Be sure with

Vidyalankar

Since 1960

Preface

- Vidyalankar is a 'Sanskrit' word combining two words Vidya + Alankar. Where Vidya means knowledge and Alankar means Ornament, the essence being that 'knowledge is the true ornament of a progressive mind'.

- Vidyalankar Polytechic is one of the leading college in Mumbai, approved by AICTE,DTE Maharashtra state and Affiliated to MSBTE. It offers under graduate courses in engineering.

- Vidyalankar Polytechnic was established by Vidyalankar Dyanapeeth Trust in 2002 under the dynamic leadership of Shri. C. S. Deshpande with the aim of imparting Technical Education in various fields of Engineering and Technology. It is located at the heart of Mumbai at Wadala(E).

- Courses offered are Electronics and Telecommunication Engineering, Information Technology and Computer Engineering .

- The college has excellent infrastructure for Class rooms, Technical library, Laboratories and latest computing facilities.

Vidyalankar Polytechnic

Vision

To achieve excellence in imparting technical education so as to meet the professional and societal needs.

Mission

- Developing technical skills by imparting knowledge and providing hands on experience.
- Creating an environment that nurtures ethics, leadership and team building.
- Providing industrial exposure for minimizing the gap between academics & industry.

Principal Speak

Vidyalankar Polytechnic has always believed in providing quality technical education to the student who aspire to become skilled engineers .

We at vidyalankar put forth for students a challenging ground; tracking them to learn and imply in their career and professional future. Emphasizing to skill and develop their opportunity to widen their innovative horizon.

V-Ideas is compilation of final year student's project ideas that have been processed and developed after fine scrutinizing and tuning by subject expertise. The selected projects were much appreciated by the judges boosting the morale of students.

Technovation the exploration of technology and innovation is the annual project exhibition and competition organised by Vidyalankar Polytechnic for final year students of various branches. Technovation enables students to exhibit and display their innovative skills, thus giving them an opportunity to manifest their hidden skills and ideas. This platform has privileged the students to think in new areas of their skills and present it in the best possible way.

V-ideas culminates V-Technovation 2017

"All of us do not have equal talent. But , all of us have an equal opportunity to develop our talents." - A.P.J Abdul Kalam

Vidyalankar Polytechnic has always believed in inculcating a synergetic and academic culture in its students, one that encourages them to be innovative and to be passionate about taking their ideas ahead.

V-Ideas are a collection of the final year project ideas of our students that have been nurtured after much rational thinking, fine-tuning and accurate reflection from teachers, guides and subject experts. The ideation stage is quite different from actual implementation; it is comparable to the transition from form to format, the regulated flow of ink from a nib which produces the actual writing. The Institute initiated an innovative idea of assembling the project ideas and transferring them into a hardcover book known as V-Ideas. This collection of projects acts as a future reference for First, Second and Third year students.

- As a part of curriculum, students of diploma undertake a project related to their field and demonstrate the knowledge and skills gained on the subject of their choice. Students also take industry based projects for better and live exposure with the industry. The projects selected by the panel of experts are ii regularly monitored by the project guides. The innovative and creative projects are projected in V-Technovation. The projects won many awards at various competitions at other institutes.

- V-Technovation provides a platform to diploma students to compete, interact and excel.

Glimpses of V-Technovation 2017

Electronics & Telecommunication Engineering

Vision

To produce Electronics and Telecommunication engineers capable of effectively using technical knowledge and interpersonal skills to benefit the industry and society.

Mission

- Providing state of the art facilities and conducive environment enabling the students to sustain the challenges in the field of Electronics and Telecommunication.

- Educating the students to face the competitive world, develop leadership skills and to instill discipline and ethics.

- Promoting industry institute interaction.

Course outcomes of Industrial Project

➢ **Evaluate different types of case studies & Develop innovative ideas.**

➢ **Develop basic technical skills by hands on experience.**

➢ **Develop leadership qualities.**

➢ **Prepare Project report.**

Index

Index

Department : Electronics and Telecommunication Engineering				
Domain ID	Project Domain	Project ID	Project Title	Page No.
EJ3	Embedded Systems	VPEJ17/18A5	Secret Knock Detector	23
		VPEJ17/18A7	Smart Car Parking System	24
		VPEJ17/18A9	Voice Control Car	25
		VPEJ17/18B1	Smart Vision	26
		VPEJ17/18B14	Smart City	27
		VPEJ17/18A6	Waste Management in Railways	28
		VPEJ17/18C1	Smart health monitoring system	29
		VPEJ17/18C5	Automatic droning system	30
EJ4	Power Electronics	VPEJ17/18A2	Automatic Solar Grass Cutter	31
		VPEJ17/18B4	Street Light Using Solar Panel	32
		VPEJ17/18B3	PWM Based Voltage Stabilizer	33
		VPEJ17/18C4	Sun Tracking Solar Panel	34

Index

Department : Electronics and Telecommunication Engineering				
Domain ID	Project Domain	Project ID	Project Title	Page No.
EJ5	Electrical And Electronics	VPEJ17/18A10	Talking Voltmeter	35
		VPEJ17/18B15	Intelligent Features In Railway System	36
		VPEJ17/18B10	College Bell	37
		VPEJ17/18B2	Underground Cable Fault Detector	38
EJ6	Biomedical	VPEJ17/18B6	Electronic First-aid Box	39
		VPEJ17/18A1	Electronics Nose	40
EJ7	Internet Of Things	VPEJ17/18A12	Smart Garbage Monitoring System	41
		VPEJ17/18B11	Air Quality Monitoring System	42
		VPEJ17/18C6	Automatic Toll Collection Using IOT	43

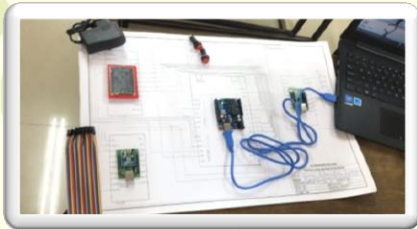# Department : Electronics & Telecommunication Engineering

Project Title : **CANTEEN AUTOMATION.**

Domain (Area of Project) : **WIRELESS COMMUNICATION**

Name of Project Guide : **Mrs. Pranjali Shelke**

Name of Students : Arqam Chaus - 15201A0010

Rishi Tiwari -15201A0013

Soham Kulkarni -15201A0008

Abstract : It is a canteen automation concept where automatic order can be placed by sitting on the table itself with the help of the TFT display where waiter is not required and the order is directly placed in the kitchen and time that will be taken for the order to get ready will be informed to the customer using zigbee.

Screenshots of the Project / Photos of Working Model (Min.3):
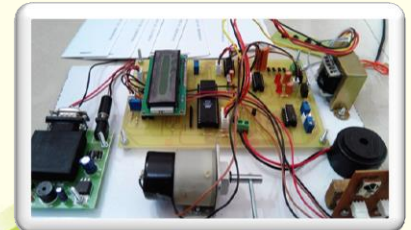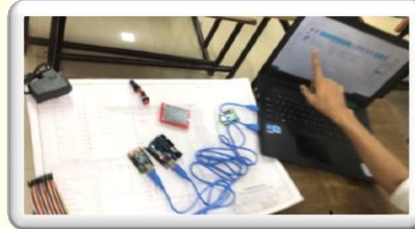
Applications: Used in Hotels, Hospitals & Malls ,etc.

