I. EMBEDDED based HANDHELD PRODUCTS

- 1. Eat, but Verify. (IEEE 2019)
- 2 Internet of Things Mobile Air Pollution Monitoring System (IoT-Mobair). (IEEE 2019)
- GSM Based Low-cost Gas Leakage, Explosion and Fire Alert System with Advanced Security. (IEEE 2019)
- 4. Waste Water Management for Smart Cities. (IEEE 2019)
- Design and Implementation of an Interactive Road Safety System for Young Bikers. (IEEE 2019)

II. EMBEDDED based CYBER PHYSICAL SYSTEMS

- 1. Vehicle Accident Prevent cum Location Monitoring System. (IEEE 2019)
- 2 IoT-Based Interactive Dual Mode Smart Home Automation. (IEEE 2019)
- **3.** A Novel Parking Management System, for Smart Cities, to save Fuel, Time, and Money. (IEEE 2019)

III. EMBEDDED based CYBER AUTOMATON SYSTEM

- 1. Development of Voice Control and Home Security. (IEEE 2019)
- 2 Towards A Novel Approach for Designing Smart Classrooms. (IEEE 2019)
- 3. Animal monitoring based on IoT technologies. (IEEE 2019)
- 4. Monitoring of Mining Workers At High Altitude. (IEEE 2019)

IV. EMBEDDED based PERVASIVE COMPUTING

- 1. Design and Development of Air Pollution Monitoring. (IEEE 2019)
- 2 A Smart Home Automation and Metering System using Internet of Things (IoT). (IEEE 2019)
- Smart School Bus: Ensuring Safety On The Road For School Children. (IEEE 2019)
- **4.** An in-pipe leak detection robot with a neural-network based leak verification system. (**IEEE 2019**)
- A Face Recognition Method in the Internet of Things for Security Applications in Smart Homes and Cities. (IEEE 2019)
- **6.** OB CITY Definition of a Family-Based Intervention for Childhood Obesity Supported by Information and Communication Technologies. (IEEE 2019)
- Automated Medical Waste Segregation Machine Using Arduino Controller. (IEEE 2019)
- 8. Railroad Track Condition Monitoring Using Inertial Sensors and Digital Signal Processing: A Review. (IEEE 2019)
- Planning and Navigation of Climbing Robots in Low-Gravity Environments. (IEEE 2019)
- Diagnostic Measurement Practices for Instrument Transformers. (IEEE 2019)

V. EMBEDDED based ENERGY-SENSITIVE PRODUCTION CONTRO

- Design Of A Monitoring System For Waste Management Using IoT. (IEEE 2019)
- 2 Multi Purpose Security System in Automobile Industry. (IEEE 2019)
- 3. An Intelligent Dress Uniform Identification System. (IEEE 2019)

- 4. A Two-Stage Data-Driven Approach for Image- Based Wind Turbine Blade Crack Inspections. (IEEE 2019)
- IoT application for real-time monitoring of Solar Home Systems based on Arduino with 3G connectivity. (IEEE 2019)

VI. EMBEDDED based E-COM

- 1. Vehicle breaking Support System. (IEEE 2019)
- 2 Distributed Inference Condition Monitoring System for Rural Infrastructure in the Developing World. (IEEE 2019)
- 3. Control System. (IEEE 2019)
- Automatic Detection of Wind Turbine Blade Surface Cracks Based on UAVtaken Images. (IEEE 2019)
- Smart Pilgrim: A Mobile-Sensor-Cloud based System to Safeguard Pilgrims through Smart Environment. (IEEE 2019)

VII.EMBEDDED based BIOSCIENCE

- 1. ECG-Based Secure Health care Monitoring System. (IEEE 2019)
- 2 A Health Remote Monitoring Application based on Wireless Body Area Network. (IEEE 2019)
- Intelligent Medicine Box For Medication Management Using IOT. (IEEE
 2019)
- Health Monitoring and Tracking System For Soldiers using IOT. (IEEE 2019)
- A Smart Home Appliance Control System For Physically Disabled Person. (IEEE 2019)
- Design and Implementation of a Bluetooth-Based MCU and GSM for Wetness Detection. (IEEE 2019)

