

Embedded Systems Projects

I. Embedded based ANDROID Mobile Systems

1. Health Assessment Monitoring using Embedded sensor data for Mobile Apps (**IEEE 2015**).
2. Precise pressure indication using simultaneous Electro cardiogram and oscillographic Blood Pressure measurements (**IEEE 2015**).
3. Bluetooth based energy conservative Technology for Vehicular Applications.
4. IoT Systems based medical healthcare using WBAN Technology (**IEEE 2015**).
5. Renewable Energy Sources monitoring based on Android (**IEEE 2015**).
6. Smart Shopping based on machine and crowd intelligence (**IEEE 2015**).
7. Android Devices based Occupancy Detection for smart Building management (**IEEE 2015**).
8. Asthma Patients Health Monitoring using Android device (**IEEE 2015**).

II. Embedded based BIO-MEDICAL Systems

1. A Novel Monitoring Device for respiration and pulse by Fusing Two Noncontact Sensor Principles (**IEEE 2015**).
2. Run-To-Run Control and Case-Based Reasoning based Insulin Bolus Advisor for Diabetic patients (**IEEE 2015**).
3. Accurate Blood Leakage Monitoring System for the Hemodialysis Therapy Applications (**IEEE 2015**).
4. Personalized Healthcare using Wearable Sensors for Health Monitoring (**Parkinson's disease**). (**IEEE 2015**).



IEEE 2015

5. Impact Analysis of wireless Power Transfer on capacitive coupling Human Body communication (**IEEE 2015**).
6. User Friendly mobile healthcare system enhancing sensor connectivity and data interoperability (**IEEE 2015**).
7. Microwave sensor based analysis for non-invasive glucose measurements and design (**IEEE 2015**).
8. An Energy-Efficient Human Gait Monitoring Using Adaptive Sensing Framework for Smart Insole. (**IEEE 2015**).
9. Near Field Communication for Pervasive Healthcare Monitoring (**IEEE 2015**).

III. *Embedded based Mobile Communication Systems*

1. Intelligent bus query system using wireless networks. (**IEEE 2015**).
2. Wireless Load Control and Monitoring using interactive voice based GSM Technology. (**IEEE 2015**).
3. Implementation of safety school bus transportation using RFID Technology (**IEEE 2015**).
4. Wireless GSM Technology for Petrol Bunk Automation with prepaid cards (**IEEE 2015**).

IV. *Embedded based WIRELESS System*

1. Design of Wireless electric vehicle charging via capacitive power transfer through a conformal bumper (**IEEE 2015**).
2. A Compact Wireless Sensor for Online Ambient Analysis (**IEEE 2015**).
3. Sea Water Quality Monitoring & control based on wireless sensors (**IEEE 2015**).
4. Design for Low vision people to work at Industry using RFID technology (**IEEE 2015**).



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5. Analysis of Electrical Parameters In Industries Through Pc Using Wireless Data Communication. (**IEEE 2015**).
6. A low complex system for the measurement and detection of faulty Street lights.(**IEEE 2015**).
7. Animal health monitoring system using Zigbee Technology (**IEEE 2015**).
8. Design of Power Line Communication for Residential PV systems (**IEEE 2015**).
9. An Intelligent Public transportation using M2M architecture (Bus Ticketing) (**IEEE 2015**).
10. Embedded Web server based Water Management system using Dynamic IP in Real Time (**IEEE 2015**).

V. *Embedded based ROBOTICS*

1. Data Acquisition system for unmanned vehicle in underwater Environment using wireless networks (**IEEE 2015**).
2. Neural Network based Control System for a Robot Navigation (**IEEE 2015**).
3. Automatic control of Unmanned Ground Vehicle using 3D Hand – gesture Tracking (**IEEE 2015**).
4. Weed Detection System and Smart Herbicide Sprayer Robot for Agriculture fields (**IEEE 2015**).
5. Artificial intelligent based speech Enabled Robotic technology (**IEEE 2015**).
6. Portable & low complex Surface cleaning robot using Blowers and Electromagnet (**IEEE 2015**).
7. Intelligent Silent Spybot Design using Gestures control systems (**IEEE 2015**).
8. Soil Condition Monitoring using Advanced Intelligent Robot (**IEEE 2015**).
9. Portable Road analyzing Robot (**IEEE 2015**).