Awards if Any for TPP / Competitions / Paper Publication / Any Other Pls. Specify:- --

Department : Electronics & Telecommunication Engineering

Project Title : **VOICE CONTROL NOTICE BOARD**

Domain (Area of Project) : **WIRELESS COMMUNICATION**

**Name of Project Guide :** **Mrs.Sandhya Kumar**

Name of Students : Kedar Potdar -15201A0029

Riya Potdar - 15201A0035

Saifoodin Bagwan -15201A0032

Abstract : Voice controlled notice board is a wireless electronic display board which is synchronized using the WI-FI technology. This will help us in passing any message almost immediately without any delay just by sending a SMS which is better and more reliable than the old traditional way of passing the message on notice board. Using WI-FI module and Bluetooth module display the message onto the display board.

Screenshots of the Project / Photos of Working Model (Min.3):
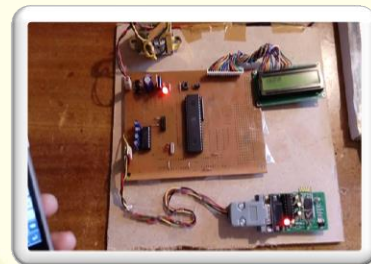
Applications: Used to maintain And monitor health at home.

Awards if Any for TPP / Competitions / Paper Publication / Any Other Pls. Specify:-

Department : Electronics & Telecommunication Engineering

Project Title : **RFID BASED RATION CARD IDENTIFICATION**

Domain (Area of Project) : **WIRELESS COMMUNICATION**


Name of Project Guide : **Mr. Rohit Sharma**

Name of Students : Rohit Lambade -15201A0041

Saeem Ahmed Kadiri-15201A0046

Shashank Shukala -15201A0043

Vedant Gaikwad -15201A0062

Abstract : In recent scenario, all the public and private sectors go for automation in their process. Civil Supplies Corporation is the major public sector which manages and distributes the essential commodities to all the citizens. In that system various products like Rice, sugar and wheat are distributed using conventional ration shop system. Some of the limitations of conventional ration shop system are Due to the manual measurements in the conventional system, the user can not able to get the accurate quantity of material.

Screenshots of the Project / Photos of Working Model (Min.3):
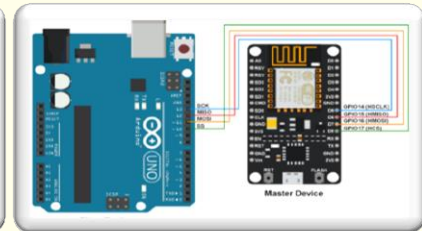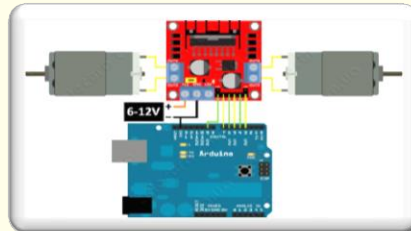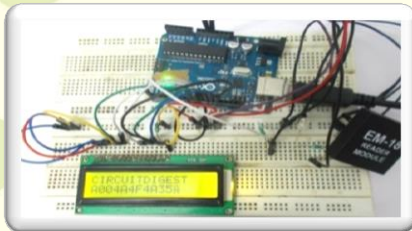
Applications : Will be used in ration shops ,so that illegal usage of ingredients will be reduced

Awards if Any for TPP / Competitions / Paper Publication / Any Other Pls. Specify:-

Department : Electronics & Telecommunication Engineering

Project Title   :   DIGITAL NOTICE BOARD USING DOT MATRIX SCROLLING DISPLAY

Domain (Area of Project)   :   WIRELESS COMMUNICATION

**Name of Project Guide :**   Prof. Rohit Sharma

Name of Students   :   Albas Khan-13201B0042

                                   Manas Shinde-15201B0010

                                   Pratiksha Gaikwad-15201B0029

                                   Usama Ansari-15201B0006

Abstract : This project name as digital notice board scrolling display. We can send any message from mobile through GSM module. The GSM module supports communication in 900MHz band. The Arduino will receive that message by using AT command with GSM module and the Arduino will send that message to dot matrix LED and than that message will display on the scrolling screen

Screenshots of the Project / Photos of Working Model (Min.3):
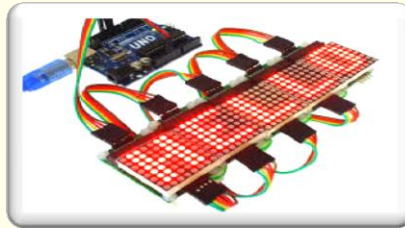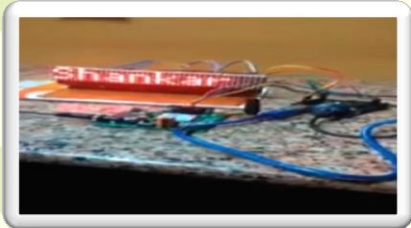
Applications: Any public utility places, Used in bus stations , railways stations , parks, etc to display.

Awards if Any for TPP / Competitions / Paper Publication / Any Other Pls. Specify:-

.

Department : Electronics & Telecommunication Engineering

Project Title : **RF BASED DETECTION SYSTEM**

Domain (Area of Project) : **WIRELESS COMMUNICATION**

**Name of Project Guide** : **Mrs.Rupali Bhosale**

Name of Students : Amarnath Jaiswal - 15201B0031

Kartik Shetty   - 15201B0030

Rahman Sayed   - 16201A1001

Abstract : This project is to keep a track on the important valuables used in daily life such as watch , Mobile , Keys etc. using RF detection system and microcontroller. This system also help to protect the devices from thefts.

Screenshots of the Project / Photos of Working Model (Min.3):
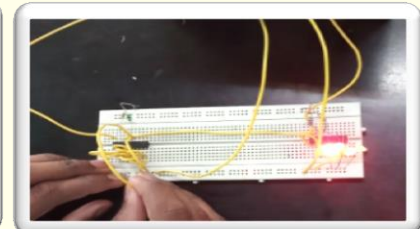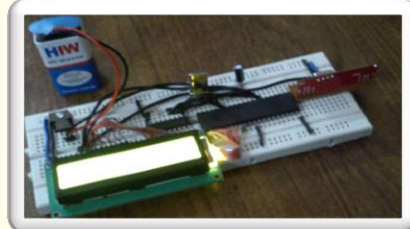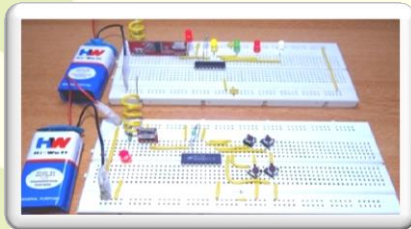
Applications: For security reasons in mall.
To keep track valuable belonging of individuals

Awards if Any for TPP / Competitions / Paper Publication / Any Other Pls. Specify:-

Department : Electronics & Telecommunication Engineering

Project Title : CHILDREN LOCATING SYSTEM

Domain (Area of Project) : WIRELESS COMMUNICATION SYSTEM.


Name of Project Guide : Mrs. Anjali Gharat .

