CODE	TITLE	APPLICATION / DESCRIPTION
VTIOT01	Internet of Thing based Electrical Device Surveillance and Management Apparatus	**Application:** Wireless automation **Description :** Electrical devices surveillance and management system is the proposed solution for most of the electric power consumption problems. We have focused on appliances Bulb, Fan. And to manage with wireless module.
VTIOT02	IoT Based Automatic Saline Monitoring System using Node MCU	**Application:** Bio-medical **Description:** The Proposed system describes about the saline level monitoring & automatic alert system .It helps to easily detect the levels of saline water and the LED lights of the IR sensor glows accurately at each level of the saline bottle.
VTIOT03	IoT-Based Distribution Transformer Health Monitoring System using Node-MCU & Blynk	**Application:** Bio-medical **Description:** The main objective of the real time monitoring of the health conditions of the distribution transformer using IOT technology. The parameters such as temperature, voltage and current of a transformer are monitored, processed and recorded in servers
VTIOT04	IoT Based Air Quality System	**Application:** Green House **Description**: In this system the hardware kit can measure the different gas sensor values in the multiple areas. The IOT will connect to the IOT modem will act as a receiver. After receiving the sensors abnormal status then, All the status will be displayed by the LCD.
VTIOT05	SICU Ambience and Patient Health Monitoring System with IOT principles	**Application:** Bio-medical **Description:** In this proposed system heart beat rate and Temperature are sensed by using corresponding sensor and sensors output are given to comparator as analog values continuously. Whenever the heart beat rate or Temperature are in the abnormal level, comparator output will be varied. Micro-controller sends the message using IoT.
VTIOT06	Solar Cell Based Integrated Sensor System Monitoring on Smart IoT	**Application:** Automation **Description:** In this system monitoring tool garden light solar cell that can be accessed through the website. Namely by facilitating the monitor process and automatic battery power check. monitoring tool designed garden light solar cell-based website using a micro-controller connected IoT so that it is able to display voltage and current data on photovoltaic,
VTIOT07	IoT based smart waste management system	**Application:** Green House **Description:** The system is implemented using two ultrasonic sensors which is being controlled by Node MCU. One of the ultrasonic sensor detects the level of the waste in the bin and other detects the person approaching the bin to dispose the waste. This detection helps in automatic opening and closing of the lid. Servo motor is connected to the lid which serves the action of closing and opening of the lid. In this system, level of waste in the bin will be sent to concerned authorities.
VTIOT08	IoT Based Temperature Control System of Home by using an Android Device	**Application:** Home automation **Description :** This project is primarily based on controlling the voltage of AC-supported equipment and developing an automatic temperature ventilation system that can make a space fully temperate. Additionally, this will protect our appliances from overheating. Using the widely used Node MCU micro-controller and IP networking for remote access and control.
VTIOT09	IoT Based Air Quality Monitoring System with Email Notification	**Application:** Green house **Description:** AQM is located in the most prominent location with the increasing pollution rate. Air Quality Index is a factor that has been used to quantify the level of pollutants. AQM collected both harmful and harmless data, which will be displayed in a large LCD screen in both digital and graphical form. It will be more helpful to know about the concentration of harmful gases

CODE	TITLE	APPLICATION / DESCRIPTION
VTIOT10	IoT Based Health Monitoring System	**Application:** Bio-medical **Description :** The proposed system helps in the monitoring of health parameters. Here, a fingertip heartbeat sensor to calculate the pulse rate along with DHT11 sensor to calculate the temperature and humidity of the patient's body is used. Also, Node MCU as a micro-controller is employed, is used to convert serial data to parallel data for LCD screen
VTIOT11	IoT enabled Smart home and health monitoring System	**Application:** Bio-medical, Home Automation **Description:** In this paper, a portable framework is displayed which constantly check patient's heartbeat, temperature and some parameters of the room with the help of Wi-Fi module. A IOT enabled smart home and health monitoring system is proposed where the authorized personal data can be accessed using any IOT platform.
VTIOT12	IoT Based Agriculture Monitoring and Controlling System	**Application:** Irrigation Automation **Description:** When the system is implemented then it will receive the data from the different sensors and this data will be send to the mobile phone and it will alert the user through the IoT. This data will be displayed in LCD about the temperature and soil moisture level, Humidity, water quality. Temperature is often a specific level; it's supported the sort crops cultivated.
VTIOT13	IoT- Based Smart Metering Mirror System for Monitoring Electric Bills During Pandemic	**Application:** Automation **Description**: Internet of Things (IOT) present an efficient and co-effective to transfer the information of energy consumer wirelessly as well as it provides to detect the usage of the electricity the main intention of this project is measure electricity consumption in home appliances and generate it's bill automatically using IOT.
VTIOT14	A Review on Internet of Things Based Door Security	**Application:** Security **Description:** When a stranger comes at the door, he/she has to pass three security levels for unlocking the solenoid locks present at the door and if he fails to do so, the door will remain locked. These three levels are of three extraordinary security features as one of them is using Fingerprint sensor, second is using a knocking pattern, and the last lock is unlocked by the preset pin/pattern entered by the user.
VTIOT15	Development of Security Starting System for Vehicles Based on IoT	**Application:** Automobiles security **Description:** The system also employs a password through keypad (with maximum 3 chances) which controls the opening of a safety locker door as well as wearing of a seat belt. If there is a window intruder, the IR module/sensor detects the intruder, or any obstacle and it sends a signal to the micro controller.
