

DISTANCE CALCULATION FOR UNDER GROUND CABLE FAULT

*A mini project report submitted in partial fulfillment of the requirements
for the award of the degree of*

BACHELOR OF TECHNOLOGY

in

ELECTRONICS & COMMUNICATION ENGINEERING

by

B.PRAVALIKA	(17S41A0404)
K.PRATHYUSHA	(17S41A0428)
M.MADHURI	(18S45A0409)
K.VAISHNAVI	(17S46A0426)

Under the guidance of

Dr.B.SATHYAM

Professor

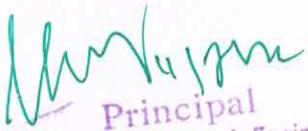


**DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING
VAAGESWARI COLLEGE OF ENGINEERING**

(Affiliated to JNTU, Hyderabad & Approved by AICTE)

Ramakrishna Colony, Karimnagar-505 527

February -2021


Principal
Vaageswari College of Engineering
KARIMNAGAR-505 527

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING
VAAGESWARI COLLEGE OF ENGINEERING
(Affiliated to JNTU, Hyderabad & Approved by AICTE)
Ramakrishna Colony, Karimnagar-505 527



CERTIFICATE

This is to certify that the Mini Project Report entitled "**DISTANCE CALCULATION FOR UNDER GROUND CABLE FAULT**" submitted by following students, in partial fulfilment of the requirements for the award of the Degree of Bachelor of Technology in ECE, is a bonafide record of the work performed by

B.PRAVALIKA

(17S41A0404)

K.PRATHYUSHA

(17S41A0428)

M.MADHURI

(18S45A0409)

K.VAISHNAVI

(17S46A0426)

The work embodied in this Mini Project Report has not been submitted to any other institution for the award of any degree.

INTERNAL GUIDE
Dr.B.SATHYAM
Professor

HEAD OF THE DEPT.
Mr.A.VENKATA REDDY
Associate Professor

PRINCIPAL
Dr. CH.SRINIVAS

EXTERNAL EXAMINER

ii
Principal
Vaageswari College of Engineering
505 527.

ABSTRACT

The objective of this project is to determine the distance of underground cable fault from base station in kilometers. The underground cable system is a common practice followed in many urban areas. While a fault occurs for some reason, at that time the repairing process related to that particular cable is difficult due to not knowing the exact location of the cable fault. The proposed system is to find the exact location of the fault.

The project uses the standard concept of Ohms law i.e., when a low DC voltage is applied at the feeder end through a series resistor (Cable lines), then current would vary depending upon the location of fault in the cable. In case there is a short circuit (Line to Ground), the voltage across series resistors changes accordingly, which is then fed to an ADC to develop precise digital data which the programmed Arduino would display in kilometers.

The project is assembled with a set of resistors representing cable length in KM's and fault creation is made by a set of switches at every known KM to cross check the accuracy of the same. The fault occurring at a particular distance and the respective phase is displayed on a LCD interfaced to the Arduino.

CHAPTER 6

CONCLUSION & FUTURE SCOPE

6.1 CONCLUSION

The importance of locating faults in the underground cables and reviews some of the cable fault locating methods along with the simple and convenient method i.e., by using ohm's law. There is a need to immediate indication about occurrence of a fault via remote communication; hence it needs to implement simple techniques which will help power utilities in immediate indication of fault occurrence and accurate methods for locating faults. To facilitate the development in society, the preliminary investigation requirements and the essential segments to be verified are presented in this paper.

6.2 FUTURE SCOPE

We detect not only the location of short circuit fault in underground cable line, but also detect the location of open circuit fault. To detect the open circuit fault, capacitor can be used in ac circuit to measure the change in impedance & calculate the distance of fault. This prototype is a basic model for underground cable fault detection which can be helpful in future for fault detection and correction purpose.