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VI. Embedded based SENSORS

1. Portable Embedded system Design for passenger car road safety (**IEEE 2015**).
2. Milk analysis based embedded system control for dairy farmers (**IEEE 2015**).
3. Mine Gas monitoring data based on sensor Web (**IEEE 2015**).
4. ARM based intelligent system design for monitoring and controlling of the Grain condition (**IEEE 2015**).
5. Portable Bus Navigation system for blind people using RFID (**IEEE 2015**).
6. Secure Wireless Sensor Networks for Monitoring the Railway Transportation systems (**IEEE 2015**).
7. Enhanced Wearable Sensors for Human Activity Monitoring (**IEEE 2015**).
8. Rose Greenhouses Monitoring using wireless sensors Technology (**IEEE 2015**).
9. Wireless Sensor Network based smart home for Elderly care (**IEEE 2015**).

VII. Embedded based ENERGY MANAGEMENT Systems

1. Design of a Photovoltaic–Thermoelectric Performance Analysis and Simulation Results (**IEEE 2015**).
2. Wireless power based mobile devices supporting inductive and resonant operating modes (**IEEE 2015**).
3. Design of Capacitive piezo electric transducer for high-Q micromechanical AIN resonators (**IEEE 2015**).
4. Portable photovoltaic pumping system using MPPT Techniques (**IEEE 2015**).
5. Multi sensor Intelligent Damage Detection for Wind Turbines using MEMS (**IEEE 2015**).
6. Solar-wind hybrid power system using MPPT and fuzzy logic. (**IEEE 2015**).



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7. Zigbee based Home energy management system based on daily demand prediction (**IEEE 2015**).
8. Novel Run-Time Management for Multi core Embedded system with Energy harvesting (**IEEE 2015**).

VIII. Embedded based SECURITY Systems

1. Event detection in low resolution video for enhancing ATM Security (**IEEE 2015**).
2. Eyes off the Road Detection System by driver eye movement analysis (**IEEE 2015**).
3. IOT based Bluetooth Devices for vehicle Applications (**IEEE 2015**).

IX. Embedded based HUMAN-MACHINE Systems

1. Biometric fingerprint authentication with minutiae using ridge feature extraction (**IEEE 2015**).
2. Wireless Video-Based Face Recognition using Systematic Learning(**IEEE 2015**).
3. Multimodal biometric identification with Palm print and Iris traits using fractional coefficients of Walsh, Haar and Kekre transforms (**IEEE 2015**).
4. An efficient finger vein indexing scheme based on unsupervised clustering (**IEEE 2015**).
5. Security Improvement of internet banking applications by using multimodal biometrics (**IEEE 2015**).
6. Biometric Recognition via Joint Feature Extraction and Classifier Design for ECG (**IEEE 2015**).



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X. Embedded based IMAGE PROCESSING

1. Railway–Road Safety System for Detecting Hazard Situations at Level Crossings using Video Processing (**IEEE 2015**).
2. Car Number Plate Identification Using Artificial Neural Network (**IEEE 2015**).
3. A Genetic Algorithm-Based Moving Object Detection Surveillance in Real-time Traffic (**IEEE 2015**).
4. Detect Anomalies in Surveillance Video for Real Time security (**IEEE 2015**).
5. Analysis for Automatic Video-Based Fire Detection for Emergency Alert (**IEEE 2015**).
6. Interfacing of stereo vision-based smart glasses using hand Segmentation and finger tip detection (**IEEE 2015**).
7. Artificial neural network based Automatic Indian currency denomination recognition (**IEEE 2015**).

XI. Embedded based INTELLIGENT System

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



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IEEE 2015

XII. Embedded based RASPBERRY- PI

1. A Enhanced global industrial monitoring through wireless communication using Rasp berry Pi (**IEEE 2015**).
2. Real Time internet of things based approach for motion detection using raspberry pi (**IEEE 2015**).