VTIOT16	IoT Based Smart Greenhouse for Future using Node MCU	**Application:** Green House **Description:** In this system all the outputs of soil, temperature, DHT11 ,PIR sensors are sent to the controller which here used is a Node MCU, and based on that certain loads are activated through relay driver. Here IOT is used such that the values of certain parameters are made to display in LCD . By doing so in case of any malfunctioning of the greenhouse automatic circuitry part, we can control and
VTIOT17	IoT Based Smart Vehicle Parking System Using RFID	**Application:** Automation **Description :** The proposed system incorporated an infrared sensor in each slot for getting information about the vacancy position of the parking slot. The user book-parking slot well in advance, all the necessary information is available on the server. Every user has an exclusive username and password. In case any misuse happened then the system will alert the responsible person.
VTIOT18	Design and Development for Smart Home via IoT Technology	**Application:** Home Automation **Description:** The proposed smart auto gate system is designed to be controlled by a mobile application via a wireless connection. This project aims to develop a minimal priced, and extensible wireless smart home auto gate system using IOT which then employs the combination of mobile application, and a cloud server.

CODE	TITLE	APPLICATION / DESCRIPTION
VTIOT19	Home Automation using Smart Devices and IoT	**Application:** Home automation **Description**: Home automation system is highly increasing to provide comfort in life and improving the quality of life. This system is based on a web portal which controlled by an Wi-Fi module. Also, a custom-made private home web server is developed for maintaining the current states of home appliances.
VTIOT20	Wireless Home Automation System for Multifunctional Devices Incorporating Internet of Things (IoT)	**Application:** Home automation **Description:** Home automation system, in the form of an experimental prototype is presented, focused in wireless communication and IOT. The result of the work developed was a capable prototype, adaptable to conventional electrical installations, with smart management capabilities regarding actuators of electric loads and sensor information utilization.
VTIOT21	IoT based Smart Greenhouse Disease Prediction	**Application:** Green House **Description:** The current article proposes and shows a full IOT -based Smart Greenhouse system that combines monitoring, alerting, cloud storage, automation, and disease prediction into a single, easily deployed package. It constantly monitors environmental variables like as temperature, humidity, and soil moisture to guarantee a better crop production and quick correction in the event of aberrant circumstances
VTIOT22	A Framework for the Emerging Smart Infrastructure in the IoT Era	**Application:** Automation **Description:** The primary goal of this project is to design and build Internet of things based Smart infrastructure for homes. We implement and design a low cost, flexible, wireless solution to the buildings. The benefit of this system includes energy savings, home safety, and user convenience.
VTIOT23	The use of Bluetooth Mesh Networking in IoT-aware Applications	**Application:** Automation **Description :** Bluetooth Low Energy (BLE) mesh networking is an emerging technology domain that promises an important role in the IOT. Significant market opportunities for BLE mesh networking have motivated the recent development of two different BLE mesh networking standards: Bluetooth Mesh and 6BLEMesh, produced by the Bluetooth SIG and the IETF, respectively.
VTIOT24	A Cost-Effective IoT Based Smart Home Application	**Application:** Home Automation **Description:** In smart living, it consists of remote controlling appliances that are used to switch ON/OFF any device remotely and saves energy. Weather is used for displaying weather conditions such as temperature, humidity, rain levels, speed of the wind
VTIOT25	IoT based Smart Baby Monitoring	**Application:** Safety **Description :** To recognize each and every movement of Baby, various Sensors are connected to the Cradle: Gas & Temperature Sensing Module for discovery of wetness of the cradle. A Camera is fitted in the top Cradle for live video film & sound sensor to break down Cry Patterns. All the information which is being taken from the sensors will be put away in information base & recognized at normal stretches. Using all those data and images, parents can be sure about the safety and well being of their babies at any time in any given place.
VTIOT26	A Framework for IoT Based Appliance Recognition in Smart Homes	**Application:** Home Automation **Description:** This work proposes an easy-to-use framework for appliance recognition based on distributed sensing techniques. The proposed appliance recognition system belongs to the application layer of the IOT architecture. The framework adds a graphical interface that significantly accelerates and facilitates its use.
VTIOT27	The IoT and Cloud Based Smart Home Automation for a Better Energy Efficiency	**Application:** Home automation **Description:** This system proposes a prototype of an improved smart home automation system, with the integration of IOT, cloud technologies, and intelligence embedding. The automation and the ability for users to control their home appliances remotely are enabled with the use of IOT.

CODE	TITLE	APPLICATION / DESCRIPTION
VTIOT28	IoT Based Smart Wheelchair for Disabled People	**Application:** Safety purpose **Description**: This system proposes will make the Smart Wheelchair affordable to a wide range of disabled people and will be based on Arduino IoT module to give Wi-Fi access, MPU6050 to detect fall with Voice message notification obstacle detection with buzzer and LED to work as hazards, voice recognition system, and joysticks to control the wheelchair.
VTIOT29	Power Analysis of Household Appliances using IoT	**Application:** Home automation **Description:** The proposed system consists of three main phases. They are Frontend, Cloud API and Dashboard display. The Front end also Request the device logging information from the cloud API which is then parsed and displayed in dashboard for power optimization.