SOCIAL DISTANCE ALARM CAP

A

*Major project report submitted in partial fulfillment of the requirements
for the award of the degree of*

BACHELOR OF TECHNOLOGY
IN
ELECTRONICS AND COMMUNICATION ENGINEERING

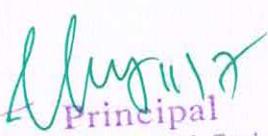
By

G.Shravani	(17S41A0421)
Hafsa Nishad	(17S41A0424)
K.Ramya	(17S41A0429)
D.Srikarunya	(18S45A0403)

Under the guidance of
Mr.G S Arun Kumar
Asst.Professor, Department of ECE



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
VAAGESHWARI COLLEGE OF ENGINEERING
(Affiliated to JNTU Hyderabad & Approved by AICTE)
Ramakrishna colony, Karimnagar-505481
2021


Principal
Vaageswari College of Engineering
KARIMNAGAR - 505481

VAAGESWARI COLLEGE OF ENGINEERING
(Affiliated to JNTU Hyderabad & Approved by AICTE)
Ramakrishna colony, Karimnagar-505481

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING



CERTIFICATE

This is to certify that this project work entitled "**Social Distance Alarm Cap**" is the bonafide work carried out by G.Shravani bearing Roll No.17S41A0421, Hafsa Nishad bearing Roll No.17S41A0424, K.Ramya bearing Roll No.17S41A0429, D.Srikarunya bearing Roll No.18S45A0403, in the partial fulfilment of the requirements for the award of the degree in Bachelor of Technology in **Electronics and Communication Engineering** from JNTUH University during the academic year 2017-2021 under our guidance and supervision.

Internal Guide

Mr.G S Arun Kumar
Asst.Professor, Dept. of ECE

Head of the Department

Mr. A Venkata Reddy
Professor, Dept. of ECE

Principal

Dr. Ch. Srinivas

External Examiner

Principal

Vaageswari College of Engineering
KARIMNAGAR-505 527.

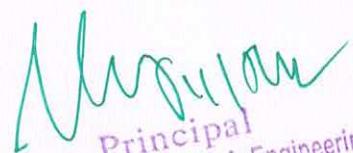
ABSTRACT

In view of the current situation the COVID-19 has become dangerous in every corner of the world. We must aim at preventing the community spread of the virus. To achieve this we must make sure a proper social distance is maintained from individual to individual. To make sure that a proper social distance is maintained from individual to individual we are coming up with the idea of social distancing cap.

To achieve the above problem and diminish the spread of virus at community level we are coming up with the social distancing cap which is a reminder of social distancing.

The main aim of the cap is to make sure a proper distance is maintained among individuals so that community spread of virus can be diminished. Here ultrasonic sensors are installed on three sides of the cap so it that measure the minimum distance to be maintained by the individual in 360 degrees. Also a buzzer is installed which alerts the individual by giving a buzzer upon not maintaining a minimum distance. The reason to design this social distancing reminder in form of a cap is that compared to a band or a belt this would be easy to use. As cap is a commonly used item by every person be it a child or an adult. In case of a band, the band may not measure the distance in 360 degrees. And the sensors should be exposed so, in case of a belt the person must tuck his shirt which may not be comfortable to everyone.

We are using 2 ultrasonic sensors which are placed at 2 sides of the cap as shown in the design. So using this we can maintain proper social distance among individuals. If proper social distance is not maintained in two directions this cap will alert the person. To alert the person we are using buzzer.


Principal
Vaageswari College of Engineering
KARIMNAGAR-505 527.

CHAPTER 6

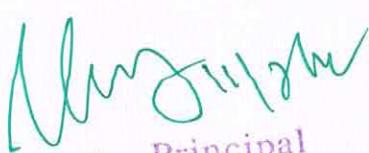
CONCLUSION AND FUTURE SCOPE

6.1 Conclusion

With government taking extreme steps to contain the spread of novel Corona virus, it is our duty to follow the advice in letter and spirit. Technology can play a crucial role in facilitating social distancing, which is an effective way of preventing COVID 19. The system described in this project uses the most commonly used components. A simple, but easy to wear device will help the community at large, in fighting against novel corona virus.

6.2 Future Scope

The current version of the processing application notifies the violation of the social distancing or prolonged indication of social distancing displays but does not record anything. Here is a lot of room for improvements. We will add video recording so that we will transmit live video recording.



Principal
Vaageswari College of Engineering
KARIMNAGAR-505 527.