- 7. Health Monitoring System for Elderly and Disabled People. (IEEE 2019)
- **8.** IoT Based Smart Edge for Global Health: Remote Monitoring with Severity Detection and Alerts Transmission. (IEEE 2019)
- IoT-Fog based Healthcare Framework to Identify and Control Hypertension Attack. (IEEE 2019)
- **10.** Non-invasive Flexible and Stretchable Wearable Sensors with Nanobased Enhancement for Chronic Disease Care. (IEEE 2019)
- 11. Vital Sign Measurement in Telemedicine Rehabilitation Based on Intelligent Wearable Medical Devices. (IEEE 2019)
- 12 Cattle Health Monitoring System Using Wireless Sensor Network. (IEEE 2019)
- **13.** Health-monitoring of pregnant women Design requirements, and proposed reference architecture. (**IEEE 2019**)
- **14.** A New Design Approach for Gesture Controlled Smart Wheelchair Utilizing Microcontroller. (**IEEE 2019**)
- Adjustment of Bed for a Patient Through Gesture Recognition. (IEEE
 2019)
- **16.** An Intelligent Mobile Agents System for Sudden Infant Death Syndrome Monitoring. (IEEE 2019)
- 17. Wearable Heart Rate Sensor Systems for Wireless Canine Health Monitoring. (IEEE 2019)
- 18. Wearable Heart Rate Sensor Systems for Wireless Canine Health Monitoring. (IEEE 2019)
- 19. Implanted Knee Kinematics Prediction: comparative performance analysis of machine learning techniques. (IEEE 2019)

20. A Wireless Continuous Patient Monitoring System for Dengue; Wi- Mon (IEEE 2019)

VIII. EMBEDDED based BROWSING SYSTEM

- Bore well water quality and motor monitoring based on IOT gateway. (IEEE 2019)
- 2. On Access Control in Cabin-Based Transport Systems. (IEEE 2019)
- 3. Arduino Based Smart Fingerprint Authentication System. (IEEE 2019)
- 4. End to End IoT Based Hazard Monitoring System. (IEEE 2019)
- 5. Monitoring Effect of Air Pollution on Agriculture using WSNs. (IEEE 2019)

IX. Embedded based TRANSPORTING

- A Proposed Model of Integrated Smart Parking Solution for a city. (IEEE 2019)
- 2 Lane change detection algorithm on real world driving for arbitrary road infrastructures. (IEEE 2019)
- 3. Wireless Digital Traffic Signs of The Future. (IEEE 2019)
- **4.** Research and design of environmental monitoring and road lighting system based on the Internet of things. (IEEE 2019)
- Wearable Device-Based System to Monitor a Driver's Stress, Fatigue, and Drowsiness. (IEEE 2019)
- Energy-efficient border intrusion detection using wireless sensors network. (IEEE 2019)
- 7. Highly Secure Multiple Account Bank Affinity. (IEEE 2019)

X.EMBEDDED based 2D

- An efficient texture descriptor for the detection of license plates from vehicle images. (IEEE 2019)
- 2 Smart home management system based on face recognition index in realtime. (IEEE 2019)
- A deep learning facial expression recognition based scoring system for restaurants. (IEEE 2019)
- 4. Smart Leaf Infection Identification and Fertilizer Spray. (IEEE 2019)
- 5. Highly Secure Multiple Account Bank Affinity. (IEEE 2019)
- 6. OTP Based Cardless Transaction using ATM. (IEEE 2019)
- 7. Bone tumour detection and classification. (IEEE 2019)
- Colour Image Segmentation for Malaria parasites Detection using Cacading Method. (IEEE 2019)
- Automatic Sickle Cell Anemia Detection Using Image Processing Technique. (IEEE 2019)
- 10. Leukocyte Segmentation and Counting Based on Microscopic Blood Images Using HSV Saturation Component with Blob Analysis. (IEEE 2019)
- 11. CNN based training and classification of MRI Brain Images. (IEEE 2019)
- **12.** Enhancing bank security using face, iris and finger vein technology. **(IEEE 2019)**
- **13.** Gesture Recognition and finger tip detection for Human Computer Interaction. (IEEE 2019)
- 14. Diseases Detection of Various Plant Leaf Using Image Processing Techniques A Review. (IEEE 2019)

XI.EMBEDDED based ARCHITECTURE

- IOT based safety and health monitoring for construction worker. (IEEE 2019)
- 2 Real Time Monitoring & Analyzation Of Hazardous Parameters In Underground Coal Mines Using Intelligent Helmet System. (IEEE 2019)

XII.EMBEDDED based CONSTRUCTION

- New Smart Home's energy management system design and implementation for frugal smart cities. (IEEE 2019)
- 2 Monitoring Corrosion Process of Reinforced Concrete Structure Using FBG Strain Sensor. (IEEE 2019)
- 3. Concrete Structure Using FBG Strain Sensor. (IEEE 2019)
- **4.** Laboratory validation of corrosion-induced delamination in concrete by ground penetrating radar. (**IEEE 2019**)
- Automated Road Crack Detection Using Deep Convolutional Neural Networks. (IEEE 2019)