VTIOT30	IoT Based Surveillance and Health Monitoring System for Elderly and Physically Challenged People	**Application:** Bio-medical **Description:** In this proposed system robust health monitoring system that is smart enough to watch the patient automatically using IOT that gathers the information status through these systems which would comprise patient's heart rate, blood pressure, and ECG and sends an urgent situation alert to patient's physician with his recent status and full medical information.
VTIOT31	Design of an occupancy simulation system in Smart homes based on IoT	**Application:** Home automation **Description:** The proposed IOT system is based on a motion sensor, actuators as relays and lights, Arduino platform to control system. The results demonstrate that security system create an environment occupied by owners without to be inside home, through sensors and actuators.
VTIOT32	IoT Based Low-Cost Smart Home Automation System	**Application:** Home Automation **Description :** In this system, a cost effective and user-friendly IOT based smart home model is presented with implementation by using Arduino micro controller and different sensors. It focuses that the system is reliable, affordable and fulfill the needs of home user.
VTIOT33	Customization In Home Automation Using IoT	**Application:** Home automation **Description:** Home automation is used to help maintain pleasant living conditions inside the home. In this regard, we will briefly introduce the IOT for home automation and to gain new experience in home appliances control. The control and monitoring of the home appliances involves user interaction in this part the customization is introduced to minimize the effort of the user.
VTIOT34	A Smart Polluted Water Overload Drainage Detection and Alert System: Based on IoT	**Application: Automation** **Description :** This system designed an advanced and automated device that can identify overloaded polluted drainage, which is responsible for water-borne disease and unexpected floods. We are using a smart ultrasonic sensor with an Ethernet shield integrated Arduino UNO.
VTIOT35	A Wireless Continuous Patient Health Monitoring System Using IoT	**Application:** Bio-Medical **Description:** In this proposed model using IOT (internet of things) health monitoring system of the patient were builted in this model and that have sensors like temperature, Heartbeat, MEMS, vibration, ECG, Wi-Fi module and GSM. It's like wireless sensor model (WSN).
VTIOT36	Automatic Irrigation System: Design and Implementation	**Application:** Irrigation Automation **Description:** The Proposed system comprises Arduino model, Moisture sensor and temperature sensor to monitor the soil moisture and temperature of the soil. Bluetooth module (HC-05) module to send data to the mobile app. The data has been collecting from the sensor and transfers microprocessor. The microprocessor often tests and compares the parameters' values with boundaries and triggers them.

CODE	TITLE	APPLICATION / DESCRIPTION
VTIOT37	Embedded IoT Car Parking and Billing System	**Application:** Automation **Description**: In this system the advanced sensors network are used to find the free slot and display the data in the LCD and also send to Mobile application through IOT.
VTIOT38	Intelligent Water Distribution and Monitoring System	**Application:** Automation **Description:** The proposed system detects the leakage in the water distribution system at the earliest. It makes use of water flow sensors to detect the leakage. A solenoid valve is provided in the system in order to cut down the water supply by closing the valve in case of heavy leakage, thereby saving the water. Hence, maintenance of the water distribution system is made easy for the authority.
VTIOT39	IoT based Remote Patient Health Monitoring system	**Application:** Bio-medical **Description:** In this system to develop a basic health monitoring system that can be used in homes or wherever possible with primary health parameters. IOT module, which monitors the patient health condition and updates to cloud at continuous time period.
VTIOT40	IoT Enabled Smart Farming and Irrigation System	**Application:** Irrigation automation **Description:** In the proposed system, the watering process is automated which reduces manual work. Various parameters of the plants and soil such as temperature, moisture and humidity are sensed with the help of different sensors.
VTIOT41	Rain Water Harvesting for Smart Water Management Using IoT	**Application:** Automation **Description :** The proposed system performs rain water harvesting for water management in smarter way. This system incorporates the Arduino water level sensor for measuring the water level of container that is stored underground, ultrasonic sensor for measuring the distance, water pump for pumping of water, pump sensor to check the rate of pressure
VTIOT42	Smart Agriculture Based on IoT	**Application:** Agriculture Automation **Description:** It aims to propose a ubiquitous IoT solution to monitor the farm remotely by the farmers.
VTIOT43	Waste contamination in Water – A Real-time Water Quality Monitoring System using IoT	**Application:** Automation **Description :** It proposes an IOT based water quality monitoring system and alerts the concerned authorities if the consumed groundwater is polluted. The proposed system uses various sensors, Node MCU and is integrated with cloud infrastructure for database storage and for real-time dashboard maintenance of the measured parameters.
VTIOT44	Fuzzy Logic and IoT for Smart City Lighting Maintenance Management	**Application: Automation** **Description:** In this project, we are controlling the street lights automatically without help of humans. Based on the light intensity falling on the LDR. The exact intensity from LDR are read by the controller which controls the relay circuit connected to street light.
VTIOT45	IoT Enabled Real-Time Remote Health Monitoring System	**Application:** Bio-Medical **Description:** In the proposed remote health care monitoring system is structured by considering diverse human services parameters. Proposed framework model is presented with Sensors.

