

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. Wearable Medical Sensor Based System Design A Survey. **(IEEE2017)**
5. Elder Tracking and Fall Detection System using Smart Tiles.**(IEEE2017)**

II. EMBEDDED based BIOMEDICAL APPLICATIONS

1. PARHELIA Particle Filter Based Heart Rate Estimation from Photoplethysmographic Signals during Physical Exercise. **(IEEE2017)**
2. Novel Approach to Non-Invasive Blood Glucose Monitoring based on Transmittance and Refraction of Visible Laser Light. **(IEEE2017)**
3. Feasibility Study for Unconstrained Respiration Monitoring based on Multi-Way Approach Using an Acceleration and Force Sensing Module. **(IEEE2017)**
4. Wearable Glove-Type Driver Stress Detection Using a Motion Sensor. **(IEEE2017)**
5. Sleep Sense: A Noncontact and Cost-Effective Sleep Monitoring System. **(IEEE2017)**
6. Private and Secured Medical Data Transmission and Analysis for Wireless Sensing Healthcare System. **(IEEE2017)**
7. Federated Internet of Things and Cloud Computing Pervasive Patient Health Monitoring System. **(IEEE2017)**

III. EMBEDDED based CYBER –PHYSICAL SYSTEM

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)**
3. Recent Trends in Driver Safety Monitoring Systems State of the Art and Challenges.**(IEEE2017)**
4. Smart Parking Guidance Monitoring and Reservations A Review.**(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. Hardware Design and Web-based Communication Modules of a Real-time Multi-Sensor Fire Detection and Notification System using Fuzzy Logic. **(IEEE2017)**
4. Modeling and Offset-Free Model Predictive Control of a Hydraulic Mini Excavator. **(IEEE2017)**
5. State-of-the-Art Intelligent Flight Control Systems in Unmanned Aerial Vehicles. **(IEEE2017)**

V. EMBEDDED based HAPTIC COMPUTING

1. Towards the Implementation of IoT for Environmental Condition Monitoring in Homes. **(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)**
4. Modeling Healthcare Quality via Compact Representations of Electronic Health Records.**(IEEE2017)**

5. An Intelligent Load Management System with Renewable Energy Integration for Smart Homes. **(IEEE2017)**

VI. EMBEDDED based SUSTAINABLE ENERGY MANAGEMENT

1. Prototype for an off-Grid photovoltaic system with low cost solar tracking. **(IEEE2017)**
2. A Wireless Sensor Monitoring Node Based on Automatic Tracking Solar-powered Panel for Paddy Field Environment. **(IEEE2017)**
3. Two-Stage Energy Management for Office Buildings with Workplace EV Charging and Renewable Energy. **(IEEE2017)**
4. Energy management for on-grid and off-grid wind/PV and battery hybrid systems. **(IEEE2017)**
5. Direct and Indirect Sensing two-axis Solar Tracking System. **(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. Energy Management System for Automated Driving. **(IEEE2017)**
2. Integration of Learning-Based Testing and Supervisory Control for Requirements Conformance of Black-Box Reactive Systems. **(IEEE2017)**
3. Secure Signature-Based Authenticated Key Establishment Scheme for Future IoT Applications. **(IEEE2017)**
4. A Community-Driven Access Control Approach in Distributed IoT Environments. **(IEEE2017)**
5. Security Attacks on Information Centric Networking for Healthcare System. **(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 FIEDILITY

1. Reliable transmission of visible light communication data in lighting control networks. **(IEEE2017)**
2. A Superimposed Relaying Strategy and Power Allocation for Outdoor Visible Light Communications. **(IEEE2017)**
3. Performance Modeling for Multipath Mobile Data Offloading in Cellular/WiFi Networks. **(IEEE2017)**
4. An Optimized Space Partitioning Technique to Support Two-layer WiFi Fingerprinting. **(IEEE2017)**
5. Joint Bandwidth and Power Allocation for Energy Efficiency Optimization Over Heterogeneous LTE/WiFi Multi-Homing Networks. **(IEEE2017)**

X. EMBEDDED based AUTOMOTIVE

1. Predictive AECMS by Utilization of Intelligent Transportation Systems for Hybrid Electric Vehicle Power train Control. **(IEEE2017)**
2. IoT-Based Multifunctional Scalable Real-Time Enhanced Road Side Unit for Intelligent Transportation Systems. **(IEEE2017)**
3. A survey on driver behavior detection techniques for intelligent transportation systems. **(IEEE2017)**

4. Automatic Incident Detection in Intelligent Transportation Systems Using Aggregation of Traffic Parameters Collected Through V2I Communications. **(IEEE2017)**
5. UAV-Enabled Intelligent Transportation Systems for the Smart City: Applications and Challenges. **(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. Paper on Virtual inputs for Computer. **(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. Single image dehazing by latent region segmentation based transmission estimation and weighted L1-norm regularization. **(IEEE2017)**
5. 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. Higher Order Linear Dynamical Systems for Smoke Detection in Video Surveillance Applications. **(IEEE2017)**
3. Text segmentation using super pixel clustering. **(IEEE2017)**
4. Dual Deep Network for Visual Tracking. **(IEEE2017)**
5. Towards Abnormal Trajectory and Event Detection in Video Surveillance. **(IEEE2017)**

6. 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)**
4. Bi-Directional Passing People Counting System based on IR-UWB Radar Sensors. **(IEEE2017)**
5. Automated Blood Donating And Managing System Using Raspberry Pi B+. **(IEEE2017)**
6. Secure Authentication System. **(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. Monitoring Corrosion Process of Reinforced Concrete Structure Using FBG Strain Sensor. **(IEEE2017)**
4. An Entropy-Based Analysis of GPR Data for the Assessment of Railway Ballast Conditions. **(IEEE2017)**
5. Automatic Detection of Marine Gas Seeps Using an Interferometric Side scan Sonar. **(IEEE2017)**
6. Low Cost Intelligent Carpet System for Footstep Detection. **(IEEE2017)**