**EMPYREAL SOLUTIONS**

**IOT Projects**

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| * IOT or internet of things is an upcoming technology that makes use of internet to control/monitor electronic/mechanical devices, automobiles and other physical devices connected to the internet. IOT gives user the ability to control more than digital things easily through a comfortable GUI over the internet. We are amongst the pioneers researching in the field of internet of things. Our efforts concentrate on researching innovative iot projects that could benefit mankind. Our IOT systems are well researched ideas that help you bring innovative IOT projects to life. |

* These iot project ideas are an inspiration to students and researchers for further iot research. Our researchers focus on the use of IOT for home/industry automation and monitoring various physical parameters over the internet. Here you may find a wide list of projects related to internet of things. These internet of things projects have been proposed on existing system improvements and new innovative solutions to different problems.

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| * [IOT Color Based Product Sorting Machine Project](http://nevonprojects.com/iot-color-based-product-sorting-machine-project/) * [IOT Paralysis Patient Health Care Project](http://nevonprojects.com/iot-paralysis-patient-health-care-project/) * [IOT Car Parking System](http://nevonprojects.com/iot-car-parking-system/) * [Smart Dustbin With IOT Notifications](http://nevonprojects.com/smart-dustbin-with-iot-notifications/) * [IOT Smart Mirror With News & Temperature](http://nevonprojects.com/iot-smart-mirror-with-news-temperature/) * [IOT Color Based Product Sorting Machine Project](http://nevonprojects.com/iot-color-based-product-sorting-machine-project/) * [IOT Garbage Monitoring With Weight Sensing](http://nevonprojects.com/iot-garbage-monitoring-with-weight-sensing/) * [IOT Smart Energy Grid](http://nevonprojects.com/iot-smart-energy-grid/) * [IOT Asset tracking System](http://nevonprojects.com/iot-asset-tracking-system/) * [IOT Based ICU Patient Monitoring System](http://nevonprojects.com/iot-based-icu-patient-monitoring-system/) * [Biometric Attendance System Over IOT](http://nevonprojects.com/biometric-attendance-system-over-iot/) * [IOT Gas Pipe Leakage Detector Insect Robot](http://nevonprojects.com/iot-gas-pipe-leakage-detector-insect-robot/) * [IOT Irrigation Monitoring & Controller System](http://nevonprojects.com/iot-irrigation-monitoring-controller-system/) * [IOT Electronic Door Opener](http://nevonprojects.com/iot-electronic-door-opener/) * [IOT Home Automation Using Raspberry Pi](http://nevonprojects.com/iot-home-automation-using-raspberry-pi/) * [IOT Alcohol & Health Monitoring System](http://nevonprojects.com/iot-alcohol-health-monitoring-system/) * [IOT Liquid Level Monitoring System](http://nevonprojects.com/iot-liquid-level-monitoring-system/)…. * [IOT Based Home Automation](http://nevonprojects.com/iot-home-automation-project/) * [IOT Based Office Automation](http://nevonprojects.com/iot-office-automation/) * [IOT Based Industry Automation](http://nevonprojects.com/iot-industry-automation-project/) * [IOT Weather Reporting System](http://nevonprojects.com/iot-weather-reporting-system/) * [IOT Based Antenna Positioning System](http://nevonprojects.com/iot-based-antenna-positioning-system/) * [IOT Based Fire Department Alerting System](http://nevonprojects.com/iot-based-fire-department-alerting-system/) * [IOT Solar Power Monitoring System](http://nevonprojects.com/iot-solar-power-monitoring-system/) * [IOT Streetlight Controller System](http://nevonprojects.com/iot-streetlight-controller-system/) * [IOT Traffic Signal Monitoring & Controller