Name of Students : Anurag Gole   -15201C0001

Siddhant Bakale -14201C0043

Sujit Waghmare -17201C2002

Sarvesh Patil   -15201C0005

Abstract : The operating system is used to scan the students ID cards while entering the school bus and ID will be scan again after getting down the school bus. This updates will be sent to the parents.

Screenshots of the Project / Photos of Working Model (Min.3):
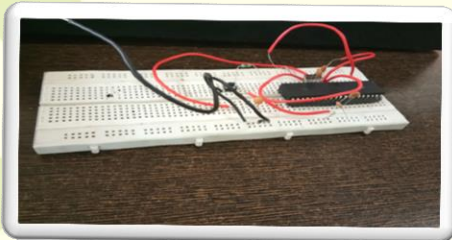
Applications: Information about location of children.

Awards if Any for TPP / Competitions / Paper Publication / Any Other Pls. Specify:-

17

Department : Electronics & Telecommunication Engineering

Project Title : **FINGERPRINT BASED ATM SECURITY SYSTEM**

Domain (Area of Project) : **WIRELESS COMMUNICATION SYSTEM**

Name of Project Guide : Mrs.Helina Tandel

Name of Students : Mustafa Mansoor -14201C0018

Suraj Jadhav -14201C0045

Chetan Satpute -16201C1005

Shivam Bhatkar -14201C0063

Abstract: The project is designed for the people that are not able to operate the ATM system and this project will also minimise the time required for accessing the ATM system. The system will get the details to open the customer's account by the input provided to it and the input will be provided by the biometric sensor i.e. the fingerprint sensor .

Screenshots of the Project / Photos of Working Model (Min.3):
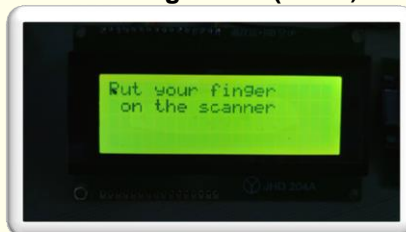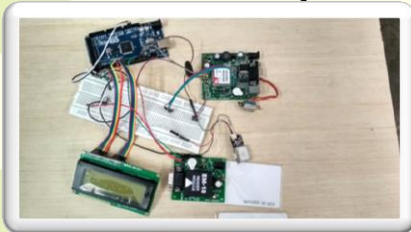
Applications: The application of this system is in the ATM

Awards if Any for TPP / Competitions / Paper Publication / Any Other Pls. Specify:-

Department : Electronics & Telecommunication Engineering

Project Title : **ARDUINO BASED COLOUR SORTING MACHINE**
Domain (Area of Project) : **INSTRUMENTATION AND CONTROL SYSTEMS**

**Name of Project Guide** : **Mr.Shrinivas Paivernekar**

Name of Students : Azeem Thakur- 15201B0045

Bharat Naikwade- 15201B0034

Nishanth Subramani- 15201B0036

Abstract: Initially, the colour skittles which are held in the charger drop into the platform attached on the top servo motor. Then the servo motor rotate and bring the skittle to the sensor which detect its colour. After that the bottom servo motor rotate to particular position and then the top servo motor rotate.

Screenshots of the Project / Photos of Working Model (Min.3):
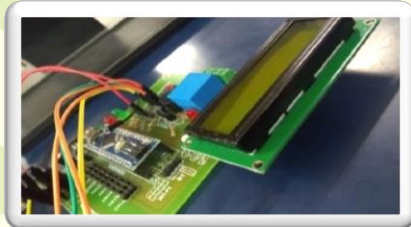
Applications: Used in food industries to separate items by their colour. .

Awards if Any for TPP / Competitions / Paper Publication / Any Other Pls. Specify:-

Department : Electronics & Telecommunication Engineering

Project Title   :   AUTOMATIC CAR WASHING SYSTEM USING PLC

Domain (Area of Project)   :   INSTRUMENTATION AND CONTROL SYSTEMS

Name of Project Guide :   Mr.Imran sayyed

Name of Students   :   kajal sharma   - 16201A1004

                                        omkar koli   - 16201A1006

                                        prasad gardi   - 16201B1011

                                        sunny Yadav   - 16201B1012

Abstract : This project is about automatic car washing system using plc. It will operate in 4 steps: 1) Clean Water 2)Soap Water 3) Clean water 4) Air for draying of vehicle. All the input and output are interfaced with PLC.

Screenshots of the Project / Photos of Working Model :

Applications: Used to maintain public gardens.

Department : Electronics & Telecommunication Engineering

Project Title : **CAMOUFLAGE ROBOT**

**Domain (Area of Project)** : **INSTRUMENTATION AND CONTROL SYSTEMS**

Name of Project Guide : Prof. Imran Sayyed

Name of Students : Akhalesh Mishra - 15201A0001

Aryan Khan   - 14201A0036

Shubham Bhogate - 15201A0011

Yogesh Dongre   - 13201A0053

Abstract : Camouflage Robot acts as a virtual spy and can be sent into the strategic locations of military importance for observation and warfare purpose. Since it's very hard to detect it by a naked human eye, the Camouflage robot can be also used to test the various security systems developed in the market and act as a measure to evaluate its efficiency.

Screenshots of the Project / Photos of Working Model (Min.3):
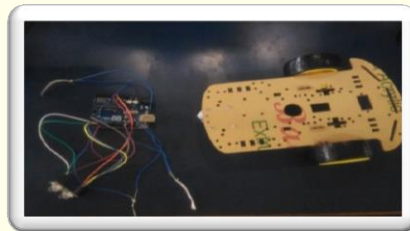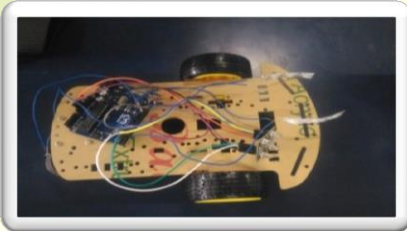
Applications: Used for spying in enemy territories & also for various security purposes.

Awards if Any for TPP / Competitions / Paper Publication / Any Other Pls. Specify:-

Department : Electronics & Telecommunication Engineering

Project Title : **AUTOMATIC VACUUM CLEANING ROBOT**

Domain (Area of Project) : **INSTRUMENTATION AND CONTROL SYSTEMS**

Name of Project Guide : Mrs.Sheetal Shelar

Name of Students : Ayatullah Ansari   15201B0048

Shivam Katheriya   15201B1012

Shubham Zambre   15201B0034

Romit Sali   15201B0032

Abstract : Here we designed an automated vacuum cleaner robotic system that allows for automatic cleaning of a particular area or room by covering the area using border analysis. The robotic system follows a zigzag path to cover entire room. The system uses I R sensor for boundary sensing and operates accordingly in order to cover entire room. The system also has a vacuum suction cleaner attached to its back for dust suction.