CODE	TITLE	APPLICATION / DESCRIPTION
VTIOT46	Monitoring Air Quality using IoT: Effects of COVID-19	**Application:** Bio-Medical **Description**: In this system Arduino based Node MCU and the sensors are to detect substantive conditions of gases. ESP-32 WiFi module is used to send the data to the server so that it can be accessed from anywhere. The data is taken before and during COVID-19 period with the developed IoT platform
VTIOT47	Smart Shopping Application using IoT and Recommendation System	**Application:** Automation **Description:** In this system automatic billing system provided by the application only deals with the automatic creation and updation of the records of commodities brought by the customer rather than the integration of payment gateways within the application itself. RFID readers are used for scanning the products.
VTIOT48	IoT Based Synergistic Approach for Poultry Management System	**Application:** Automation **Description:** The system was designed with wireless and autonomous sensor nodes to monitor temperature, humidity, air quality, water level and feed availability in interested poultry space, and communicate the processed data via their transceiver to the accessed node
VTIOT49	IoT-Based Data Logger for Weather Monitoring Using Arduino-Based Wireless Sensor Networks with Remote Graphical Application and Alerts	**Application:** Green House **Description:** The proposed system used several electronic sensors for sensing the air conditions including hydrocarbons, Sulphur-dioxide, nitrogen oxides, and so on. In case of reception of the dangerous gas values, the system activated the warning alarm. Furthermore, it can communicate a Short Message System (SMS) message to final user.
VTIOT50	An IoT Design Approach to Residential Energy Metering, Billing and protection	**Application:** Home security automation **Description :** In this project an electric energy metering with high accuracy, which can calculate instantaneous active power and average active power of electrical equipment. The IR sensor interfacing with energy meter and it calculate the number of consuming units. This status update to IoT. Alert through Buzzer and status display on LCD.
VTIOT51	Smart Street Light Management System with Automatic Brightness Adjustment	**Application:** Automation **Description:** This system presents a street lamp control system based on the Bolt IoT platform. The aim of this project is conservation of energy by reducing electricity wastage and to minimize the manpower. The scheme utilizes Light Emitting Diodes (LED) that doesn't take huge amount of power and being directional light sources, it can radiate light in specific direction thereby improving the efficiency of the street lamps
VTIOT52	Intruder Detection and Adaptive Irrigation System Using IOT	**Application:** Irrigation Automation **Description :** It proposes to irrigate fields only when there is a need of water and to provide information about detection of any intrusion in agricultural fields. The information is sent to the farmers by using cloud application. The performance of our system is measured in terms of intrusion detection and moisture of soil for irrigation
VTIOT53	Low Power IoT Based Implementation ECG & Health Monitoring System	**Application:** Bio-Medical **Description:** In this paper, the IoT assisted electrocardiogram (ECG) monitoring framework with secure data transmission has been proposed for continuous cardiovascular health monitoring. The ECG Signal Strength Analysis has been proposed for automatic classification and realtime implementation, using ECG sensors, Arduino, Android phones, Bluetooth and cloud servers with the proposed IoT-assisted ECG monitoring system.
VTIOT54	IoT-based Automated Pond Water Quality Monitoring System for Aquaculture Farms	**Application:** Aquaculture **Description:** The designed system allows farmers to monitor in real time the most important physico-chemical variables of the pond water. Especially, this work introduces a simple and effective approach for automatic cleaning sensor probes that helps improve sensor reading's reliability and reduce and maintenance costs

CODE	TITLE	APPLICATION / DESCRIPTION
VTIOT55	A Feasible IoT-Based System for Precision Agriculture	**Application:** Agriculture Automation **Description**: This paper presents a feasible and a low-cost IoT based monitoring system for precision agriculture, with emphasis to viticulture. A field/crop data are acquired by self-powered measuring station and sent to remote collector, located in the home or office
VTIOT56	A support system for children using Internet of Things technology	**Application:** Automation **Description:** This paper introduces a prototype system of an IoT-based support system for ASD children. The system guides and monitors ASD children using a set of sensors linked to a modern Wi-Fi, which also uses the Blynk platform to control and monitor the system sensors from the mobile device and communicate with parents or supervisors
VTIOT57	Application of MQ-Sensors to Indoor Air Quality Monitoring in Lab based on IoT	**Application:** Green House **Description:** The project was established to keep track of air quality metrics in the lab environment like carbon dioxide, carbon monoxide, alcohol, phenol, toluene, LPG, benzene, ammonia, and methane, if not properly maintained, this can have an impact on the inhabitants' comfort, health, and indoor working conditions
VTIOT58	IoT based Water Pollution Reporting System: An IoT based system for controlling pollution in water	**Application:** Green House **Description:** In this system by measuring turbidity and using the pH range, we can estimate the quality of water and its health. Thus, would help the remote regions to test the water source prior to consumption. Constant monitoring of these water parameters at the source would also help keeping the pollution, would facilitate clean water availability and regulates irrigation practices.
VTIOT59	Real Time Water Treatment Plant Monitoring System using IOT	**Application:** Green House **Description :** In this system water treatment plant that measures quality of water utilizing various parameters like temperature, pH, turbidity and TDS. In this several sensors that measure distinctive parameters like pH value, turbidity in water, level of the water within the tank, temperature and humidity of the surrounding atmosphere are interfaced with Arduino micro-controller unit.
VTIOT60	Intelligent Garbage Monitoring System Using IoT	**Application:** Green House **Description:** The system we built will apprise individuals or organisations about the amount of waste in their bins and also alert them when the bin is filled to the brim. Our system also analyses the waste products to ensure the proper segregation of the wastes into biodegradable, non-biodegradable and recyclable wastes.