Smart Shopping Trolley with Automated Billing using Arduino

A

Major project report submitted in partial fulfillment of the requirements for the
award of the degree of

BACHELOR OF TECHNOLOGY IN ELECTRONICS AND COMMUNICATION ENGINEERING

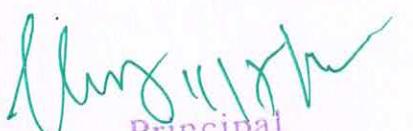
By

E. ANIL,	(17S41A0413)
FARKHANDA TANIYA NAJAM	(17S41A0415)
J. VAIHITHA	(17S41A0425)
K. SUSHMANA	(17S41A0432)

Under the guidance of
Mr. K. GOPI KRISHNA
Asst. Professor, Department of ECE



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
VAAGESWARI COLLEGE OF ENGINEERING
(Affiliated to JNTU Hyderabad & Approved by AICTE) Ramakrishna
colony, Karimnagar-505481
2021


Principal
Vaageswari College of Engineering
KARIMNAGAR-505 527.

VAAGESWARI COLLEGE OF ENGINEERING
(Affiliated to JNTU Hyderabad & Approved by AICTE) **Ramakrishna**
colony, Karimnagar-505481

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING



CERTIFICATE

This is to certify that this project work entitled "**Smart Shopping Trolley with Automated Billing using Arduino**" is the bonafide work carried out by E. Anil bearing Roll No.17S41A0413, Farkhanda Taniya Najam bearing Roll No.17S41A0415, J. Vaihitha bearing Roll No.17S41A0425, K. Sushmana bearing Roll No.17S41A0432, in the partial fulfilment of the requirements for the award of the degree in Bachelor of Technology in **Electronics and Communication Engineering** from JNTUH University during the academic year 2020-2021 under our guidance and supervision.

Internal Guide

Mr. K. Gopi Krishna

Professor, Dept. of ECE

Head of the Department

Mr. A. Venkata Reddy

Professor, Dept. of ECE

Principal

Dr. Ch. Srinivas

External Examiner

Principal
Vaageswari College of Engineering
KARIMNAGAR-505 527.

ABSTRACT

Shopping is simple but waiting on a bill counter makes shopping too boring and a tedious task. Huge amount of rush plus cashier preparing the bill with barcode scanner is too time consuming and results in long que. This innovative project consists of an automated billing system which can be placed within the shopping trolley. This automated payment system consists of a RFID reader which is controlled by Arduino. So, whenever the shopper puts any product in trolley it is detected by the RFID module and is displayed on LCD along with the price of the product. As the shopper goes on adding products, all products are detected by the module and therefore the price will increase accordingly. In case if customer changes his/her mind and doesn't want any product added in the trolley he/she can remove it and the price added will be deducted automatically.

At the end of shopping the shopper will press the button which when pressed adds all the product along with their price and gives the total amount to be paid. At exit for verification the shopkeeper can verify the products purchased with the help of master card. Hence this technique is an appropriate method to be used in places like super markets, this will help in reducing manpower and helps in making a better shopping experience for customers.

CHAPTER 6

CONCLUSION & FUTURE SCOPE

6.1 Conclusion

This project has been successfully implemented. This system is not only effective in eradicating the long queues but also manages the budget of the customer. This system is automated and far better than the existing Barcode system. With new technologies rapidly making every walk of life smart, shopping should be made smarter too. The system also has a very quick and easy billing option.

6.2 Future Scope

In future, we can pay the bill amount via online by using the smart phone by scanning the QR code of that particular supermarket. And get the soft copy of the bill receipt to check out from the super market.

DUAL AXIS SOLAR TRACKING SYSTEM

*A major project report submitted in partial fulfillment of the requirements
for the award of the degree of*

BACHELOR OF TECHNOLOGY

in

ELECTRONICS AND COMMUNICATION ENGINEERING

by

D.SHIREESHA (17S41A0409)

G.SANGEETHA (17S41A0417)

K.PRADEEP VARUN (17S41A0435)

M.MADHURI (18S45A0409)

Under the guidance of

Mrs. D.CHAMUNDESHWARI

Assistant Professor



**DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING
VAAGESWARI COLLEGE OF ENGINEERING**

(Affiliated to JNTU, Hyderabad & Approved by AICTE)

Ramakrishna Colony, Karimnagar-505 527

June -2021


Principal
Vaageswari College of Engineering
KARIMNAGAR-505 527.

