

Embedded Systems Projects

I. EMBEDDED based REALWORLD MOBILITY

1. Bluetooth GPS Application Based On Latitude And Longitude For Child Tracking Model. **(IEEE2017)**
2. Communication approach through handheld devices for Disabled patient based on morse code. **(IEEE2017)**
3. A Wireless Health Monitoring System Using Mobile Phone Accessories. **(IEEE2017)**
4. Monitoring physiological variables of mining workers at high altitude. **(IEEE2017)**
5. Wearable Medical Sensor Based System Design A Survey. **(IEEE2017)**

II. EMBEDDED based BIOLOGICAL SYSTEM ANALYSIS

1. An Empirical Study on Engineering a Real World Smart Ward Using Pervasive Technologies. **(IEEE2017)**
2. PARHELIA Particle Filter Based Heart Rate Estimation from Photoplethysmographic Signals during Physical Exercise. **(IEEE2017)**
3. Novel Approach to Non-Invasive Blood Glucose Monitoring based on Transmittance and Refraction of Visible Laser Light. **(IEEE2017)**
4. Feasibility Study for Unconstrained Respiration Monitoring based on Multi-Way Approach Using an Acceleration and Force Sensing Module. **(IEEE2017)**
5. Development and Characterization of Carbonic Anhydrase Based CO₂ Biosensor for Primary Diagnosis of Respiratory Health. **(IEEE2017)**
6. Wearable Glove-Type Driver Stress Detection Using a Motion Sensor. **(IEEE2017)**
7. Sleep Sense: A Noncontact and Cost-Effective Sleep Monitoring System. **(IEEE2017)**
8. Private and Secured Medical Data Transmission and Analysis for Wireless Sensing Healthcare System. **(IEEE2017)**

9. Federated Internet of Things and Cloud Computing Pervasive Patient Health Monitoring System . (**IEEE2017**)
10. Investigation of an Indoor Air Quality Sensor for Asthma Management in Children. (**IEEE2017**)

III. EMBEDDED based SMART WORLD

1. Fuzzy Group Based Intersection Control via Vehicular Networks for Smart Transportations. (**IEEE2017**)
2. Towards fourth industrial revolution impact smart product based on RFID technology. (**IEEE2017**)

IV. EMBEDDED based AUTONOMOUS VEHICLE

1. A Comprehensive Review of Smart Wheelchairs: Past, Present, and Future. (**IEEE2017**)
2. NARMAX Self Tuning Controller for Line-of-Sight-Based Waypoint Tracking for an Autonomous Underwater Vehicle. (**IEEE2017**)
3. Robot assistant in management of diabetes in children based on the internet of things. (**IEEE2017**)

V. EMBEDDED based AMBIENT INTELLIGENCE

1. A Survey of Smart Parking Solutions. (**IEEE2017**)
2. SimpliMote A Wireless Sensor Network Monitoring Platform for Oil and Gas Pipelines. (**IEEE2017**)
3. Self_Powered ZigBee Wireless Sensor Nodes for Railway Condition Monitoring. (**IEEE2017**)

VI. EMBEDDED based NATURAL RESOURCE MANAGEMENT

1. A Wireless Sensor Monitoring Node Based on Automatic Tracking Solar-powered Panel for Paddy Field Environment. **(IEEE2017)**
2. An Autonomous Wireless Body Area Network Implementation towards IoT Connected Healthcare Applications. **(IEEE2017)**
3. Multi-Agent System based Event-Triggered Hybrid Controls for High-Security Hybrid Energy Generation Systems. **(IEEE2017)**
4. Towards an Energy-Efficient Anomaly-Based Intrusion Detection Engine for Embedded System. **(IEEE2017)**
5. Towards an Energy-Efficient Anomaly-Based Intrusion Detection Engine for Embedded Systems. **(IEEE2017)**
6. Global optimal energy management control strategies for connected four-wheel-drive Hybrid electric vehicles. **(IEEE2017)**

VII. EMBEDDED based ACCESS VERIFICATION AND CONTROL

1. Modeling and Offset-Free Model Predictive Control of a Hydraulic Mini Excavator. **(IEEE2017)**
2. Safety-Level Aware Bin-Packing Heuristic for Automatic Assignment of Power Plants Control Functions. **(IEEE2017)**
3. State-of-the-Art Intelligent Flight Control Systems in Unmanned Aerial Vehicles. **(IEEE2017)**
4. Planning and Control for Collision-Free Cooperative Aerial Transportation. **(IEEE2017)**
5. RISE-Based Adaptive Control of Hydraulic Systems With Asymptotic Tracking. **(IEEE2017)**

VIII. EMBEDDED based FINANCIAL DATA SECURITY

1. VOT-EL: Three Tier Secured State-Of-The-Art EVM Design Using Pragmatic Fingerprint Detection Annexed With NFC Enabled Voter -ID Card Anooshmita. **(IEEE2017)**
2. Design of a Solar Power Electronic Voting Machine. **(IEEE2017)**
3. Preventing And Securing Data From Cyber Crime Using New Authentication Method Based On Block Cipher Scheme. **(IEEE2017)**