Screenshots of the Project / Photos of Working Model (Min.3):
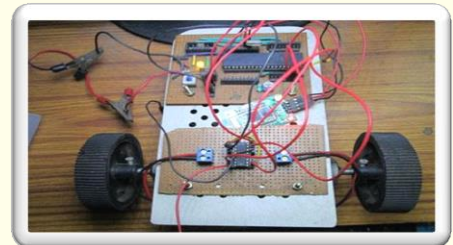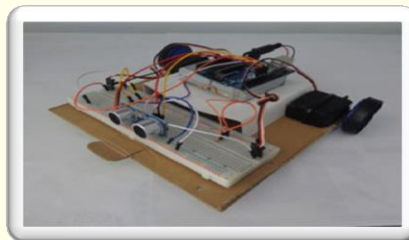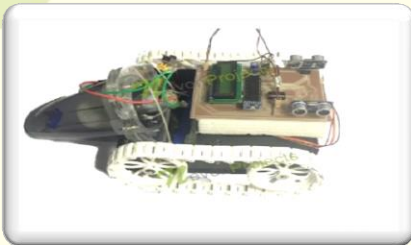
Applications: Used to clean the floor in office ,home,workshop,college,hospital etc.

Awards if Any for TPP / Competitions / Paper Publication / Any Other Pls. Specify:-

Department : Electronics & Telecommunication Engineering

Project Title   :   **PUBLIC GARDEN AUTOMATION**

Domain (Area of Project)   :   **INSTRUMENTATION AND CONTROL SYSTEMS**

**Name of Project Guide :**   **Miss.Tanvi Gursale**

Name of Students   :   Vaibhav Palaye   - 16201B1009

                                 Priyanka Daki   - 16201B1003

                                 Panay Nirbhavane   - 16201B1004

                                 Sujit Shukla   - 16201B1005

Abstract : This project is about the Public Garden Automation. This project aims to practice the overall automation of general public garden using Arduino. The project will help to avoid the mistreatment of electricity and normal water in the public garden with the automatic gate control system.

Screenshots of the Project / Photos of Working Model :
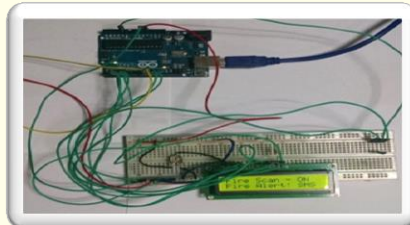
Applications: Used to maintain public gardens.

Department : Electronics & Telecommunication Engineering

Project Title   :   SECRET KNOCK DETECTOR USING ARDUINO UNO.
Domain (Area of Project)   :   EMBEDDED SYSTEMS

Name of Project Guide :   **Mr.Shrinivas A Paivernekar**

**Name of Students**   :   Kunal Waman   -15201A0018

          Ninad Veer   - 15201A0024

          Chintan Chauhan -15201A0015

          Rushikesh Chavan - 15201A0022

Abstract : Security is a major concern in our day to day life, and digital locks have become an important part of these security systems. Some examples are PIR based Security System, RFID based Security System, bio-matrix systems, Electronics Code lock. In this post, let us build a **Secret Knock Detecting Door Lock using Arduino** which can detect the pattern of your knocks at the door and will only open the lock if the knocking pattern matches with the correct pattern.

Screenshots of the Project / Photos of Working Model (Min.3):
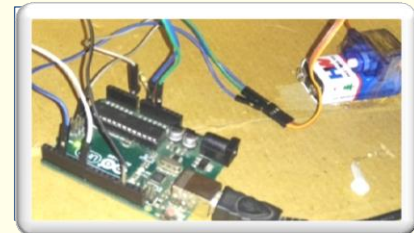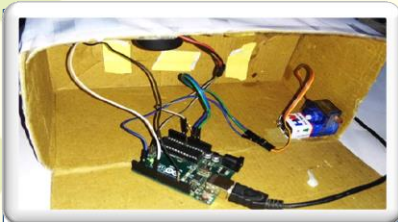
Applications: Used as security systems in industry.

Awards if Any for TPP / Competitions / Paper Publication / Any Other Pls. Specify:-

Department : Electronics & Telecommunication Engineering

Project Title   :   SMART CAR PARKING USING ARDUINO
Domain (Area of Project)   :   EMBEDDED SYSTEMS

Name of Project Guide : Prof. Rupali Bhosale

Name of Students   :   Aaditya Jadhav - 15201A0019

Chandan Kamble - 15201A0023

Sanket Pangam - 15201A0033

Akshata Wagh - 15201A0034

Abstract : In our project we are making a system which will reduce parking problems in Hospitals, Malls, IT parks by designing a circuit using Arduino which will indicate parking availability.

Screenshots of the Project / Photos of Working Model (Min.3):
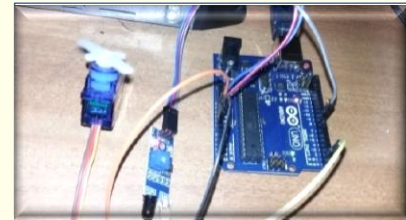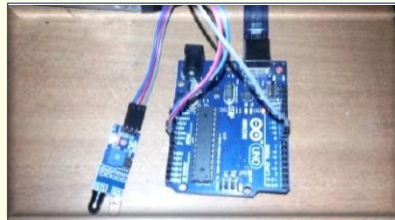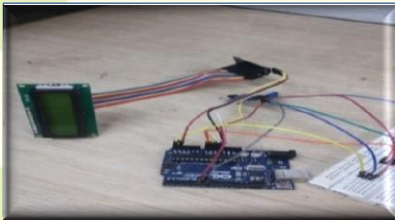
Applications: It can be used in Hospitals and Malls Parking area.

Awards if Any for TPP / Competitions / Paper Publication / Any Other Pls. Specify:- L & T sponsored project

Department : Electronics & Telecommunication Engineering

Project Title   :   **VOICE CONTROL CAR**

Domain (Area of Project)   :   **EMBEDDED SYSTEMS**


Name of Project Guide :   **Prof. Arpit Bankar**

Name of Students   :   Himnshu Kantak -15201A0037

Prashant Khochare 15201A0040

Rehan Mukadam - 15201A0051

Shankar Shedge - 15201A0050

Abstract : We can use this concept in real time car by using proper controllers so that car will be protected we can interface the controller with the car so that it can work like voice controlled car. We can put security system for car and voice identification so that your car will only move with the registered voice in the system

Screenshots of the Project / Photos of Working Model (Min.3):
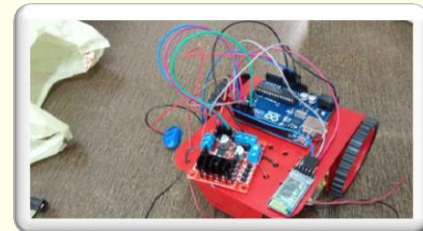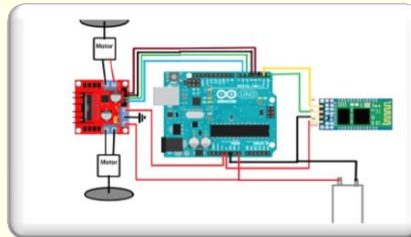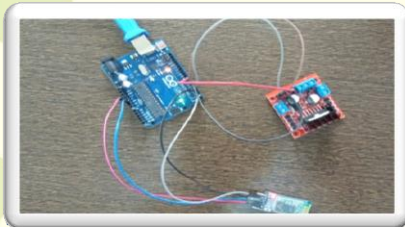
Applications: It is very easy for the mentally challenge people to drive. The main objective of this concept is to reduce the human efforts and to protect car theft.