VTIOT61	A Zigbee based IoT enabled Trash Bin Level Monitoring System	**Application:** Green House **Description :** The proposed system would be able to automate the solid waste monitoring process and management of the overall collection process using IOT. whenever the waste bin gets lied this is acknowledged by Placing GPS at the waste bin, which transmits it to the receiver at the desired place in the area or spot, then received signal indicates the waste bin status at the Monitoring and controlling system
VTIOT62	Automobiles Based Black-Box System Using IoT	**Application:** Automation **Description:** The Vehicle black box receives the information from various sensors like the breath analyser, acceleration and the distance of surrounding vehicles along with push and panic button. When the driver alcohol consumption reaches maximum limit, the messages are sent to emergency contacts. If the accident occurs, by using GSM and GPS the vehicle location is traced and the information is sent to local hospital and police.
VTIOT63	Driving Behavior Analysis of City Buses Based on Real-Time GNSS Traces and Road Information	**Application:** Automation **Description:** This paper develops a platform with vehicle-mounted terminals using differential global navigation satellite system (DGNSS) modules for driver behavior analysis. The DGNSS traces were used to derive the vehicle trajectories, which were then linked to road information to produce speed and acceleration matrices.

CODE	TITLE	APPLICATION / DESCRIPTION
VTIOT64	IoT based Automated Health Care Monitoring System for Smart City	**Application:** Bio-Medical **Description**: The objective of the proposed system is to provide excellent patient support even in remote areas, which could be smart enough to analyze the data collected by wearable IoT sensors and would be able to provide a recommendation for a check-up.
VTIOT65	An Energy Efficient Smart Metering System using Edge Computing in Zigbee Network	**Application:** Automation **Description:** This paper provides a comprehensive review of the smart grid systems, based on IoT and EC. The development in the rising technologies, the framework for EC-IoT-based SG, and requirements to implement the EC-IoT-based SG system
VTIOT66	Securing IoT for Smart Home System	**Application:** Home Security Automation **Description:** In this paper, we investigate security attacks in smart home and evaluate their impact on the overall system security. We identified security requirements and solutions in the smart home environment. Based on several scenarios, we suggest to set security goals for the smart home environment.
VTIOT67	Women Security System	**Application:** Security **Description:** The proposed work aims at designing an IoT based safety device that relies on providing security to women by fingerprint-based method of connectivity to the device and alerting nearby people and police when a women is not safe. An unsafe situation is sensed by fingerprint verification for a minute then it will automatically alert nearby people and police if the device senses no signal.
VTIOT68	An IoT-Based Healthcare Platform for Patients in ICU Beds During the COVID-19 Outbreak	**Application:** Bio-Medical **Description :** This system an IoT-based healthcare platform to provide remote monitoring for patients in a critical situation .It aims to extend the platform by integrating wearable and unobtrusive sensors to monitor patients with coronavirus disease.
VTIOT69	IoT-Based Data Logger for Weather Monitoring Using Arduino-Based Wireless Sensor Networks with Remote Graphical Application and Alerts	**Application:** Green House **Description:** It proposes an automatic weather monitoring system that allows having dynamic and real-time climate data of a given area. The system also includes electronic devices, sensors, and wireless technology. The main objective of this system is sensing the climate parameters, such as temperature, humidity, and existence of some gases, based on the sensors. The captured values can then be sent to remote applications or databases.
VTIOT70	Vehicle Accident Detection System using Internet of Things (VADS – IoT)	**Application:** Automation **Description :** The accident is detected by the vibration and gyroscope sensors and immediately a message is sent to the emergency contact numbers using GSM module along with the location identified by the GPS module. If the vehicle gets any head-on collision the vibrations are produced.

CODE	TITLE	APPLICATION / DESCRIPTION
VTIOT01	IoT Based Health Monitoring System	**Application: Consumer applications** **Description :** This proposed method consists of numerous smart sensors like Temperature, Heartbeat, Eye blink sensors for fetching the patient's body temperature, coronary heart rate, eye movement and oxygen saturation percentage of the patient
VTIOT02	Smart Vehicle Parking System Using IoT	**Application: Security system** **Description:** The main motive of this paper is to develop a system by which peoples can access the real time data about the presence of parking lot nearer to the user wherever they want. In this system we have used Global Positioning System (GPS) to locate the nearer parking
VTIOT03	Internet of Things (IoT) Based Fire Alert Monitoring System for Car Parking	**Application: Security system** **Description:** This system should be introduced since the existing parking is unsystematic and less efficient as it unable to response the complications that are regularly happen to the students because they do not receive any information regarding a fire smoke or an accident near their vehicle in the parking area
VTIOT04	Water Irrigation and Flood Prevention using IOT	**Application: Energy Management** **Description**: This Paper proposes a system through which we can reduce the problems of the farmers by automated smart irrigation system in drought conditions and smart suction pump which will suck out the excess water during flooding conditions
VTIOT05	Protecting the Agriculture field by IoT Application	**Application: Automation** Description: The designed system uses infrared passive infrared sensors to detect the motion of cattle in the fields. These sensors are located at all the four corners of the crop field. The sensor transfers the data to transmitting section and from there it is sent on the cloud
VTIOT06	Supermarket Shopping System using RFID as the IoT Application	**Application: Bio-Gadgets** **Description:** In this system, smart shopping carts that the consumers can navigate in their search for their desired items are used, while promotional items are also recommended, and the billing information will be calculated during the customer's shopping activity.