XIII. EMBEDDED based MINI COMPUTER 3.0

- IOT based Smart Garbage Monitoring System using Raspberry Pi. (IEEE 2019)
- 2 Design and Implementation of the Smart Glove to Aid the Visually Impaired. (IEEE 2019)
- IoT based Smart Parking and Traffic Management System for Middle East College. (IEEE 2019)
- Rice Donation System in Orphanage Based on IOT, Raspberry-pi and Block chain. (IEEE 2019)
- 5. Automatic Road Accident Detection using Ultrasonic Sensor. (IEEE 2019)

- Raspberry Pi based Smart Fire Management System employing Sensor based Automatic Water Sprinkler. (IEEE 2019)
- 7. Water Quality Monitoring and Waste Management using IoT. (IEEE 2019)
- 8. Automated Blood Bank System Using Raspberry Pi. (IEEE 2019)
- 9. Advanced Anti-Terrorism Unmanned Ground Vehicle. (IEEE 2019)
- 10. An Early Detection System for Proactive Management of Raw Milk Quality: An Australian Case Study. (IEEE 2019)
- 11. A Personal Healthcare IoT System model using Raspberry Pi 3.
 (IEEE 2019)
- **12.** Agricultural Field Monitoring using IoT. (IEEE 2019)
- **13.** Automated irrigation and water level management system using Raspberry Pi 3. (**IEEE 2019**)
- **14.** A Smart Office Automation System Using Raspberry Pi (Model- B). (IEEE 2019)
- 15. Surveillance Robot using Raspberry Pi and IoT. (IEEE 2019)
- **16.** Healthcare Monitoring System and transforming Monitored data into Real time Clinical Feedback based on IoT using Raspberry Pi. (IEEE 2019)
- 17. Person Recognition for Access Logging. (IEEE 2019)

 XIV. EMBEDDED based ACTUALITY MOBILITY
- 1. Forest Fire Alerting System using GPS. (IEEE 2019)
- 2 Smartphone-Based System for Improving Pedestrian Safety (IEEE 2019)
- An IOT Approach to Vehicle Accident Detection using Cloud Computing. (IEEE 2019)
- **4.** Design and Implementation of a Smart Home Energy Saving System with Active Loading Feature Identification and Power Management. (IEEE 2019)

 IoT-BBMS: Internet of Things-based Baby Monitoring System for Smart Cradle. (IEEE 2019)

XV. EMBEDDED based DIGITAL TWIN

- 1. Biometrically Secured Electronic Voting Machine. (IEEE 2019)
- 2 Voice Operated Intelligent Fire Extinguishing Vehicle. (IEEE 2019)
- 3. Enabling Technologies for the Internet of Health Things. (IEEE 2019)
- **4.** An IoT Based Proposed System for Monitoring Manhole in Context of Bangladesh. (IEEE 2019)
- Cloud-based Vehicle Functions: Motivation, use-cases and Classification. (IEEE 2019)

XVI. EMBEDDED based APPLICATION

- 1. Smart ring for women safety using IOT. (IEEE 2019)
- 2 Smartphone-Based System for Improving Pedestrian Safety. (IEEE 2019)
- A Crowd source-Based Sensing System for Monitoring Fine-grained Air Quality in Urban Environments. (IEEE 2019)
- Monitoring Vital Signs and Postures During Sleep Using WiFi Signals. (IEEE 2019)

XVII. EMBEDDED based ENERGY SAVING AND MANAGEMENT SYSTEM

- Smart Energy Metering and Power Theft Control using Arduino & GSM. (IEEE 2019)
- 2 Implementation of Environment Parameters Monitoring in a Manufacturing Industry using IOT. (IEEE 2019)

3. Lifetime Optimization of Wireless Sensor Networks for Gas Monitoring in Underground Coal Mining.(IEEE 2019)

XVIII. EMBEDDED based RACKET CONTROL AND PREVENTION

- **1.** A Review on Human-Centered IoT-Connected Smart Labels for the Industry 4.0. (IEEE 2019)
- 2 An IoT Approach for an AAL Wi-Fi-Based Monitoring System. (IEEE 2019) XIX. EMBEDDED based LIGHT AND 4G DATA
- 1. IoT based Intelligent Waste Bin. (IEEE 2019)
- 2 IoT based Green House Environment Monitoring. (IEEE 2019)
- Embedded System Enabled Vehicle Collision Detection: An ANN Classifier. (IEEE 2019)
- 4. IoT Based Intelligent Agriculture Field Monitoring system. (IEEE 2019)
- 5. Internet of Things: Incorporation into Healthcare Monitoring. (IEEE 2019)
- Internet of Things for Greenhouse Monitoring System Using Deep Learning and Bot Notification Services. (IEEE 2019)
- A Health Remote Monitoring Application Based On Wireless Body Area
 Networks. (IEEE 2019)
- Secured And Green Data Processing And Transmission In A Human-Vehicle Interaction Adas System. (IEEE 2019)
- Performance Modeling For Multipath Mobile Data Offloading In Cellular/Wifi Networks. (IEEE 2019)
- 10. Smart Unit Care For Pre Fall Detection and prevention. (IEEE 2019) XX. EMBEDDED based SELF LAUNCH
- 1. Intelligent Ultrasonic Detection of Walking Stick for the Blind. (IEEE 2019)
- 2 Surveillance Robot with Human Detection. (IEEE 2019)

