# **I-Tech System**

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## **IOT Project List**

#### Sensor Based IoT Projects

- 1. IoT Home Security Model: The home can be monitored from where through the internet using the sensors connected in the home.
- 2. Health Monitoring and Management Using Internet of Things: The concept of remote health monitoring is implemented here with the help of IoT technology. The system integrates the concept of health monitoring and clinical practice. This is possible with the help of latest wearable devices with built in sensors and also have IoT capability. The data from the sensors is transferred over the internet and can be used to analyze the health of a patient by the physician.

### WiFi Based IoT Projects

- 3. AWS IoT Remote Soil Moisture Monitor: A soil moisture monitoring system using IOT is proposed here. A ESP8266 Wifi module was used here to connect the system to the internet. Thus the state of the soil moisture can be measured from anywhere in the world.
- 4. Smart Security Solutions based on Internet of Things (IoT): The proposed system uses RFID or biometric technology for access control system. This is a wireless system. Inputs from the user are processed inside the controller and if they are valid access is given and the details of the user are transferred to the PC using Wi-Fi module.

#### RFID Based IoT Projects

- 5. Secure Smart Environment Using IOT based on RFID: The smart and secure environment system can be used in shopping malls. The lot connects everything to the internet. Rfid provides the authentication. The products placed in the shopping cart are automatically detected and the amount of bill deducted from your account.
- 6. Smart Trash Can IoT System: This project aims at optimizing the collection of waste and thus reducing the fuel consumption. This system gives the details like amount of stuff inside the container, temperature inside the container. This data is sent over the cellular network and is displayed on the web platform. Drivers are provided with RFID card, so that the driver who collected the garbage can be noted.
- 7. Smart Disease Surveillance Based on Internet of Things (IoT): Health monitoring and surveillance allows the Governments of developing nations to interpret the data on disease patterns and necessary actions can be implemented. The concept of Internet of Things (IoT) helps in retrieving information from everyone connected to the internet. An RFID and some sensing devices capture the patients' records and transfer them to the backbone network for further processing.
- 8. The Application of IoT in Agricultural means of Production Supply Chain Management: In this article, the concept of Internet of Things (IoT) is applied to production supply chain for agricultural products. The applications of IoT to agriculture products supply chain will improve the operation efficiency of low level supply chain, small and medium industrialization, low level management and information exchange. IoT based on RFID is integrated in all aspects of supply chain for better management.
- 9. Integrating Wireless Sensor Networks into Internet Of Things For Security: IoT includes many objects like RFID tags, sensors, actuators, computers, phones etc. All these devices are assigned with a separate identifier and through unique addressing system, they communicate with each other. The purpose of

- this paper is to create a secure channel between the sensors and the internet host for enhanced security of the communication.
- 10. Secure Smart Environment Using IOT based on RFID: An IoT technology based smart environment scheme is mentioned here that is based on RFID system. The system helps in implementing a secure shopping scenario where the goods are associated with an RFID tag and the information is made available to the user through their smart phone. The billing and payment are made easy. The system can be used to track the quantity of the goods and set a reminder.
- 11. RFID Modular System for the Internet of Things (IoT): The main aim of this paper is to design system architecture for identifying and monitoring movement of monitored items. The basic requirement is to create a modular system and application of this system for real hospital laundry management application

#### **IoT Healthcare Projects**

- 12. Intelligent Healthcare Service by using Collaborations between IoT Personal Health Devices: The intelligent health care service system gives the feedback to an individual about their health.
- 13. Smart plant system: This project shows the plant health status. Environmental parameters like temperature, humidity, intensity were monitored.
- 14. Towards an IoT for Healthcare: This projects tests the feasibility of using IOT with Bio signal monitoring and shows how it is used at low cost for health care monitoring.
- 15. E-Health Glove (Intel IoT): The E health glove proposed here monitors the body vitals of the patients and is stored in the server. Although latest ambulances can have body vital measuring equipment, this monitors before the arrival of the ambulance and is informed to doctor for better treatment.

16. A Secure and Efficient Authentication and Authorization Architecture for IoT-Based Healthcare: An IoT based healthcare system is developed using smart gateways with secure and efficient authentication and authorization. The smart e-health gateways perform the tasks of authentication and authorization in place of resource constrained medical sensors. The proposed architecture provides a reliable security for the latest IoT based healthcare systems.