VTIOT07	Arduino Based IOT Device for Septuagenarian Fall Detection	**Application: Automation** **Description:** This work possesses to make the detector on Arduino based device for the old age people who fall down. The device is used to detect the falling of a person with the help of accelerometer and this is specially designed as to contact an entitled person as soon. The implementation is based on the combination of both hardware and software
VTIOT08	Monitoring & Controlling of Substation Using IoT in Distribution Power Grid	**Application: Security** **Description :** The Proposed System single phase electrical system using an Arduino platform as a microcontroller to read the voltage and current from sensors and then wirelessly send the measured data to monitor the results using a new Android application
VTIOT09	Design and Development of IoT based Robotic Arm by using Arduino	**Application: Domestic Application** **Description:** This paper is presenting the process through which robotic arm is made with the help of Arduino and Potentiometer for controlling and coordinating the industrial processes. Here, we realize that the robotic arm has the ability to move in four directions with the help of motors

CODE	TITLE	APPLICATION / DESCRIPTION
VTIOT10	Design and Analysis of IoT Based Intelligent Robot for Real-Time Monitoring and Control	**Application: Green House** **Description :** This paper we put forward a surveillance robot that can be used in domestic areas and many other places. Robots are becoming important in our day to day life activities as they reduce the human labor and probability of error
VTIOT11	Low Cost IoT Sensor System for Real-time Remote Monitoring	**Application: Ambient intelligence** **Description:** In this paper, the design of a module for remote and real-time monitoring of environmental parameters is indicated
VTIOT12	An IoT Based Smart Aquarium Monitoring System	**Application: Home automation** **Description:** An IoT-based smart aquarium monitoring system is one of the solutions to cater the problems. This research presents a developed prototype of an IoT-based Smart Aquarium Monitoring System to keep a fresh water in the aquarium for fish life habitats
VTIOT13	Lightweight Anomaly Detection Framework for IoT	**Application: Security** **Description**: This is mainly due to the resource-constrained nature of IoT, cost, and power consumption. In this paper, we propose and analyse a framework for detecting anomalies on a low power IoT platform
VTIOT14	IoT based Smart Agriculture using Machine Learning	**Application: Ambient Intelligence** Description: This system comprises of temperature, humidity and moisture sensor, deployed in an agricultural field, sends data through a microprocessor, developing an IoT device with cloud
VTIOT15	Proficient Smart Soil based IoT System for Crop Prediction	**Application: Ambient Intelligence** **Description:** In this work, the proposed mechanism is to effectively predict the crop which is suitable to that soil. Conventional soli testing process uses chemicals to test the soil fertility and it is a time taken process
VTIOT16	24 × 7 Smart IoT based Integrated Home Security System	**Application: Automation** **Description:** The proposed system works 24x7, whether the user is inside or outside his home. The system detects any kind of fire breakout, gas leakage, or intruder in the house and; informs the user in real-time via Short Message Service (SMS). Simultaneously, the system uses a camera to record the ongoing events
VTIOT17	Real Smart Home Data-Assisted Statistical Traffic Modelling for the Internet of Things	**Application: Irrigation** **Description :** The proposes a novel experimental and mathematical framework to determine statistical models for IoT data traffic. Based on empirical data generated by common smart home devices (e.g., ambient temperature, luminous intensity, atmospheric pressure and motion sensors) recorded over a full year using an experimental IoT subsystem
VTIOT18	Dynamic Measurement and Data Calibration for Aerial Mobile IoT	**Application: Industry** **Description:** Here propose a novel data calibration model based on the network to capture the complicate correlations of the sensor–sensor and sensor–environment in the dynamical high-altitude environment. Specifically, internal- and external correlation representations are computed through the pathway design in the correlation layer of our NN.

CODE	TITLE	APPLICATION / DESCRIPTION
VTIOT19	IoT based Agri Soil Maintenance Through Micro-Nutrients and Protection of Crops from Excess Water	**Application: Irrigation** **Description**: The proposed system mainly focuses on analysing the number of micro-nutrients present in the farmland and maintaining the crops within the safe bounds of moisture level. The idea is to manage the excess waterlog in the farmland which may cause during rainfall and floods. Also, measure the number of micronutrients present in the farmland and improve fertility by measuring the pH level of the soil
VTIOT20	IOT Based Smart Farming for Effective Utilization of Water and Energy	**Application: Irrigation** **Description:** We propose a suitable method which uses the blend of technologies to effectively utilize this resource and to enhance the production of agriculture products and eventually minimize the consumption of electrical energy. This project uses raspberry pi to interact with the sensors and with the motor pump so that both the water and the electrical energy is minimized
VTIOT21	Super Smart Irrigation System using Internet of Things	**Application: Irrigation** **Description:** This paper proposes a new system with the use of advanced sensors and a GSM module to provide SMS acknowledgment whenever there is any critical action that is initiated during the process. This includes water being pumped in excess to a crop, there is too much of sunlight for a sustained period and many other critical situations. The farmer will then have opportunity to take necessary action
VTIOT22	IoT Applications in Automated Water Level Detections	**Application: Consumer Electronics** **Description:** This paper is a novel study on IoT applications with a proposal for IoT enabled framework for automatic water level detections for water dispensers
VTIOT23	Agricultural Field Monitoring System Based on IOT	**Application: Smart Agriculture** **Description :** In this paper, we propose a smart Agriculture System (AgriSys) that can analyze an agriculture environment and intervene to maintain its adequacy. The system deals with general agriculture challenges, such as, temperature, humidity, and soil moisture support.