System](http://nevonprojects.com/iot-traffic-signal-monitoring-controller-system/) * [IOT Industry Automation Using Raspberry Pi](http://nevonprojects.com/iot-industry-automation-using-raspberry-pi/) * [IOT Underground Cable Fault Detector Project](http://nevonprojects.com/iot-underground-cable-fault-detector-project/) * [IOT Air & Sound Pollution Monitoring System](http://nevonprojects.com/iot-air-sound-pollution-monitoring-system/) * [Energy Meter Monitoring Over IOT](http://nevonprojects.com/energy-meter-monitoring-over-iot/) * [IOT Based Person/Wheelchair Fall Detection](http://nevonprojects.com/iot-based-personwheelchair-fall-detection/) * [IOT Patient Health Monitoring Project](http://nevonprojects.com/iot-patient-health-monitoring-project/) * [IOT Heart Attack Detection & Heart Rate Monitor](http://nevonprojects.com/iot-heart-attack-detection-heart-rate-monitor/) * [IOT Based Toll Booth Manager System](http://nevonprojects.com/iot-based-toll-booth-manager-system/) * [IOT Theft Detection Using Raspberry Pi](http://nevonprojects.com/iot-theft-detection-using-raspberry-pi/) |

* A New Early Warning Method of Train Tracking Interval Based on CTC
* A Real-Time Flood Alert System for Parking Lots
* Fingerprint and iris biometric controlled smart banking machine embedded with GSM technology for OTP
* Challenges and Opportunities of Waste Management in IoT-enabled Smart Cities: A Survey
* A Smart Approach onCollecting Working Condition Data from HomeAppliances under the Field Test.
* A Navigation and Reservation Based Smart Parking Platform Using Genetic Optimization for Smart Cities
* An IoT Platform integrated into an energy efficientDC lighting grid
* Design of Bus Tracking and Fuel Monitoring System
* Design of a Solar Power Electronic Voting Machine
* Design and Implementation of a Fingerprint Based Lock System for Shared Access
* Design of an IoT based autonomous vehicle with the aid of computer vision
* Application of Wireless Sensor Network in Water Quality Monitoring
* An IoT Enabled Real-Time Communication and Location Tracking System for Vehicular Emergency.
* An IoT based Fire Alarming and Authentication System for Workhouse using Raspberry Pi 3
* Implementation of speech based home automation system using Bluetooth and GSM
* Hand Gesture Recognition based on ShapeParameters
* Environment monitoring and device control using ARM based Embedded Controlled Sensor Network
* Design of Intelligent Home Appliance ControlSystem Based on ARM and ZigBee
* Design of Emergency Remote Security Monitoring and Control System Based on ARM
* An automatic driver drowsiness Alert system by using GSM
* An Advanced Security System Integrated With RFID Based Automated Toll Collection System
* Advance Automatic Toll Collection &Vehicle Detection During Collision using RFID
* RFID-based Production Data Analysis in an IoT-enabled Smart Job-shop
* IoT-Driven Automated Object Detection Algorithm for Urban Surveillance Systems in Smart Cities.
* Design of an energy efficient Iot enabled smart system based on DALI network over MQTT protocol
* IoT based smart museum using Bluetooth Low Energy.
* Knowledge Based Real Time Monitoring System for Aquaculture Using IoT.
* Identifying parking spaces & detecting occupancy using vision-based IoT devices
* Low-cost Smart Refrigerator
* Smart water management using IOT
* RFID-Based Attendance Management System
* Open source embedded data logger design for PV system monitoring
* An IoT Based Remote HRV Monitoring System for Hypertensive Patients
* A ZigBee based energy efficient environmental monitoring, alerting and controlling system
* Reconfigurable Smart Water Quality Monitoring System in IoT Environment
* Performance Enhancement and IoT Based Monitoring for Smart Home
* Multiple Motion Control System of Robotic Car Based on IoT to Produce Cloud Service.