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING
VAAGESWARI COLLEGE OF ENGINEERING
(Affiliated to JNTU, Hyderabad & Approved by AICTE)
Ramakrishna Colony, Karimnagar-505 527

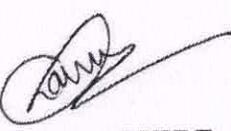


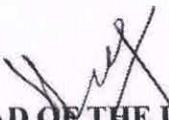
CERTIFICATE

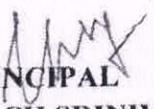
This is to certify that the major project report entitled "**DUAL AXIS SOLAR TRACKING SYSTEM**" submitted by following students, in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in ECE, is a bonafide record of the work performed by

D.SHIREESHA	(17S41A0409)
G.SANGEETHA	(17S41A0417)
K.PRADEEP VARUN	(17S41A0435)
M.MADHURI	(18S45A0409)

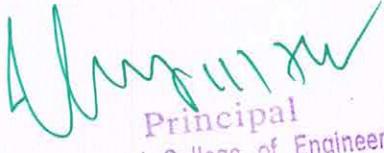
The work embodied in this major project report has not been submitted to any other institution for the award of any degree.


INTERNAL GUIDE
Mrs. D. CHAMUNDESHWARI
Assistant Professor


HEAD OF THE DEPT.
Mr. A. VENKATA REDDY
Associate Professor

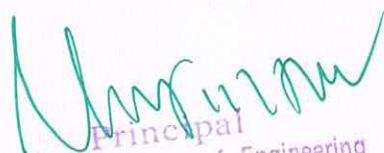

PRINCIPAL
Dr. CH. SRINIVAS

EXTERNAL EXAMINER


Principal
Vaageswari College of Engineering
KARIMNAGAR-505 527.

ABSTRACT

The goal of this thesis was to develop a laboratory prototype of a solar tracking system, which is able to enhance the performance of the photovoltaic modules in a solar energy system. The operating principle of the device is to keep the photovoltaic modules constantly aligned with the sunbeams, which maximizes the exposure of solar panel to the Sun's radiation. As a result, more output power can be produced by the solar panel. The work of the project included hardware design and implementation, together with software programming for the microcontroller unit of the solar tracker. The system utilised an ATmega328P microcontroller to control motion of two servo motors, which rotate solar panel in two axes. The amount of rotation was determined by the microcontroller, based on inputs retrieved from four photo sensors located next to solar panel. At the end of the project, a functional solar tracking system was designed and implemented. It was able to keep the solar panel aligned with the sun, or any light source repetitively. Design of the solar tracker from this project is also a reference and a starting point for the development of more advanced systems in the future.


Principal
Vaageswari College of Engineering
KARIMNAGAR-505 527.

CHAPTER 6

CONCLUSION & FUTURE SCOPE

6.1 CONCLUSION

In this 21st century, as we build up our technology, population & growth, the energy consumption per capita increases exponentially, as well as our energy resources (e.g. fossils fuels) decrease rapidly. So, for sustainable development, we have to think alternative methods (utilization of renewable energy sources) in order to fulfil our energy demand. In this project, Dual Axis Solar Tracker, we've developed a demo model of solar tracker to track the maximum intensity point of light source so that the voltage given at that point by the solar panel is maximum. After a lot of trial and errors we've successfully completed our project and we are proud to invest some effort for our society. Now, like every other experiment, this project has couple of imperfections.

- Our panel senses the light in a sensing zone, beyond which it fails to respond.
- If multiple sources of light (i.e. diffused light source) appear on panel, it calculates the vector sum of light sources & moves the panel in that point.

This project was implemented with minimal resources. The circuitry was kept simple, understandable and user friendly.

6.2 FUTURE SCOPE

With the available time and resources, the objective of the project was met. The project is able to be implemented on a much larger scale. For future projects, one may consider the use of more efficient sensors, which should also be cost effective and consume little power. This would further enhance efficiency while reducing costs. If there is the possibility of further reducing the cost of this project, it would help a great deal. This is because whether or not such projects are embraced is dependent on how cheap they can be. Shading has adverse effects on the operation of solar panels. Shading of a single cell will have an effect on the entire panel because the cells are usually connected in series. With shading therefore, the tracking system will not be able to improve efficiency as is required.

