Embedded Systems Projects

I. EMBEDDED based HANDHELD MOBILE COMPUTERS

1. Heart Rate Tracking using Wrist-Type Photoplethysmographic (PPG) Signals during Physical Exercise with Simultaneous Accelerometry. (IEEE 2016)
5. Smart phone-based peak expiratory flow meter. (IEEE 2016)

II. EMBEDDED based BIO-MEDICAL APPLICATIONS

1. Non-invasive measurement of stress levels in knee implants using a magnetic-based detection method. (IEEE 2016)
2. Telemonitoring System for Patients with Chronic Kidney Disease Undergoing Peritoneal Dialysis (Portable Kidney Machines). (IEEE 2016)
5. Temporal Pattern Recognition in Gait Activities Recorded with a Footprint Imaging Sensor System. *(IEEE 2016)*


7. Model for Personalization of mHealth Systems for Monitoring Patients with Chronic Diseases. *(IEEE 2016)*

8. OB CITY—Definition of a Family-Based Intervention for Childhood Obesity Supported by Information and Communication Technologies. *(IEEE 2016)*


### III. EMBEDDED based CYBER-PHYSICAL SYSTEM

1. Wearable Heart Rate Sensor Systems for Wireless Canine Health Monitoring. *(IEEE 2016)*


3. A Dual-Channel, Interference-free, Bacteria-Based Biosensor for Highly-Sensitive Water Quality Monitoring. *(IEEE 2016)*

4. Modeling Mobile Ticket Dispenser System with Impatient Clerk. *(IEEE 2016)*

5. Transport models and intelligent transportation system to support urban evacuation planning process (School Children Transportation safety). *(IEEE 2016)*


8. Soft Actuation: Smart Home and Office with Human-in-the-Loop. *(IEEE 2016)*
IV. EMBEDDED based ROBOTIC VEHICLE

1. Head Movement Controlled Wheel Chair Using MEMS Sensors. (IEEE 2016)
4. Design and development of a climbing robot for several applications. (IEEE 2016)
5. Visual Servoing of Quadrotors for Perching by Hanging from Cylindrical Objects. (IEEE 2016)
6. Robust Trajectory Tracking Error-Based Model Predictive Control for Unmanned Ground Vehicles. (IEEE 2016)
7. Learning Physical Collaborative Robot Behaviors from Human Demonstrations. (IEEE 2016)

V. EMBEDDED based UBQUITOUS COMPUTING

2. Microwave Sensing of Quality Attributes of Agricultural and Food Products. (IEEE 2016)
5. Using Distributed Wearable Sensors to Measure and Evaluate Human Lower Limb Motions. (IEEE 2016)
EMBEDDED SYSTEMS Projects

IEEE 2016

7. Railway Track Circuit Fault Diagnosis Using Recurrent Neural Networks (condition monitoring for railway industry). (IEEE 2016)

VI. EMBEDDED based ENERGY-SENSITIVE PRODUCTION CONTROL

2. Wind turbine condition monitoring and fault diagnosis in China. (IEEE 2016)
5. A Flexible Piezoelectric-Pyroelectric Hybrid Nanogenerator Based on P(VDF-TrFE) Nanowire Array. (IEEE 2016)

VII. EMBEDDED based SECURITY AND ACCESS CONTROL

1. Software-Defined Industrial Internet of Things in the Context of Industry 4.0. (IEEE 2016)
 VIII. **EMBEDDED based BANKING**

3. Comparative Study and Simulation of Digital Forensic Tools. *(IEEE 2016)*

 IX. **EMBEDDED based E-COM**

2. Smart Pollution Monitoring for Instituting Aware Traveling. *(IEEE 2016)*
3. Low Power Wearable Systems for Continuous Monitoring of Environment and Health for Chronic Respiratory Disease. *(IEEE 2016)*
5. An Optimal and Learning-Based Demand response and Home Energy Management System. *(IEEE 2016)*
6. Design of Automated Irrigation System based on Field sensing and forecasting. *(IEEE 2016)*
X. **EMBEDDED based WIFI & LIGHT FIDELITY**

1. Optimized LEDs Foot printing for Indoor Visible Light Communication Networks. (IEEE 2016)
2. VANET based Real-Time Intelligent Transportation System (VLC based VANET). (IEEE 2016)

XI. **EMBEDDED based TRANSPORTATION SYSTEM**

2. Three stage Toll Gate Alarming Mechanism on Road Highways. (IEEE 2016)

XII. **EMBEDDED based INTERNET OF THINGS (IOT)**


4. Black Box Anomaly Detection in Multi-Cloud Environment. *(IEEE 2016)*

5. Front-End Intelligence for Large-Scale Application-Oriented Internet-of-Things. *(IEEE 2016)*

6. Enabling Synergy in IoT: Platform to Service and Beyond- Heterogeneous Company Infrastructure. *(IEEE 2016)*

7. Internet of Things and Big Data Analytics for Smart and Connected Communities *(IEEE 2016)*

8. E-Waste Management: Save Earth. *(IEEE 2016)*

**XIII. EMBEDDED based VIRTUAL REALITY**


2. Air-touch User Interface with High Touch Accuracy on Flat-concave dual-mirror projector. *(IEEE 2016)*

3. Cyberphysical System with Virtual Reality for Intelligent Motion Recognition and Training. *(IEEE 2016)*

**XIV. EMBEDDED based COMPUTER VISION AND IMAGE PROCESSING**

1. Diabetic foot ulcer assessment through the aid of smart phone. *(IEEE 2016)*


3. Fusion of quantitative image and genomic biomarkers to improve prognosis assessment of early stage lung cancer patients *(IEEE 2016)*
EMBEDDED SYSTEMS Projects

IEEE 2016

4. MIGS-GPU: Microarray Image Gridding and Segmentation on the GPU. (IEEE 2016)
8. Onboard fuzzy logic approach to active fire detection in Brazilian amazon forest. (IEEE 2016)

XV. EMBEDDED based HUMAN-MACHINE INTERFACE

5. Bayesian Blind Identification of Nonlinear Distortion with Memory for Audio Applications (Medico Stick). (IEEE 2016)

XVI. EMBEDDED based ARCHITECTING AND CONSTRUCTION

2. Automated Crack Detection on Concrete Bridges. *(IEEE 2016)*
4. A Survey on Rapidly Deployable Solutions for Post-Disaster Networks. *(IEEE 2016)*
5. Smart City Wireless Connectivity Considerations and Cost Analysis: Lessons Learnt From Smart Water Case Studies. *(IEEE 2016)*
7. Automatic Crack Detection and Measurement Based on Image Analysis. *(IEEE 2016)*

**XVII. EMBEDDED based LAB-VIEW**

2. EEG Acquisition and Processing for Cognitive Brain Mapping During Chess Problem Solving. *(IEEE 2016)*
3. The puzzle of police body cams. *(IEEE 2016)*

**XVIII. EMBEDDED based RASPBERRY PI**

1. Smart Home Automation: A Literature Review. *(IEEE 2016)*
2. Smart Precision based Agriculture using Sensors. *(IEEE 2016)*
3. The tactile internet: vision, recent progress, and open challenges. *(IEEE 2016)*
4. Multi-Directional Multi-Level Dual-Cross Patterns for Robust Face Recognition. *(IEEE 2016)*
5. Early Scavenger Dimensioning in Wireless Industrial Monitoring Applications. *(IEEE 2016)*