VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI–590 018

A MICRO PROJECT REPORT ON

"An advanced alcohol sensing and engine locking system for cars"

Submitted By,

K H Abdul Rajaque Shah	4AL20CV006
Pratham P	4AL20AI031
Pavan K H	4AL20EC030
Shreya P J	4AL20CS142

Under the Guidance of

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ABSTRACT

This is used to detect and drive the ignition on/off relay for the drug driver control system. We have implemented an alarm system in this device that will send the car's location to the nearest police station or the driver's relatives if the alcohol level is above the normal permitted level, and the ignition system of the car will turn off after the detection.

B5

VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI–590 018

A MICRO PROJECT REPORT ON

"SMART DYNAMIC INFORMATION- BASED CAR PARKING GUIDANCE"

Submitted By,

Shivakumar K N	4AL20CV023
Shailesh Rao	4AL20AI039
Anson Sarosh D' Souza	4AL20IS006
Suchith H C	4AL20CS153

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ABSTRACT

This paper focus on dynamic car parking information optimization .The large number of vehicle constantly seeking access to congested areas in cities means that finding a public parking place in often difficult and causes problems for drivers and citizen alike. To break down these problems this paper idea implemented 'DYNAMIC CAR PARKING NEGOTIATION AND GUIDANCE USING AN AGENT BASED PLATFORM'

B18

VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI–590 018

A MICRO PROJECT REPORT ON

"DTMF Based Home Automation"

Submitted By,

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Abubakkar Siddiq	4AL20CS005
Shramik S Shetty	4AL20IS046
Usha G M	4AL20CS165

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ABSTRACT

In Mobile Controlled Home Automation using DTMF, a smart logic control based on embedded systems has been implemented. The DTMF based home automation is controlled by mobile signals. Mobilecontrolled Home Automation system using DTMF technique is all about controlling a relay using DTMF decoder . The relay is controlled from a mobile phone even at a far away distance by making a call to the other mobile phone attached to the DTMF decoder in the home automation system. During the course of the call, if any button is pressed, the tone corresponding to the button pressed is heard at the other end. This tone is called "Dual Tone Multi Frequency tone (DTMF)".Using DTMF code, each relay corresponding to a particular code turns ON/OFF. The relay will be attached to a corresponding appliance at home. When each appliance needs to be turned ON , the corresponding relay needs to be ON as well. This circuit can also be used to control the water tank motor by setting the ontime.

B72

VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI–590 018

A MICRO PROJECT REPORT ON

"Two-Way Wireless Anti-Theft Alarm for Two-Wheeled Vehicles"

Submitted By,

Rohan H	4AL20EC043
Adarsh Suresh Ajila	4AL20CS009
Tejas R	4AL20IS055
Varsha U K	4AL20CS167

Under the Guidance of

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ABSTRACT

The main goal of this project is to keep track of a two-wireless wheeler's anti-theft alarm system. The proposed project is simple to use and operates effectively

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VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI–

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A MICRO PROJECT REPORT ON

"SMART DYNAMIC INFORMATION- BASED CAR PARKING GUIDANCE"

Submitted By,

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Ashwini	4AL20CS025
Harsha K	4AL20AI017
Nandini S	4AL20CV011

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ABSTRACT

This paper focus on dynamic car parking information optimization .The large number of vehicle constantly seeking access to congested areas in cities means that finding a public parking place in often difficult and causes problems for drivers and citizen alike. To break down these problems this paper idea implemented 'DYNAMIC CAR PARKING NEGOTIATION AND GUIDANCE USING AN AGENT BASED PLATFORM'.

B45

VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI-590 018

A MICRO PROJECT REPORT ON

"Detection of Speed of Vehicles"

Submitted By,

Tarun D R	4AL20AI046
Bugade Poonam Gajanan	4AL20CS031
Prajwal P Pavesekar	4AL20AI028
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ABSTRACT

India is the country with the highest number of road fatalities, the most of which are caused by excessive speeding. There have been numerous attempts to develop reliable and effective methods of detecting overspeeding automobiles. One such device is a hand held over a speeding detector. The problem of such a gadget was that it was bulky and operated only with professional hands; also, by the time a speed reading was received, the vehicle would have already left.