DESIGN OF SOLAR TRACKING ENERGY SYSTEM

*A mini project report submitted in partial fulfillment of the requirements
for the award of the degree of*

BACHELOR OF TECHNOLOGY

in

ELECTRONICS AND COMMUNICATION ENGINEERING

by

K.SPANDHANA (17S45A0413)

S.NAGA SHARANYA (17S41A0446)

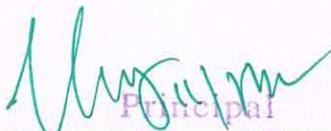
P.ANJALI (18S45A0419)

S.SUPRIYA (18S45A0424)

*Under the Guidance of
Mr.T. NAGESHWAR RAO
Associate Professor*



Department of Electronics and Communication Engineering
VAAGESWARI COLLEGE OF ENGINEERING
(Affiliated to JNTUH Hyderabad & Approved by AICTE New Delhi)
Ramakrishna colony, Karimnagar-505527
2021


Principal
Vaageswari College of Engineering
KARIMNAGAR-505 527.

**Department of Electronics and Communication Engineering
VAAGESWARI COLLEGE OF ENGINEERING**



CERTIFICATE

This is certify to that the mini project report entitled **DESIGN OF SOLAR TRACKING ENERGY SYSTEM** submitted by the following students in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in ECE, and is a bonafide record of the work performed by

K.SPANDHANA

(17S45A0413)

S.NAGA SHARANYA

(17S41A0446)

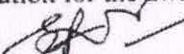
P.ANJALI

(18S45A0419)

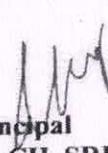
S.SUPRIYA

(18S45A0424)

The work embodied in this mini project report has not been submitted to any other institution for the award of any degree.


Mr. T. NAGESHWAR RAO
Associate Prof.
Internal Guide


Mr. A. VENKATA REDDY
Associate Prof.
Head of the Dept.


Principal
Dr. CH. SRINIVAS

External Examiner

ABSTRACT

Solar tracking energy system is a Power generating from sunlight. This method of power generation is simple and is taken from natural resource. This needs only maximum sunlight to generate power. Solar panels collect solar radiation from the sun and actively convert that energy to electricity. A solar tracking system for renewable energy is designed and built to collect free energy from the sun, store it in the battery and convert this energy to alternating current. The generation of power from the reduction of fossil fuels is the biggest challenge for the next half century. The idea of converting solar energy into electrical energy using photovoltaic panels holds its place in the front row compared to other renewable sources. But the continuous change in the relative angle of the sun with reference to the earth reduces the watts delivered by solar panel.

In this context solar tracking system is the best alternative to increase the efficiency of the photovoltaic panel. Solar trackers move the payload towards the sun throughout the day. In this paper different types of tracking systems are reviewed and their pros and cons are discussed in detail. The results presented in this review confirm that the azimuth and altitude dual axis tracking system is more efficient compared to other tracking systems. However in cost and flexibility point of view single axis tracking system is more feasible than dual axis tracking system.

The main goal of increasing the efficiency is to get the maximum power from the solar panel. The project is to design and implementation simple and cheap price solar tracker system with two axes (azimuth angle as well as altitude angle) using Light Dependent Resistor (LDR) with real dimensions the project composed of solar panel, two-motor satellite dish and ball-joint, LDR sensor module and an electronic circuit. This project is compared with fixed solar panel and the results showed that solar tracker more output power than fixed solar panel. The project is divided into two parts; hardware and electronic. Hardware part generally composed of solar panel, two-DC motors with gearbox and LDR sensor module. Second part is electronic circuit. In this work sensing of the sun position carried out in two stages, first stage or direct sensing performed via set of LDR sensors as output tuning to trims the azimuth and altitude angles. The results indicated that the automatic solar tracking system is more reliable.

CHAPTER 6

CONCLUSION AND FUTURE SCOPE

6.1 Conclusion

The project "SOLAR TRACKING SYSTEM" has been successfully designed and tested. Integrating features of all the hardware components used have developed it. Presence of every module has been reasoned out and placed carefully thus contributing to the best working of the unit. Secondly, using highly advanced IC's and with the help of growing technology the project has been successfully implemented.