- Unsupervised Online System Identification for Underwater Robotic Vehicles. (IEEE 2019)
- 4. Design and Implementation of a microcontroller based low cost DTMF Controlled Acoustic &Visual Detecting Robot to Monitor Child & Aged Person. (IEEE 2019)
- 5. Voice Operated Intelligent Fire Extinguishing Vehicle. (IEEE 2019)
- Designing and Implementation of a Wireless Gesture Controlled Robot for Disabled and Elderly People. (IEEE 2019)
- 7. Wireless Synchronization Of Robotic Arm With Human Movements Using Arduino For Bomb Disposal. (IEEE 2019)
- Control System of a Wall Climbing Robot for Automatic Welding. (IEEE 2019)
- Multi-Task Cascaded Convolutional Networks based Intelligent Fruit Detection for Designing Automated Robot. (IEEE 2019)
- One Dimensional Moving Obstacle Detection Method for Mobile Robotics Applications. (IEEE 2019)

XXI. EMBEDDED based GET UP AND GO ENVIRONMENT

- 1. Design of Smart Home System Based on ZigBee. (IEEE 2019)
- 2 Enhanced IoT- Based Online Access Control System for Vehicles in Truck Loading Fuel Terminals. (IEEE 2019)
- Wearable Wireless Sensor System with RF Remote Activation for Gas Monitoring Applications. (IEEE 2019)
 XXII. EMBEDDED based VIRTUAL REALITY &

LEAP MOTION

- Cognitive Load Measurement In A Virtual Reality-Based Driving System For Autism Intervention. (IEEE 2019)
- 2 Supporting Trembling Hand Typing Using Optical See-Through Mixed Reality. (IEEE 2019)
- Study Of Text Segmentation And Recognition Using Leap Motion Sensor. (IEEE 2019)

XXIII. EMBEDDED based WEB EMPIRE

- An Internet of Things Based Smart Surveillance and Monitoring System using Arduino. (IEEE 2019)
- 2 Automated Toll Tax Collection System using Cloud Database. (IEEE 2019)
- Drowsiness Detection and Monitoring the Sleeping Pattern using Brainwaves Technology and IoT. (IEEE 2019)
- 4. Efficient IoT Based Smart Bin for Clean Environment. (IEEE 2019)
- 5. Water Level Monitoring and Management of Dams using IOT. (IEEE 2019)
- Internet of Things Enhanced User Experience for Smart Water and Energy Management. (IEEE 2019)
- Noncontact RF Vital Sign Sensor for Continuous Monitoring of Driver Status. (IEEE 2019)
- 8. Development of an Arduino-based CO2 Monitoring Device. (IEEE 2019) XXIV. EMBEDDED based HOMINOID-P
- 1. Smart Health Monitoring System through IOT. (IEEE 2019)
- 2 Smart Farming IoT in Agriculture. (IEEE 2019)
- A deep learning approach for vital signs compression and energy efficient delivery in mHealth systems. (IEEE 2019)
- 4. A Big Data Approach for Proactive Healthcare Monitoring of Chronic Patients. (IEEE 2019)

- 5. FishTalk: An IoT-based Mini Aquarium System. (IEEE 2019)
- 6. IoT based Safety System for Coal Mines. (IEEE 2019) XXV. EMBEDDED based TILLAGE MANAGEMENT
- 1. Internet of Things (IoT) for Precision Agriculture Application. (IEEE 2019)
- 2 Gesture Controlled Wireless Agricultural Weeding Robot. (IEEE 2019)
- Design of Green Agriculture System Using Internet of Things and Image Processing Techniques. (IEEE 2019)
- 4. Advanced Agriculture System using GSM Technology. (IEEE 2019)
- 5. IoT Solutions for Crop Protection against Wild Animal Attacks. (IEEE 2019)
 XXVI. EMBEDDED based HORTICULTURE
 MANAGEMENT
- Protocol Implementation for Wireless Sensor Network for Anti-Poaching of Trees.(IEEE 2019)
- Water Quality Monitoring System using IoT and Machine Learning. (IEEE
 2019)
- 3. Sensor for real-time animal condition and movement monitoring Physical sensors for precision aquaculture: A Review.