Awards if Any for TPP / Competitions / Paper Publication / Any Other Pls. Specify:-

Department : Electronics & Telecommunication Engineering

Project Title : SMART VISION
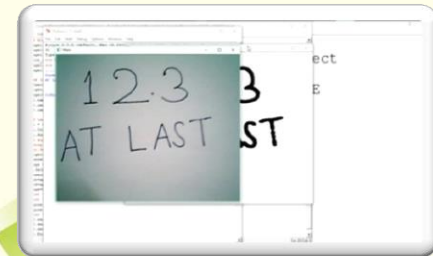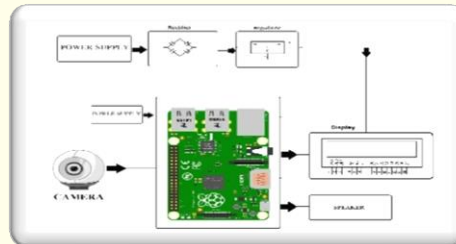**Domain (Area of Project)** : EMBEDDED SYSTEMS

Name of Project Guide : Ms Minal Tandle

Name of Students : Ashish Kamat - 15201B0020

Karthik Vembukumar - 14201B0045

Taif Haji - 13201B0042

Vrushika Mohite - 15201B0001

Abstract : The objective of this project is to help blind people and dyslexic people to read context of books news papers and documents without seeing the text and actually knowing how to read . This project take a snapshot of the text that the user wants to read and it convert it into an audio output so that the user understands what is written .

Screenshots of the Project / Photos of Working Model :

Applications: Used to maintain public gardens.

Department : Electronics & Telecommunication Engineering

Project Title   :   **SMART CITY**

Domain (Area of Project) :   **EMBEDDED SYSTEMS**

Name of Project Guide   : Mr.Arpit Bankar

Name of Students   : Rushikesh Yadav - 16201A1008

                   Sanket Borkar   - 16201A1013

                   Vivekkumar Konda -16201A1007

Abstract : Population and lack of advance technologies tends smart cities .Smart city is place where everything is scheduled and processed digitally using sensors. Concept is city will be embedded with various sensors which are linked to a central data center. Data from various sensors which are placed in different parts of city are feeded to processor the data and control various situation

Screenshots of the Project / Photos of Working Model (Min.3):
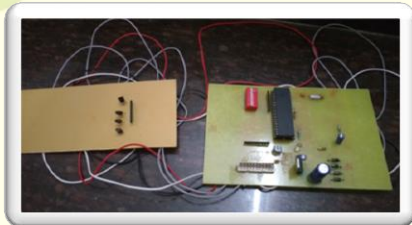
Applications: It can be used to reduce the traffic .
                Using flood detector sensor the level of water can be detected .

Awards if Any for TPP / Competitions / Paper Publication / Any Other Pls. Specify:-

Department : Electronics & Telecommunication Engineering

Project Title   :   WASTE MANAGEMENT IN RAILWAYS
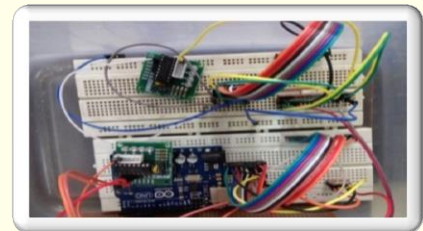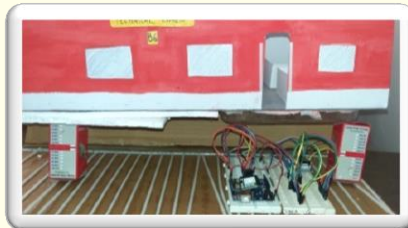Domain (Area of Project)   :   EMBEDDED SYSTEMS

Name of Project Guide :   **Prof . Servesh Gupta**

Name of Students   :   Aniket Chavan - 15201A0028

Nikhil Gangathade - 15201A0030

Pranav Dalvi 15201A0021

Tejesh Gawas - 15201A0025

Abstract : The project deals with the waste management in railways . In present scenerio the waste in railways spread on railway track. This system is designed in such a way that the waste is disposed only when the train is halting on railway station.

Screenshots of the Project / Photos of Working Model (Min.3):

Applications: In rail express/mails

Awards if Any for TPP / Competitions / Paper Publication / Any Other Pls. Specify:-

Department : Electronics & Telecommunication Engineering

Project Title   :   **SMART HEALTH MONITORING SYSTEM**

Domain (Area of Project) :   **EMBEDDED SYSTEM**

Name of Project Guide :   Prof. Pranesh Naik

Name of Student   :   Ganesh Kota(15201C0010)

Rajesh Kumar(15201C0009)

Nitin Rajbhar (16201C1006)

Istiyak Shaikh(14201C0044)

Abstract : In today's world I.O.T is a system that connects physical objects ,animals and people etc to the internet by Using Rasberi Pi and Aurdino, Sensor will give output to Arduino and Arduino will convert the analog signal into digital as raspberry pi collect digital signal , the output of sensor which is saved in server it can be access though Google cloud and anyone can access it, so doctor can access it when patient is in ambulance and when patient reach hospital he can Start the immediate treatment of patient.

Screenshots of the Project / Photos of Working Model (Min.3):

Applications: Used in emergency cases
We can even use as patient report system

Awards if Any for TPP / Competitions / Paper Publication / Any Other Pls. Specify:-

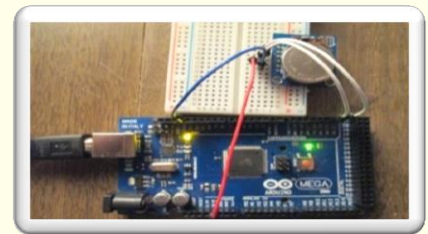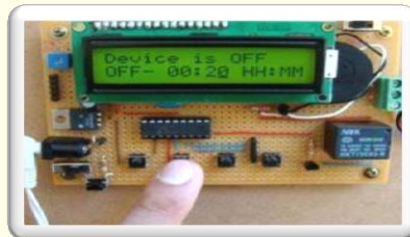# Department : Electronics & Telecommunication Engineering

Project Title : **AUTOMATIC DROWNING DETECTION SYSTEM**

Domain (Area of Project) : **Embedded System**

Name of Project Guide : **Mrs. Helina Tandel**

Name of Students : Mhatre Pooja(10D824)

Malgaonkar Pranav(11D833)

Trimbake Kunal(11D859)

Phalke Shruti (14201C0031)

Abstract: The main purpose of this project is to design a safety swimming pool. It approaches to detection of drowning incidents in swimming pools at the earliest possible stage. This is done by preventing the children from drowning in the swimming pool by lifting the iron plate.

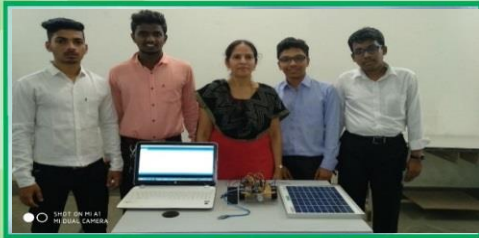**Screenshots of the Project / Photos of Working Model (Min.3):**

Applications: Used in swimming pool side area .