Advances in the algorithms of sun tracking systems have enabled the development of many solar thermal and photovoltaic systems for a diverse variety of applications in recent years. Compared to their traditional fixed-position counterparts, solar systems which track the changes in the sun's trajectory over the course of the day collect a far greater amount of solar energy, and therefore generate a significantly higher output power. This paper has presented a review of the major algorithms for sun tracking systems developed over the past 20 years. It has been shown that these sun tracking algorithms can be broadly classified as either closed-loop or open-loop types, depending on their mode of control. The control / computational principles of each method have been reviewed and their performance and relative advantages / disadvantages systematically discussed. Overall, the results presented in this review confirm the applicability of sun tracking system for a diverse range of high performance solar-based applications.

6.2 Future Scope

1. By using controller microcontroller we can implement the intelligent system in future.
2. In Future the conventional energy is not sufficient for use. So there is need of use of non conventional energy sources.
3. Reducing the cost of mechanical structure.
4. Adjusting the gear ratio to decrease energy loss.
5. Improving the load carrying capacity.

MEMS BASED WHEELCHAIR

*A mini project report submitted in partial fulfillment of the requirements
for the award of the degree of*

BACHELOR OF TECHNOLOGY

in

ELECTRONICS AND COMMUNICATION ENGINEERING

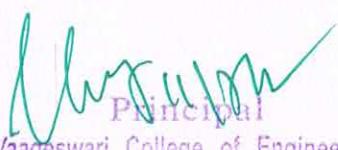
by

M.LAHARI	(17S41A0441)
K.SONY	(18S45A0427)
V.JYOTHIRMAI	(18S45A0433)
U.LIKITH SAI	(16S41A0481)

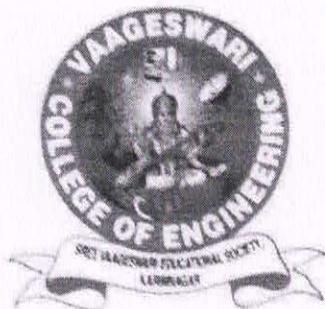
*Under the Guidance of
Mr.M.VISHNUvardan REDDY
Associate Professor*



Department of Electronics & Communication Engineering
VAAGESWARI COLLEGE OF ENGINEERING
(Affiliated to JNTUH Hyderabad & Approved by AICTE, New Delhi)
Ramakrishna colony, Karimnagar, TS-505527
2021


Principal
Vaageswari College of Engineering
KARIMNAGAR-505 527.

Department of Electronics & Communication Engineering
VAAGESWARI COLLEGE OF ENGINEERING

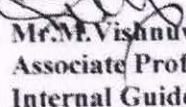


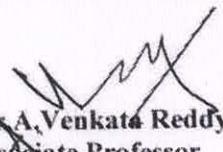
CERTIFICATE

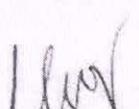
This is certify to that the mini project report entitled "**MEMS BASED WHEELCHAIR**" submitted by the following students in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in ECE, and is a bonafide record of the work performed by

M.LAHARI	(17S41A0441)
K.SONY	(18S45A0427)
V.JYOTHIRMAI	(18S45A0433)
U.LIKITH SAI	(16S41A0481)

The work embodied in this mini project report has not been submitted to any other institution for the award of any degree.


Mr. M. Vishnuvardhan Reddy
Associate Professor
Internal Guide


Mr. A. Venkata Reddy
Associate Professor
Head of the Dept.


Principal
Dr. Ch Srinivas

External Examiner

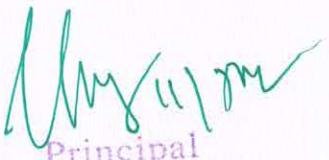

Principal
Vaageswari College of Engineering
KARIMNAGAR-505 527.

ABSTRACT

The main aim of this project is to control the devices and to ask the basic needs like water, food or medicine by using MEMS (Micro Electro-Mechanical Systems) technology. MEMS is a Micro Electro Mechanical Sensor which is a highly sensitive sensor and capable of detecting the tilt. This sensor finds the tilt is to the right side then the device will be on for the first time then next time it will be off. In the same way, if the tilt is to the left side then another device is going to be controlled. The tilt is in upwards or downward direction the related need will be announced. This device is very helpful for paralysis and physically challenged persons.