VTIOT24	Home Automation and Security using IOT	**Application: Security** **Description:** Home automation systems are used to control home devices or appliances in smart homes and provide automatic remote control inside or outside homes.
VTIOT25	Sensor Based Garbage Segregation and Monitoring System using IOT	**Application: Consumer Applications** **Description :** This paper proposes a smart alert system for garbage clearance by giving an alert signal to the web server for instant cleaning with proper verification based on level of garbage filling
VTIOT26	Women Safety Smart Device with Location Sharing using IOT	**Application: Smart wearable Devices** **Description:** We propose an idea which changes the way everyone thinks about women safety. The need for a device which automatically senses and rescues the victim is the venture of our idea in this paper.
VTIOT27	IOT Based Emergency and Theft Vehicle Identification in Traffic System using RFID	**Application: Security** **Description:** We have developed a system which is used to provide clearance to any emergency vehicle by turning all the red lights to green on the path of the emergency vehicle, hence providing a complete green wave to the desired vehicle.

CODE	TITLE	APPLICATION / DESCRIPTION
VTIOT28	IOT Based Coal Mine Safety Monitoring and Controlling	**Application: Industrial safety** **Description**: In this system, we use ARDUINO MEGA (ATmega2560) microcontroller which acts as brain of the system, because the entire system program instruction stored in it. The coal mine monitoring as well the controlling gives the accurate result from various sensors we used.
VTIOT29	Supermarket Shopping Cart System Using IOT and RFID Technology	**Application: Consumer Electronics** **Description:** Here we introduce a new concept of billing the items of the customer without even having to wait in the long-lasting queue. We use RFID (Radio Frequency Identification Tag) which would attach on every purchase of an item. So overall the tag is less expensive
VTIOT30	Smart Gardening Automation using IOT	**Application: Green House** **Description:** This paper presents the monitoring system for gardening through the internet of things (IOT). This system will help to control the various environmental conditions such as soil moisture, temperature and humidity extra this system will provide the best climatic condition for the growth of the plant
VTIOT31	Automobiles Based Black-Box System using IOT	**Application: Automobiles** **Description:** The system aims to achieve accident analysis by objectively tracking what occurs inside the vehicles. The system also involves enhancement of security by preventing tampering of the recorder data.
VTIOT32	Industrial Sensor's Monitoring System using IIoT	**Application: Industrial monitoring** **Description :** Under this scenario, the present manuscript aims to accomplish a critical review of noteworthy contributions and research studies on SEM, that involve monitoring of air quality, water quality, radiation pollution, and agriculture systems.
VTIOT33	IoT Based Dust bin Monitoring System Using Node MCU	**Application: Swachh Bharath** **Description:** This system screens the trash canisters and educates about the level of waste gathered in the junk containers. This will likewise send status of bins to waste accumulation vehicles.
VTIOT34	Smart Car Parking System using IOT	**Application: Automation** **Description :** This paper resolves the issue of parking system and has come up with IOT (Internet of Things) enabled parking space and allocation mechanism. Smart parking involves use of ultrasonic sensor, Arduino Uno and cloud server
VTIOT35	Flood Early Detection and Alert System using IOT	**Application: Disaster Management** **Description:** The system is designed in a way so as to ensure the objectives, one of monitoring of the weather condition remotely, This paper has proposed the ideas and methods for the detection of flood disaster based on IoT.
VTIOT36	Wheelchair control through eye blinking and IoT platform	**Application: Consumer Electronics** **Description:** Monitoring the physical status of the physically challenged persons at anytime and anywhere, and develop more precise wheel chair with sensors.

CODE	TITLE	APPLICATION / DESCRIPTION
VTIOT37	Low Cost IoT Enabled Weather Station	**Application: Greenhouse** **Description**: In this paper, we proposed an autonomous system that is designed and implemented to monitor environmental parameters such as temperature, humidity, air quality, and harmful gas concentration
VTIOT38	Waste Management Improvement in Cities using IoT.	**Application: Swachh Bharath** **Description:** This paper deals with the concept of waste management and the smart system for waste management with higher benefits to the society. The proposed system for waste management will use various sensors for sensing the waste.
VTIOT39	A Real-Time Flood Alert System for Parking Lots	**Application: Disaster Management** **Description:** The system is designed in a way so as to ensure the objectives, one of monitoring of the weather condition remotely, this paper has proposed the ideas and methods for the detection of flood disaster based on IoT.
VTIOT40	Design of Bus Tracking and Fuel Monitoring System	**Application: Vehicle Monitoring & Security** **Description:** This paper developed a bus tracking and monitoring the fuel and speed system to provide a facility for the management requirements by the administrator. The proposed system based on Arduino, GSM/GPS
VTIOT41	Intelligent Shopping Cart Using Bolt Esp8266 Based on Internet of Things	**Application: Consumer Electronics** **Description :** Here we introduce a new concept of billing the items of the customer without even having to wait in the long-lasting queue. We use RFID (Radio Frequency Identification Tag) which would attach on every purchase of an item. So overall the tag is less expensive.