Awards if Any for TPP / Competitions / Paper Publication / Any Other Pls. Specify:-

Department : Electronics & Telecommunication Engineering

Project Title : **AUTOMATIC SOLAR GRASS CUTTER**
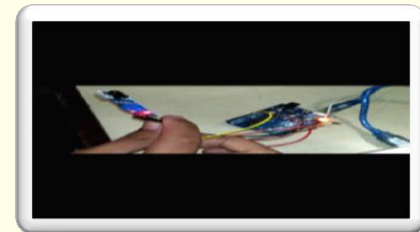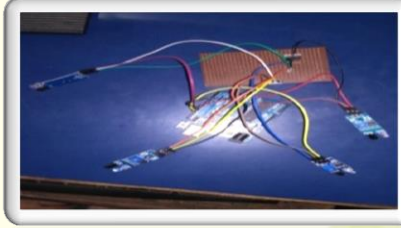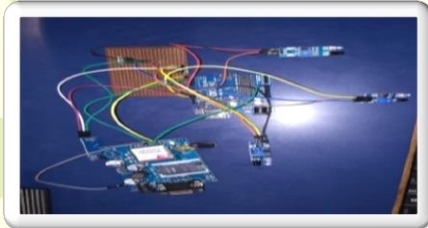
Domain (Area of Project) : **POWER ELECTRONICS**

Name of Project Guide : **Mrs. Madhavi K.**

Name of Students **:** Pritam Bhilare - 14201A0042

Inzamam Mukadam - 15201A0014

Aishwarya Satam   - 13201A0035

Amit Singh   - 15201A0005

Abstract : A solar grass cutter is a machine that uses sliding blades to cut a lawn at an even length.
Power consumption becomes essential for future. The solar grass cutter consists of the photovoltaic cell for the efficiency power from solar panel. The DC to DC buck boost converter helps to step up the DC voltage from the photovoltaic panel and store the DC voltage in a battery. It is an automated system for the purpose of grass cutting

Screenshots of the Project / Photos of Working Model (Min.3):

Application: Used to cut grass in garden

Awards if Any for TPP / Competitions / Paper Publication / Any Other Pls. Specify:-

Department : Electronics & Telecommunication Engineering

Project Title   :   **PWM BASED VOLTAGE STABILIZER**

Domain (Area of Project)   :   **POWER ELECTRONICS**

Name of Project Guide :   Mrs.Shanti K.

**Name of Students   :**   Amit Pandey - 15201B0003

                                    Chirag Parmar - 15201B0028

                                    Parth Raul - 15201B0025

                                    Pratik Jagtap - 13201B0009

Abstract : Voltage stabilizer are used for many appliances in homes, offices and industries. The mains supply suffers from large voltage drops due to losses on distribution lines en route. Voltage stabilizer maintains the voltage upto the appliances at nominal value of around 220 volts even if the input mains fluctuates over a wide range. So here is circuit of an automatic voltage stabilizer that can be adopted to any power rating.

Screenshots of the Project / Photos of Working Model (Min.3):
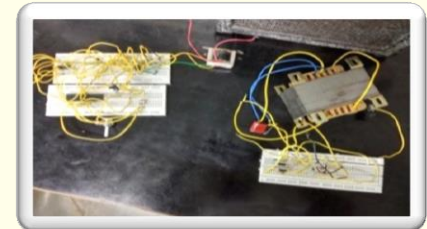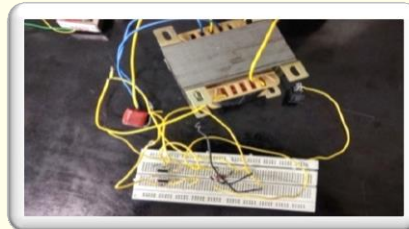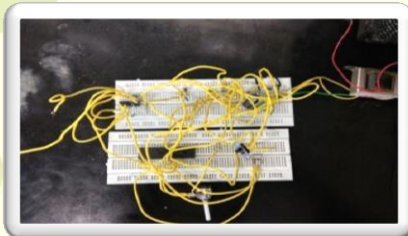
Applications: CNC machine, mobile communication, radio base station(msc,bts), radar and microwave station, security, screnning and x-ray machine

Awards if Any for TPP / Competitions / Paper Publication / Any Other Pls. Specify:-

Department : Electronics & Telecommunication Engineering

Project Title : **AUTOMATIC STREET LIGHT USING SOLAR PANEL**

**Domain (Area of Project)** : **POWER ELECTRONICS**

Name of Project Guide : **Mrs. Madhavi M**

Name of Students : Falguni Waghela - 15201B0016

Rehan Khan - 15201B0009

Soham Khedekar - 15201B0026

Abstract : This project is driven by solar energy used to control the light from 7pm to 12am based on the brightness. Using 12v solar panel we will charge 12v battery. The charge controller circuit can prevent the battery to flow high current through it after than we will convert 12v to 5v using voltage divider circuit Using RTC (Real Time Control) can generate seconds, minutes, hours, date of the month, month, day of the week, and year with leap-year. Arduino will control the sensor which is used to detect the motion and when motion is detected the led will automatically turn on

Screenshots of the Project / Photos of Working Model (Min.3):
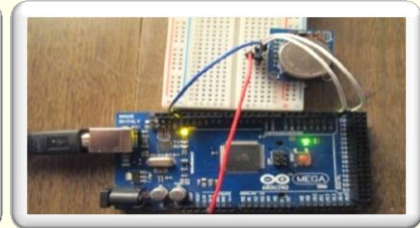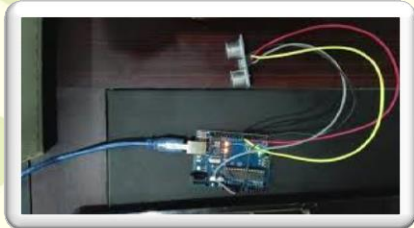
Applications: Hospital lighting, Highway lighting, Street lighting, etc

Awards if Any for TPP / Competitions / Paper Publication / Any Other Pls. Specify:-

Department : Electronics & Telecommunication Engineering

Project Title : SUN SOLAR TRACKING SYSTEM

Domain (Area of Project) : Power Electronics

Name of Project Guide : Prof. Kirthi Gupta

**Name of Students :** Nitendar Chuahan(14201C0060)

Abhishek Tandale(15201B0049)

Salman Khan (16201C1002)

Venkatesh (15201C0006)

Abstract : The project uses a solar panel coupled to a stepper motor to track the Sun so that maximum sun light is incident upon the panel at any given time of the day. The proposed system solves the problem by an arrangement for the solar panel to track the Sun. This tracking movement is achieved by coupling a stepper motor to the solar panel such that the panel maintains its face always perpendicular to the Sun to generate maximum energy. This is achieved by using a programmed microcontroller to deliver stepped pulses in periodical time intervals for the stepper motor to rotate the mounted panel as desired.