IX. EMBEDDED based WIFI AND LIGHT FIEDLITY

1. A Superimposed Relaying Strategy and Power Allocation for Outdoor Visible Light Communications. **(IEEE2017)**
2. Reliable transmission of visible light communication data in lighting control networks. **(IEEE2017)**
3. Light-weight and Robust Security-Aware D2D-assist Data Transmission Protocol for Mobile-Health Systems. **(IEEE2017)**
4. Performance Modeling for Multipath Mobile Data Offloading in Cellular/WiFi Networks. **(IEEE2017)**

X. EMBEDDED based AUTOMOTIVE

1. A Hybrid Approach for Efficient Privacy Preserving Authentication in VANET. **(IEEE2017)**
2. Interoperable EV detection for dynamic wireless charging with existing hardware and free resonance. **(IEEE2017)**
3. Power Rail Segmentation and Deployment. **(IEEE2017)**
4. When Smart Wearable Meet Intelligent Vehicles: Challenges and Future Directions. **(IEEE2017)**

XI. EMBEDDED based VIRTUAL ENVIRONMENTS

1. Study of Text Segmentation and Recognition using Leap Motion Sensor. **(IEEE2017)**
2. supporting trembling hand typing using optical see-through mixed reality. **(IEEE2017)**
3. Recent Trends in Driver Safety Monitoring Systems: State of the Art and Challenges. **(IEEE2017)**

XII. EMBEDDED based MACHINE LEARNING AND IMAGE PROCESSING

1. Hyper spectral face recognition via feature Extraction and CRC-based classifier. **(IEEE2017)**
2. Facial-Expression Monitoring System for Improved Healthcare in Smart Cities. **(IEEE2017)**
3. Reworking Multilabel Brain Tumor Segmentation. **(IEEE2017)**
4. A Robust and Efficient Approach to License Plate Detection. **(IEEE2017)**
5. Single image dehazing by latent region segmentation based transmission estimation and weighted L1-norm regularization. **(IEEE2017)**
6. MIGS-GPU: Microarray Image Gridding and Segmentation on the GPU. **(IEEE2017)**

XIII. EMBEDDED based MAN MACHINE COMMUNICATION

1. Brain Machine Interface and Visual Compressive Sensing based Teleoperation Control of an Exoskeleton Robot. **(IEEE2017)**
2. Early Detection of Sudden Pedestrian Crossing for Safe Driving during Summer Nights. **(IEEE2017)**
3. Higher Order Linear Dynamical Systems for Smoke Detection in Video Surveillance Applications. **(IEEE2017)**
4. Hierarchical Approach for Rain or Snow Removing in A Single Color Image. **(IEEE2017)**

5. Dual Deep Network for Visual Tracking. **(IEEE2017)**
6. Towards Abnormal Trajectory and Event Detection in Video Surveillance. **(IEEE2017)**
7. Towards Detection of Bus Driver Fatigue Based on Robust Visual Analysis of Eye State. **(IEEE2017)**

XIV. EMBEDDED based SINGLE BOARD COMPUTERS (RASPBERRY PI)

1. Improving Smart Home Security; Integrating Logical Sensing into Smart Home. **(IEEE2017)**
2. A Driver State Detection System—Combining a Capacitive Hand Detection Sensor With Physiological Sensors. **(IEEE2017)**
3. A Temperature Compensated Smart Nitrate-Sensor for Agricultural Industry. **(IEEE2017)**

XV. EMBEDDED based BUILDING MANAGEMENT

1. IoT Considerations, Requirements, and Architectures for Smart Buildings – Energy Optimization and Next Generation Building Management Systems. **(IEEE2017)**
2. A Generic Deep-Learning-Based Approach for Automated Surface Inspection. **(IEEE2017)**
3. Automatic Detection of Wind Turbine Blade Surface Cracks Based on UAV-taken Images. **(IEEE2017)**
4. Monitoring Corrosion Process of Reinforced Concrete Structure Using FBG Strain Sensor. **(IEEE2017)**
5. An Entropy-Based Analysis of GPR Data for the Assessment of Railway Ballast Conditions. **(IEEE2017)**
6. Automatic Detection of Marine Gas Seeps Using an Interferometric Side scan Sonar. **(IEEE2017)**

7. Road Sense: Smartphone Application to Estimate Road Conditions using Accelerometer and Gyroscope. **(IEEE2017)**

EMBEDDED based IOT (INTERNET OF THINGS)

1. IoT Driven Automated Object Detection Algorithm for Urban Surveillance Systems in Smart Cities. **(IEEE2017)**
2. SPARK: Smart Power Assessment Rendering Kit. **(IEEE2017)**
3. Survey on Flooding Detection System using Internet of things. **(IEEE2017)**
4. Patients' Adoption of WSN-Based Smart Home Healthcare Systems: An Integrated Model of Facilitators and Barriers. **(IEEE2017)**
5. Structural Health Monitoring Framework Based on Internet of Things: A Survey. **(IEEE2017)**
6. Challenges and Opportunities of Waste Management in IoT-enabled Smart Cities: A Survey . **(IEEE2017)**
7. RFID-based Production Data Analysis in an IoT-enabled Smart Job-shop. **(IEEE2017)**
8. IoT applications on Secure Smart Shopping System. **(IEEE2017)**