B47

VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI-590 018

A MICRO PROJECT REPORT ON

"USING LOOP DETECTORS CONTROLLING TRAFFIC LIGHT"

Submitted By,

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Shwetha C	4AL20CS032
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ABSTRACT

Loop detectors ensure that traffic lights are controlled accurately and reliably. Each lane has two inductive loop detectors, one before and one after the stop line. Every passing car is tracked and recorded. It is possible to set a delay time. After that time, any car that passes is photographed twice in quick succession. The first shot depicts the crime, while the second indicates that the vehicle was in motion. The camera is set up in such a way that the red light can be seen in the image. Cars and trucks are distinguished through loop detection. For each category, a distinct speed threshold can be installed. When the lights are green, red, or amber, the traffic signal cameras can also be used to measure speed.

B65

VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI-590 018

A MICRO PROJECT REPORT ON

"Automatic overspeed detector"

Submitted By,

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Hemanth B	4AL20CS047
B Sai Shreya	4AL20CS027
Disha H	4AL20EC012

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ABSTRACT

In this project we developed a prototype sleek hand held device that can be operated by the traffic official whenever he observes an over speeding vehicle, to obtain the correct speed of the vehicle. It has a 2 digit 7-segment display, which can display speeds up to 97km/h. It also has two switches, which are used for starting the device and for enabling it only when required. The state of the device is indicted by three status indicating LEDs which display the following conditions: a green LED indicating power on, an orange LED indicating the set or enabled condition, and a red LED indicating speeds in excess of 100 km/h.

B68

VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI–590 018

A MICRO PROJECT REPORT ON

"Automated Charging Machine(ACM)"

Submitted By,

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Ishwar Pavan	4AL20CS050
Ikshu B A	4AL20CS048
Kishan Kumar	4AL20EC017

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ABSTRACT

This project is related to ACM which provides the public with the ability to recharge a mobile device ,often for a small fee. Similar to vending machines , ACM's take cash ,then charge the connected devices. Basically we use PC RS232 Communication. These places include Airports, Shopping malls,parks, clubs, Supermarkets, Campuses and other popular locations. Public charging stations for mobile devices appeared around 2006. A variety of features have been introduced to these machines, including lockers, U V sanitation and wirelessly updated advertising space.

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VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI-590 018

A MICRO PROJECT REPORT ON

"GSM MODULE IN REMOTE ELECTRICAL LOADS CONTROL"

Submitted By,

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ABSTRACT

This project has low cost solution to Remote Control and Monitoring via your mobile phone. It had 2 output relay and 4 input colsure contect. Lighting,central heating boiker,pumps etc are controled by using output and input can be connected thermostats,security Sensors and flood detectors.

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VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI–590 018

A MICRO PROJECT REPORT ON

"CELLPHONE OPERATED ROBOT"

Submitted By,

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Karthikeyan J	4AL20CS056
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ABSTRACT

The use of radio signals to remotely control a device is known as radio control (abbreviated as R/C or simply RC). The word is widely used to refer to the use of a hand-held radio transmitter to operate miniature automobiles. Radio-controlled cars are also used in [traffic] by industrial, military, and scientific research organisations.

Any mobile device that is operated by a means that does not restrict its motion with an origin external to the device is referred to as a remote control vehicle. A radio control device, a cable between the control and the vehicle, an infrared controller are common examples. A remote control vehicle (also known as an RCV) varies from a robot in that it is always controlled by a person and does not take any positive action on its own. Remote vehicle control is one of the major technologies that underpins this sector. A vehicle must be capable of travelling accurately to a target location, navigating inside that region to complete its task, and returning to base with the same accuracy and safety

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VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI–590 018

A MICRO PROJECT REPORT ON

"GESTURE CONTROLED ROBOTIC ARM"