Screenshots of the Project / Photos of Working Model (Min.3):
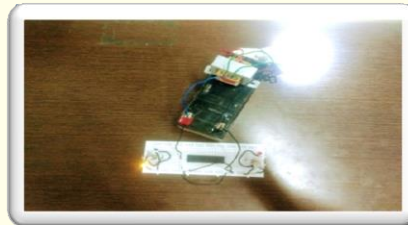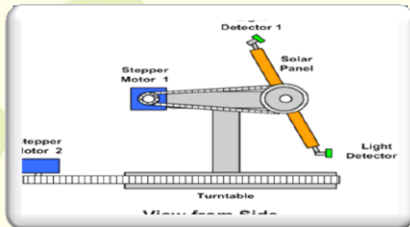
Applications: 1.Can be used for small & medium scale power generations.

2. For domestic backup power system

Awards if Any for TPP / Competitions / Paper Publication / Any Other Pls. Specify:-

Department : Electronics & Telecommunication Engineering

Project Title : **TALKING VOLTMETER**

Domain (Area of Project) : **ELECTRICAL AND ELECTRONICS**


Name of Project Guide : **Prof. SHILPA GAIKWAD.**

Name of Students : Sarvesh Surve - 15201a0038

Pranay Bane - 15201a0049

Shamshad Mallick - 15201a0045

Suyash Golatkar - 15201a0052

Abstract : Voltmeter is a measuring instrument, used to measure the voltage difference between two points in electrical network. ADC0808 converts analog signal to digital signal. Text To Speech Converter Is Used Convert The Digital Signals Into Voice integration with analog input, digital processing and analog output functionality.LCD display output voltage

Screenshots of the Project / Photos of Working Model (Min.3):
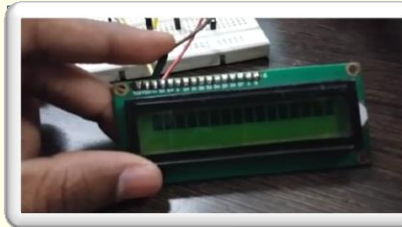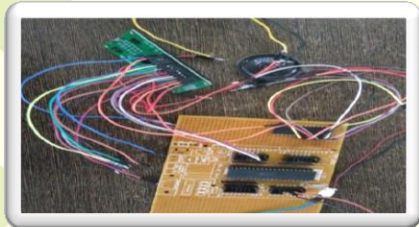
Applications: It is use for voltage measurement.

Awards if Any for TPP / Competitions / Paper Publication / Any Other Pls. Specify:-

Department : Electronics & Telecommunication Engineering

Project Title   :   **INTELLIGENT FEATURES IN RAILWAY USING MICROCONTROLLER**

Domain (Area of Project)   :   **ELECTRICAL AND ELECTRONICS**

**Name of Project Guide** : **Mrs shilpa Gaikwad**

Name of Students : Gunank Juwatkar - 16201B1010

                                 Pooja Palkar - 16201B1015

                                 Rushabh Tribhuvan - 16201B1003

                                 Shubham Nanaware - 16201B1012

Brief idea of Project : This project is about the intelligent features in railway using microcontroller =The project will help to reduces electricity, detect obstacle, reduces accidents etc.

Screenshots of the Project / Photos of Working Model :
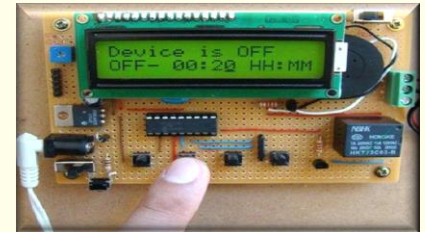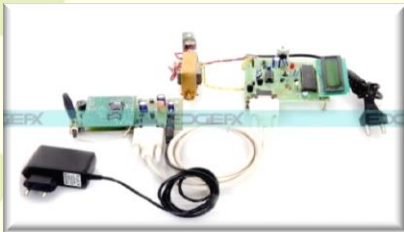
Applications: can be used in current railway system .

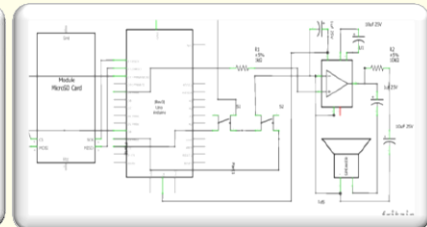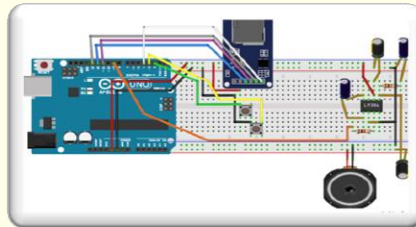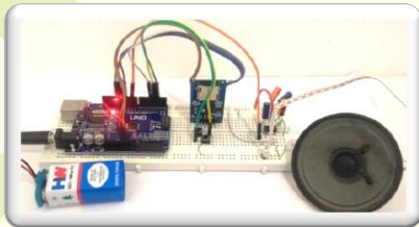# Department : Electronics & Telecommunication Engineering

Project Title : **COLLAGE BELL**

Domain (Area of Project) : **ELECTRICAL AND ELECTRONICS**

Name of Project Guide : **Mrs. Pranjali Patil**

Name of Students : Abhishek Patil - 15201B0040

Santosh Kadam - 15201B0042

Urvesh Gawde - 15201B0038

Abstract : It is Arduino.based automatic college bell system which rings itself according to a fed time table. The project device should be installed in individual classrooms and have the time table set manually. The user can set the time table for six days of the week and can also set the duration of the periods.

Screenshots of the Project / Photos of Working Model (Min.3):

Applications: 1.In Industries to operate machines automatically
2.maintain And monitor health of a patient

Awards if Any for TPP / Competitions / Paper Publication / Any Other Pls. Specify:-

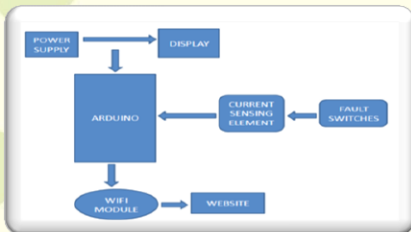# Department : Electronics & Telecommunication Engineering

Project Title	:	UNDERGROUND CABLE FAULT DETECTION SYSTEM BASED ON IOT
Domain (Area of Project)	:	ELECTRICAL AND ELECTRONICS

Name of Project Guide : Monicka jagtap

Name of Students : Zoheb Mir-15201B0014

Izhar Ahmad-15201B0021

Sejal Chaurasia-15201B0012

Abstract : Here we present an cable fault detection over IOT that detects the exact fault position makes repairing work very easy. Here we use resistive network to detect the fault and locate it. A series of resistors are placed in a cable line at fixed distances, So when fault occurs resistance of the cable will change and hence we can locate the fault We use IOT technology that allows the authorities to monitor and check faults over internet.

Screenshots of the Project / Photos of Working Model (Min.3):

Applications: Used for repairing faults in underground cable.

Awards if Any for TPP / Competitions / Paper Publication / Any Other Pls. Specify:-

Department : Electronics & Telecommunication Engineering

Project Title : **ELECTRONIC FIRST-AID BOX**

Domain (Area of Project) : **BIOMEDICAL**


Name of Project Guide : Ms. Apurva Sawant

Name of Students :

Ashutosh Darvesh   16201A1002

Mohammed Bilal   15201B0047

Mihir Mistry   15201B0039

Faizan Khan   15201B1006

Brief idea of Project : E-Frist aid box is an Arduino based project which make availability of medicines within patients reach by inserting coin and selecting appropriate medicine. According to the programing of Arduino displace the medicine to the patient. Patient can fetch the require medicine any time 24*7.