* Microcontroller based Digital Meter with Alert System using GSM
* IoT based vehicle parking manager
* Investigation of a new technology of controlling electrical apparatus via a smart phone
* Internet of Vehicles (10 V) forTraffic Management
* Fuel Management System
* Electrical Appliances Control Prototype by Using GSM Module and Arduino
* Dynamically Controlling Exterior and Interior Window Coverings through IoT for Environmental Friendly Smart Homes
* Developing fish feeder system using Raspberry Pi
* Design and Implementation of Remotely Located Energy Meter Monitoring with Load Control andMobile Billing System through GSM
* Design and Implementation of Real TimeTransformer Health Monitoring System Using GSMTechnology
* EMACS : Design and implementation of indoor environment monitoring and control system
* Child Safety Wearable Device
* 14. Challenges and Opportunities of Waste Management in IoT-enabled Smart Cities: A Survey
* Body and Fall Detection Systemwith Heart Rate Monitoring
* Anti-theft Protection of Vehicle by GSM & GPS withFingerprint Verification
* RFID-based Production Data Analysis in an IoT-enabled Smart Job-shop
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* A ZigBee based energy efficient environmental monitoring, alerting and controlling system
* Smart water management using IOT
* Cost-Efficient Provisioning Strategy for Multiple Services in Distributed Clouds
* IoT based Smart HealthCare Kit
* “Teach Me–Show Me”—End-User Personalization of a Smart Home and Companion Robot
* Datacenter at the Airport: Reasoning about Time-Dependent Parking Lot Occupancy
* An Integrated Cloud-Based Smart Home Management System with Community Hierarchy
* A Framework for Environmental Monitoring with Arduino-based Sensors using Restful Web Service
* Web based Automatic Irrigation System using wireless sensor network and Embedded Linux board
* Development of Android based on-line monitoring and control system for Renewable Energy Sources
* Multi-hop WBAN Construction for Healthcare IoT Systems
* Application of gprs technology in water quality monitoring system
* Enabling Reliable and Secure IoT-based Smart City Applications
* A Smart System Connecting e-Health Sensors and the Cloud
* Water management system using dynamic IP based Embedded Webserver in real time
* Water Level Meter for Alerting Population about Floods
* Intuitive IoT-based H2U Healthcare System for Elderly People
* Effective Ways to Use Internet of Things in the Field of Medical and Smart Health Care
* Big Data Challenges in Smart Grid IoT (WAMS) Deployment
* Building Smart Cities Applications using IoT and Cloud-based Architectures
* Design and implementation of automated blood bank using embedded systems
* Web based automatic irrigation system using wireless sensor network and embedded Linux board
* Smart drip irrigation system using raspberry pi and arduino
* A smart system connecting e-health sensors and the cloud
* The real time monitoring of water quality in IoT environment
* Design and management of an intelligent parking lot system by multiple camera platforms
* RoboSantral: An autonomous mobile guide robot
* An Internet of things approach for motion detection using Raspberry Pi
* Monitoring and controlling of smart equipments using Android compatible devices towards IoT applications and services in manufacturing industry
* Computer vision based vehicle detection for toll collection system using embedded Linux
* EURIDICE — IoT applied to logistics using the Intelligent Cargo concept
* Web based automatic irrigation system using wireless sensor network and embedded Linux board
* Design and development of sensor-based mini projects for embedded system laboratory using ARM Cortex-M3(LPC1768)
* Pibot: The raspberry pi controlled multi-environment robot for surveillance & live streaming
* Enabling reliable and secure IoT-based smart city applications
* A CAN protocol based embedded system to avoid rear-end collision of vehicles
* Design of a home multi-robot system for the elderly and disabled
* An intervention study on automated lighting control to save energy in open space offices
* Computer vision based vehicle detection for toll collection system using embedded Linux
* Raspberry Pi for Automation of Water Treatment Plant
* Design and operation of Wi-Fi agribot integrated system
* Acquisition and management of biomedical data using Internet of Things concepts
* Agricultural Drought Data Acquisition and Transmission System Based on Internet of Things