Submitted By,

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Rasi K S	4AL20CS114
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ABSTRACT

In this micro-project we developed an trainable remotely controlled robotic arm using DC motors. we prepared robotic arm which will perform primary pick and place operations and we can also save the movements of the arm and repeat the recorded actions without any error corrections. This arm has an 360 degrees of actions . The robotic arm is mounted on a base that allows it to perform different coordinates. we used Arduino Mega 2560 for controlling functionalities of the robot. we prepared this robot in two stages. In the first stage, the robot will be controlled with the help of potentiometer and in the second stage of development, remote functionality was added. we prepared this arm with the functionality by which the arm is controlled by the Bluetooth also. so it will make our daily life easy, better and simple.

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VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI–590 018

A MICRO PROJECT REPORT ON

"Anti-lock brakes with traction control at a low cost"

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DEPARTMENT OF BASIC SCIENCES

CERTIFICATE

This is to certify that the Micro-Project entitled **"Anti-lock brakes with traction control at a low cost"** has been Successfully Completed by

Finny Paul	**4AL20IS018**
Laxmish Vishnu Hegde	**4AL20CS064**
Shravika I P	**4AL20CS141**
Shwetha	**4AL20EC053**

The bonafide students of **Department of Basic Sciences, Alva's Institute of Engineering and Technology,** affiliated to VISVESVARAYA **TECHNOLOGICAL UNIVERSITY, BELAGAVI,** during the academic year 2020–2021. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report. The report has been approved as it satisfies the academic requirements in respect of Micro-Project work prescribed for Bachelor of Engineering.

Mr. Gopala Krishnna
Mini Project Guide

Dr. Ramaprasad A.T,
HOD Physics

H.O.D.
Dept. Of Physics
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Mijar, MOODBIDRI - 574 225

ABSTRACT

In this project we created a traction control system that detects wheel slip and adjusts the wheel velocity as needed. Robotic vehicles are growing more complicated, and high levels of movement control are frequently required. When a vehicle's wheels start to slip, it's best to modify the speed of the wheels so that the vehicle moves in the desired direction.

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VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI–590 018

A MICRO PROJECT REPORT ON

"Efficient Power Manager Project"

Submitted By,

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Arpitha	4AL20CS073
Aravinda	4AL20EC006
Keerthana G	4AL20IS020

Under the Guidance of

Dr. Ramaprasad A.T
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DEPARTMENT OF BASIC SCIENCES
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2020–2021

ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY

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ABSTRACT

The technology is designed to use the least amount of energy possible by keeping track of the number of people in the space. When someone enters the room, the electric loads are turned on, and they are turned off when no one is present. In order to accomplish this, the system employs Infrared Sensor pairs, which saves a significant amount of energy. Each pair consists of two sensor pairs set in opposing directions at a certain distance from one another. The IR transmitter sends infrared rays directly to the receiver, which receives the signal and passes it to an 8051 microcontroller. The IR sensor module detects when a person enters the room and sends this information to the microcontroller. This input is processed by the microcontroller, which then turns on the load. The system also counts the number of persons present at this time and increments a counter with each arrival; this count is displayed on a 7-segment display. The sensor detects no presence when the last person leaves the room and so turns off the load/lamp. To demonstrate as a burden, a tiny lamp is employed.

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VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI–590 018

A MICRO PROJECT REPORT ON

"AC Power Strength Controller System"

Submitted By,

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Mohammed Fahiz	4AL20CS076
Chaithrashree M G	4AL20EC008
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Under the Guidance of

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This is to certify that the Micro-Project entitled **"AC Power Strength Controller System"** has been Successfully Completed by

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ABSTRACT

The project's purpose is to manage AC power using the concept of thyristor firing angle control. The required proportion of power supply can be entered using a keypad. The data is delivered to an 8051 microcontroller, which initiates the firing angle and changes the load power. To match the power to the needed one, a TRIAC is used in series with the AC load. An LCD panel shows the percentage of power delivered by the user.