IEEE 2015**).
8. Modelling an Automated & Intelligent Soil Monitoring Robot (**IEEE 2015**).
9. Road Control Assessment using Intelligent Robotic Design (**IEEE 2015**).

VI. *Embedded based SENSORS*

1. Portable Embedded system in passenger car for road safety (**IEEE 2015**).
2. Design of milk analysis embedded system for dairy farmers (**IEEE 2015**).
3. Implementing Mine Gas monitoring based on sensor using Web for real time (**IEEE 2015**).
4. Intelligent system for monitoring and controlling of the Grain condition based on ARM (**IEEE 2015**).
5. Advanced Bus control system for blind people using RFID (**IEEE 2015**).
6. A Novel Wireless Sensor Networks for Condition Monitoring in the Railway Industry (**IEEE 2015**).
7. Wearable Sensors for Human Activity Recognitions for Surveillance operations (**IEEE 2015**).
8. A Novel Design of a Wireless Sensor Network for Rose Greenhouses Monitoring (**IEEE 2015**).



IEEE 2015

9. Advanced Home Automation for Elderly people using Wireless Sensor Network **(IEEE 2015).**

VII. Embedded based ENERGY MANAGEMENT Systems

1. Performance Analysis of Photovoltaic–Thermoelectric with Simulation Results **(IEEE 2015).**
2. Advanced Wireless power systems for mobile devices supporting inductive and resonant operating modes **(IEEE 2015).**
3. Low complex capacitive piezo electric transducer for high-Q micromechanical AIN resonators **(IEEE 2015).**
4. Maximum power point tracking technique for photovoltaic pumping system **(IEEE 2015).**
5. High Intelligent Damage Detection via MEMS sensors for Wind Turbines **(IEEE 2015).**
6. Design of MPPT control using fuzzy logic in solar-wind hybrid power system. **(IEEE 2015).**
7. Advanced Home energy management system based on daily demand prediction and Zigbee network **(IEEE 2015).**
8. Multi core Embedded system Run-Time Management with Energy harvesting **(IEEE 2015).**

VIII. Embedded based SECURITY Systems

1. Anomaly event detection in low resolution video for enhancing ATM facility **(IEEE 2015).**
2. Eyes off the Road Detection System based on driver gaze tracking **(IEEE 2015).**
3. Internet of Things based Bluetooth Devices for Vehicle Applications **(IEEE 2015)**



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IX. Embedded based HUMAN-MACHINE Systems

1. Ridge feature extraction in Finger Biometric for Real time Authentication systems **(IEEE 2015)**.
2. Systematic Learning in Wireless Video-Based Face Recognition for real time applications **(IEEE 2015)**.
3. Multi biometric identification with Palm print and Iris traits using fractional coefficients **(IEEE 2015)**.
4. A Real time Application using finger vein indexing scheme based on unsupervised clustering **(IEEE 2015)**.
5. A Novel Security enhancement of internet banking applications by using multimodal biometrics **(IEEE 2015)**.
6. A Novel Joint Feature Extraction and Classifier Design for ECG Based Biometric Recognition **(IEEE 2015)**.

X. Embedded based IMAGE PROCESSING

1. A Video-Analysis-Based Railway–Road Safety System for Detecting Hazard Situations at Level Crossings **(IEEE 2015)**.
2. OCR based License Plate Identification Using Artificial Neural Network and Wavelet Transformed Feature Selection **(IEEE 2015)**.
3. An Mathematical Algorithm-Based Moving Object Detection for Real-time Traffic Surveillance **(IEEE 2015)**.
4. Detection of Anomalies in Surveillance Video for Emergency Alert **(IEEE 2015)**.
5. Automatic Video-Based Fire Detection using Colorspace Features **(IEEE 2015)**.
6. Real Time Hand segmentation and fingertip detection for interfacing of stereo vision-based smart glasses **(IEEE 2015)**.



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7. Intelligent Design for Indian currency denomination recognition system based on artificial neural network. **(IEEE 2015)**.

XI. Embedded based INTELLIGENT System

1. Real Time Visible Light Communication Link Protection Mechanism for Smart Factory **(IEEE 2015)**.
2. Novel Networked Switching and Polymorphing Control of Electrical Loads with Web and Wireless Sensor Network **(IEEE 2015)**.
3. CAN based Intelligent Vehicle System for Driver Assistance using Advanced RISC Machines (ARM) **(IEEE 2015)**.
4. Advanced Detection and Notification of Potholes and Humps on Roads to Aid Drivers **(IEEE 2015)**.

XII. Embedded based RASPBERRY- PI

1. Global industrial monitoring through wireless communication based on Rasp berry Pi **(IEEE 2015)**.
2. An Novel internet of things approach for motion Analysis using raspberry pi **(IEEE 2015)**.