Screenshots of the Project / Photos of Working Model :
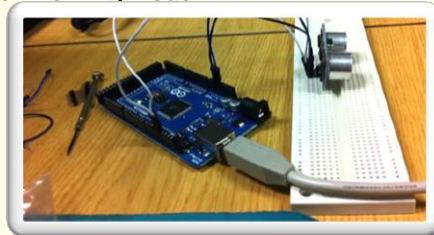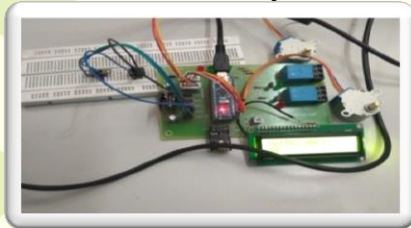
Applications: This machine can be installed at any public place, i.e. Shopping malls, highways etc. As it works 24*7, the availability of medicines is always possible.

Awards if Any for TPP / Competitions / Paper Publication / Any Other Pls. Specify:-

Department : Electronics & Telecommunication Engineering

Project Title : **E- Nose**

**Domain (Area of Project)** : **BIOMEDICAL**

Name of Project Guide : **Prof. Pratik Tawde**

Name of Students : Akash Gond - 13201A0009

Mayur Pawar - 15201A0012

Omkar Rasam - 15201A0003

Sneha Karnik - 15201A0009

Abstract : An odour is composed of molecules, each of which has a specific size and shape. An electronic nose (e-nose) is a device that identifies the specific components of an odour and analyses its chemical makeup to identify it. The electronic nose is a device that detects the hazardous gases which are present in industrial areas. It senses as well as informs the operator such that they are in safe condition.

Screenshots of the Project / Photos of Working Model (Min.3):
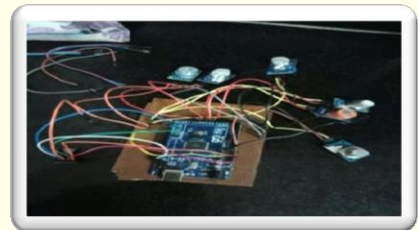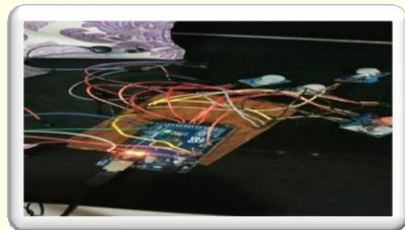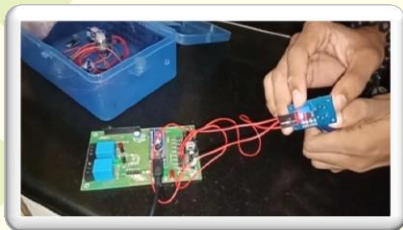
Applications: Medical diagnostics and health monitoring, Environmental monitoring, Food industry, Space applications, BARC.

Awards if Any for TPP / Competitions / Paper Publication / Any Other Pls. Specify:-

Department : Electronics & Telecommunication Engineering

Project Title   :   **IOT BASED GARBAGE MONITORING SYSTEM**

**Domain (Area of Project)**   :   **INTERNET OF THINGS**

Name of Project Guide : **Prof. Anjum mujawar**

Name of Students   : Parth gaikwad - 15201A0048

Suyog patil - 15201A0042

James fernandes - 15201A0059

Brief idea of Project : This project IOT Garbage Monitoring system is a very innovative system which will help to keep the cities clean. This system monitors the garbage bins and informs about the level of garbage collected in the garbage bins via a web page. This web page also send all information to garbage collection vehicles.

Screenshots of the Project / Photos of Working Model (Min.3):
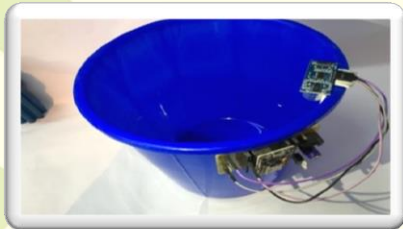
Applications: smart cleaning system in city.

Awards if Any for TPP / Competitions / Paper Publication / Any Other Pls. Specify:-

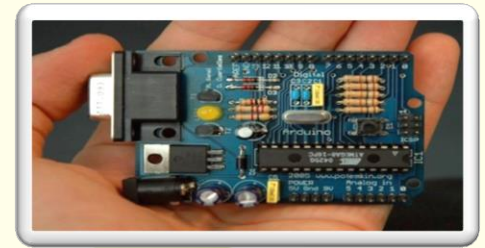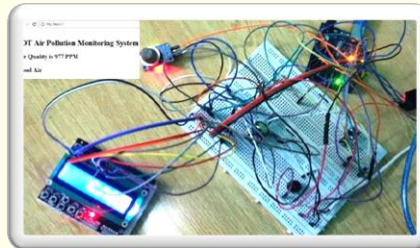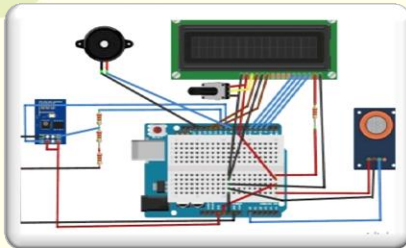# Department : Electronics & Telecommunication Engineering

Project Title   :   AIR QUALITY MONITORING SYSTEM

Domain (Area of Project)   :   INTERNET OF THINGS

Name of Project Guide :   Mr Sarvesh Gupta

Name of Students   :   Krishna Mhatre   16201B1014

Shubham Dhadave   16201A1007

Antosh Tiwari   16201B1008

Abstract ; In this project we are going to make an **IOT Based Air Pollution Monitoring System** in which we will **monitor the Air Quality over a webserver using internet** and will trigger a alarm when the air quality goes down beyond a certain level, means when there are sufficient amount of harmful gases are present in the air like CO_2, smoke, It will show the air quality in PPM on the LCD and as well as on webpage so that we can monitor it very easily.

Screenshots of the Project / Photos of Working Model :

Applications: Pollution Monitoring

Department : Electronics & Telecommunication Engineering

Project Title : **AUTOMATIC TOLL COLLECTION USING IOT**

Domain (Area of Project) : **INTERNET OF THINGS**

Name of Project Guide : Mr.Pranesh Naik

Name of Students : Sayali Bole (16201C1008)

Ankita Jadhav (17201C2001)

Junaid Bagwan (15201C0002)

Kajal Chaurasiya (16201C1003**)**

Abstract: The sole purpose of this idea is to motivate cashless transaction by installing automated E-toll collection system and the technology that we use is the use of RFID readers / tags. Basically to tackle this problem, the use of RFID tags that must be uniquely fixed onto subjects vehicle and RFID reader must be fixed t E-toll booth. The registration of the subjects vehicle is carried through internet.

Screenshots of the Project / Photos of Working Model (Min.3):

Applications: automatic toll collection , time saving and makes flow of traffic easy.

Awards if Any for TPP / Competitions / Paper Publication / Any Other Pls. Specify:-

Project Committee
Department of Electronics and telecommunication

	Ms.Sheetal Shelar
	Ms. Trupti Patel