VTIOT42	Gas Level Detection and Automatic Booking Using IoT	**Application: Consumer Electronics** **Description:** In this project, we present an Internet of Things (IoT) based system which monitors different aspects related to LPG cylinder, and thereby keeps the consumer updated via a mobile application.
VTIOT43	Internet of Things Mobile–Air Pollution Monitoring System (IoT-Mobair)	**Application: Green House** **Description :** The gas sensors gather data from air and forward the data to the Arduino IDE. The Arduino IDE transmits the data to the cloud via the Wi-Fi module.
VTIOT44	IOT based Wireless Controlled Smart Transportation System	**Application: Automation** **Description:** The objective is paper is to implement a low-cost system and transmit the Vehicle conditions. Sensors are being used for measuring the parameters by using the wireless network
VTIOT45	An IoT-based Smart Garden with Weather Station System	**Application: Greenhouse** **Description:** Our system is a real time analysis of the air pollution, and monitors the air based on the real time and the data stored from the real time analysis.

CODE	TITLE	APPLICATION / DESCRIPTION
VTIOT46	IoT based Disaster Monitoring and Management System for Dams (IDMMSD)	**Application: Disaster Management** **Description**: The proposed system is an app based IoT system which will monitor and send real time parameters related to Dam (gate position, water discharge, water level) and weather conditions (rain fall, temperature, humidity).
VTIOT47	Forest Fire Alerting System with GPS Co-ordinates Using IoT	**Application: Environment Management** **Description:** The objective of this work is to design and implement an IoT based system which is self-sustaining and would predict and detect the forest fires and sends the exact location to concerned officials which would help fire fighting personnel to extinguish the fire in the location where it starts slowly.
VTIOT48	A complete Internet of Things (IoT) platform for Structural Health Monitoring (SHM)	**Application: Healthcare** **Description:** The proposed platform consists of a Wi-Fi module, a Raspberry Pi, an Analog to Digital Converter (ADC), a Digital to Analog Converter (DAC), a buffer, and piezoelectric (PZT) sensor.
VTIOT49	A novel and Secure Smart Parking Management System (SPMS) based on integration of WSN, RFID, and IoT	**Application: Automation** **Description:** This paper resolves the issue of parking system and has come up with IOT (Internet of Things) enabled parking space and allocation mechanism. Smart parking involves use of ultrasonic sensor, Arduino Uno and cloud server
VTIOT50	Advanced IOT Based Combined Remote Health Monitoring, Home Automation and Alarm System	**Application: Healthcare** **Description :** In this paper, we have discussed the monitoring of heart rate, blood pressure, respiration rate, body temperature, body movement and saline levels.
VTIOT51	An IoT Based Data Collection Platform for Situational Awareness-Centric Micro grids	**Application: Energy Management** **Description:** A communication framework based on the publish-subscribe model is also proposed and implemented for the communication layer of the SA using the message queuing telemetry transport (MQTT) protocol over two different physical (PHY) layers
VTIOT52	Energy Monitoring and Control Using Internet of Things (IoT) System	**Application: Energy Management** **Description :** This paper aims to research, build, test and implement a low-cost energy monitoring and control system using IoT devices. Electrical appliances (e.g., air conditioning units and overhead lighting) can be controlled and monitored using IoT technology
VTIOT53	IoT based Solar Powered Agribot for Irrigation and Farm Monitoring	**Application: Renewable Energy** **Description:** The Agribot is developed using an Arduino Microcontroller. It harvests solar power when not performing irrigation. While executing the task of irrigation, it moves along a pre-determined path of a given farm, and senses soil moisture content and temperature at regular points.
VTIOT54	Multiple Motion Control System of Robotic Car Based on IoT to Produce Cloud Service	**Application: Automation** **Description:** The main contribution of this paper is that it leverages the efficiency of robot's motion controlling system because robotic car can receive direct commands at a time from IOT

CODE	TITLE	APPLICATION / DESCRIPTION
VTIOT55	IoT Based Real Time Patient Monitoring System	**Application: Bio-Gadgets** **Description**: This project consists of the sensing equipment, gateway and a real-time patient monitoring structure. The sensing device obtains information from accelerometers and sends them to the gateway via IoT
VTIOT56	Analysis and Designing of an IoT based smart helmet	**Application: Automation** **Description:** The smart helmet system analysed in this paper is used in mining industry for safeguarding the miners from hazardous events in the mine and to alert the miners from hazardous gas emissions inside it.
VTIOT57	Smart Poultry Farm Incorporating GSM and IoT	**Application: Industry** **Description:** In this paper, Safety measures such as fire protection, anti-thief features which ensures an overall surveillance of the farm has been incorporated.
VTIOT58	Cloud of Things In Smart Agriculture: Intelligent Irrigation Monitoring By Image Processing	**Application: Irrigation** **Description:** In agriculture WSN used for monitoring, measuring temperature, irrigation system, measuring water supply and so on. WSN helps the farmer to produce the crop with high quantity
VTIOT59	A Secure IoT Enabled Smart Home System	**Application: Home Application** **Description :** In this work, we propose a secure and efficient smart home system that enable to protect homes from theft or unusual activities and parallelly saves power.
VTIOT60	Smart Energy Efficient Home Automation System Using IoT	**Application: Energy Management** **Description:** In this paper, smart energy efficient home automation system is proposed that can access and control the home equipment's.