* Real time vehicle monitoring and tracking system based on embedded Linux board and android application
* Raspberry PI based global industrial process monitoring through wireless communication
* A low cost smart irrigation control system
* The real time monitoring of water quality in IoT environment
* A Novel Wireless Multifunctional Electronic Current Transformer based on ZigBee-based Communication
* The Glasgow Raspberry Pi Cloud: A Scale Model for Cloud Computing Infrastructures
* Raspberry Pi based Interactive Home Automation System through E-mail
* A Cloud Network-based Power Management Technology for Smart Home Systems
* Automated Irrigation System Using a Wireless Sensor Network and GPRS Module
* Application of Data Acquisition System for Superconducting Quantum Interface Devices (SQUID) at Remote Location
* Implementation of a Web of Things based Smart Grid to remotely monitor and control Renewable Energy Sources
* Surveillance System with Light Sensor
* Application of RFID Technology and the Maximum Spanning Tree Algorithm for Solving Vehicle Emissions in Cities on Internet of Things
* A survey of Internet-of-Things: Future Vision Architecture, Challenges and Services
* Plantation Monitoring System Based on Internet of Things
* Design of on-line Interactive Data Acquisition and Control System for embedded real time applications
* IOT Gateway: BridgingWireless Sensor Networks into Internet of Things
* Intelligent Early-Warning System for Landslides Based on the ZigBee Network
* Gateway: BridgingWireless Sensor Networks into Internet of Things
* Application of data acquisition system for Superconducting Quantum Interface Devices (SQUID) at remote location
* Implementation of a Web of Things based Smart Grid to remotely monitor and control Renewable Energy Sources
* Internet of vehicles: From intelligent grid to autonomous cars and vehicular clouds
* Design and development of a networked health monitoring and control system
* Wind speed measurement and alert system for tunnel fire safety
* Multi-channel data acquisition and data logging for Green House application
* User Interactive and Assistive Fleet Management and Eco-Driving System
* Low cost internet based wireless sensor network for air pollution monitoring using Zigbee module
* BIO-monitoring system with conductive textile electrodes integrated into t-shirt
* Implementation of a remote data logging system
* Acquisition and elaboration of cardiac signal in android Smartphone devices
* Mobile data acquisition towards contextual risk assessment for better disease management in diabetes
* An adaptable and extensible mobile sensing framework for patient monitoring
* Ubiquitous Data Accessing Method in IoT-Based Information System for Emergency Medical Services
* Research of Architecture and Application of Internetof Things for Smart Grid
* Vehicle Data Acquisition and Telemetry
* Design of a dielectrophoresis-based portable device for monitoring pollution in water deposits
* Smart vehicle connectivity for safety applications
* Application of RFID technology and the maximum spanning tree algorithm for solving vehicle emissions in cities on Internet of Things
* An App for Promoting Health and Local Tourism
* Anti-theft application for android based devices
* Design and implementation of vehicle tracking system using GPS/GSM/GPRS technology and smartphone application
* An intelligent target localization in wireless sensor networks
* Design aspects for a reference M2M communication platform for Smart Cities
* Smart Lighting Solutions for Smart Cities
* Utilizing M2M Technologies for Building Reliable SmartCities
* Implementation of a Web of Things based Smart Grid to remotely monitor and control Renewable Energy Sources
* A multi-parameter signal monitoring system based onCortex-M3
* Design of the wireless monitoring system of solar lamps based on ZigBee and GPRS
* Automated Irrigation System Using a Wireless Sensor Network and GPRS Module
* Research of real-time agriculture information collection system base on mobile GIS
* Design and implementation of vehicle tracking system using GPS/GSM/GPRS technology and smartphone application
* Controlling electric vehicle charging in the smart grid
* A survey of Internet-of-Things: Future vision, architecture, challenges and services
* Solid Waste Management Architecture Using Wireless Sensor Network Technology
* SVASTHA: An effective solid waste management system for Thiruvalla Municipality in Android OS