EMBEDDED SYSTEM IEEE PROJECTS YEAR 2021-2022

1. Development of a High-Performance Force Sensing Fast Tool Servo
2. Reputation-Based Method to Deal With Bad Sensor Data
3. Biosensors: A Smart Portable Potentiostat With Advanced Cloud-Enabled Features
4. A Field Study of Internet of Things-Based Solutions for Automatic Passenger Counting
5. Smartphone-Based Indoor Tracking in Multiple-Floor Scenarios
6. Detection of Unsupervised Standardized Gait Tests From Real-World Inertial Sensor Data in Parkinson's Disease
7. A Survey on Motion Prediction of Pedestrians and Vehicles for Autonomous Driving
8. Safety Embedded Control of Nonlinear Systems via Barrier States
9. RobHand: A Hand Exoskeleton With Real-Time EMG-Driven Embedded Control. Quantifying Hand Gesture Recognition Delays for Bilateral Rehabilitation
10. Real-Time Defect Detection of Track Components: Considering Class Imbalance and Subtle Difference Between Classes
11. A Novel Intelligent Garbage Classification System Based on Deep Learning and an Embedded Linux System
12. Design, Development and Evaluation of an Intelligent Animal Repelling System for Crop Protection Based on Embedded Edge-AI
13. Blockchain and AI-Empowered Social Distancing Scheme to Combat COVID-19 Situations.

14. Ring-Embedded Micro-Power mm-Sized Optical Sensor for Accurate Heart Beat Monitoring

15. Low-Cost Embedded Real-Time Handheld Vibration Smart Sensor for Industrial Equipment Onsite Defect Detection

16. Dual-Loop Continuous Control Set Model-Predictive Control for a Three-Phase Unity Power Factor Rectifier

17. Fast and Efficient Group Key Exchange in Controller Area Networks (CAN)

18. Industrial Automation as a Service: A New Application to Industry 4.0

19. Control Protocol Design and Analysis for Unmanned Aircraft System Traffic Management

20. Dynamic Properties of Electrochemical Oxygen Gas Sensor and Method to Estimate of New Steady-State

21. Smart Home Automation Using Intelligent Electricity Dispatch

22. Teaching Embedded Systems and Internet-of-Things Supported by Multipurpose Multiobjective Remote Laboratories

23. Design of Piezoelectric MEMS Accelerometer Module and its Application in Surface Roughness Prediction of Fused Silica Substrate

24. An Energy-Autonomous Chemical Oxygen Demand Sensor Using a Microbial Fuel Cell and Embedded Machine Learning

25. Battery-Less NFC Bicycle Tire Pressure Sensor Based on a Force-Sensing Resistor

26. Online Robot Trajectory Optimization for Persistent Environmental Monitoring

27. Pattern Extraction From Industrial Alarm Flood Sequences by a Modified CloFAST Algorithm

28. Dynamic Edge and Cloud Service Integration for Industrial IoT and Production Monitoring Applications of Industrial Cyber-Physical Systems

29. Smart Meters Enabling Voltage Monitoring and Control: The Last-Mile Voltage Stability Issue

30. Scalable Wireless Wearing Monitoring System for Harsh Industrial Environment

31. Design and Application of a Low-Cost, Low- Power, LoRa-GSM, IoT Enabled System for Monitoring of Groundwater Resources With Energy Harvesting Integration

32. Detection and Identification of Mobile Network Signals

33. Comparison of Average Total EMF Exposure for Microcell/Macrocell Topologies Using Novel Methodology Based on Operational Network Measurements

34. Cable Current Detection With Passive RF Sensing Tags