This device is portable and this system operation is entirely driven by wireless technology. User can wear it to his head like a band and can operate it by tilting the MEMS sensor.

The MEMS based sensor detects the tilt and provides the information to the microcontroller. And the controller judges whether the instruction is right movement or left movement instruction and controls the operation respectively.



Principal
Vaageswari College of Engineering
KARIMNAGAR-505 527.

CHAPTER-7

CONCLUSION

This project is implemented using various components, the project is just a prototype if we make this project as commercial project, then definitely useful to all the disabled people, who are unable to move and unable to drive normal wheel chair their own. With their hand movements they can move wheel chair right, left, front, and back directions with 3-axis accelerometer (MEMS SENSOR) which is a highly sensitive sensor and capable of detecting the tilt. The future scope of the project can be extended using wireless technology, and intelligent hand gesture wheel chair.

CHAPTER-8

FUTURE SCOPE

Voice monitoring helps the disabled person to determine the obstacle by acknowledging with alarm signals with slight modification in power section by monitoring the battery voltage levels to enhance the speed and estimate the delay for action to be taken. To enhance the speed of the wheelchair dc motors can be replaced by servomotors.

**MONITORING AND CONTROLLING AGRICULTURE
FIELD ENVIRONMENT**

*A mini project submitted in partial fulfilment of the requirements
for the award of the degree of*

BACHELOR OF TECHNOLOGY

in

ELECTRONICS & COMMUNICATION ENGINEERING

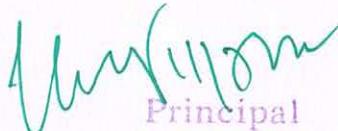
by

M.RAMYA	17S41A0439
T.KAVYARANI	17S41A0457
P.MANASA	18S45A0420
S.ADITHYA	18S45A0425

*Under the guidance of
Mr. B. THIRUPATHI
Assistant Professor*



**DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING
VAAGESWARI COLLEGE OF ENGINEERING**
(Affiliated to JNTUH Hyderabad & Approved by AICTE New Delhi)
Ramakrishna colony, Karimnagar-505527
February-2021


Principal
Vaageswari College of Engineering
KARIMNAGAR-505 527.

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING
VAAGESWARI COLLEGE OF ENGINEERING
(Affiliated to JNTUH Hyderabad & Approved by AICTE New Delhi)
Ramakrishna colony, Karimnagar-505527



CERTIFICATE

This is to certify that the mini project entitled "**MONITORING AND CONTROLLING AGRICULTURE FIELD ENVIRONMENT**", submitted by following students, in partial fulfillment of the requirements for the award of Degree of Bachelor of Technology in ECE, is a bonafide record of the work performed by

M.RAMYA	17S41A0439
T.KAVYARANI	17S41A0457
P.MANASA	18S45A0420
S.ADITHYA	18S45A0425

The work embodied in this dissertation has not been submitted to any other institution for the award of any degree.

Mr. B. Thirupathi
INTERNAL GUIDE
Mr. B. THIRUPATHI
Assistant Professor

Mr. A. Venkata Reddy
HEAD OF THE DEPT.
Mr. A. VENKATAREDDY
Associate Professor

Dr. C. H. Srinivas
PRINCIPAL
Dr. C. H. SRINIVAS

EXTERNAL EXAMINAR

Principal
Vaageswari College of Engineering
KARIMNAGAR-505 527.

ABSTRACT

The main aim of this project is to monitor and control the parameters of the agricultural field. The purpose of the project is to provide the details of soil fertility, temperature, humidity and to control these parameters.

Appropriate environmental conditions are necessary for optimum plant growth, improved Crop yields, and efficient use of water and other resources. Automating the data acquisition process of the soil conditions and various climatic parameters that govern plant growth allows information to be collected at high frequency with less labour requirements. The existing systems employ PC for keeping the user continuously informed the conditions inside the greenhouse, but are unaffordable, bulky, difficult to maintain and less accepted by the technologically unskilled workers.

The objective of this project is to provide a combination of manual supervision and partial automation and is similar to manual set-up in most respects but it reduces the labor involved in terms of Irrigation design is simple, easy to install, microcontroller-based circuit to monitor and record the values of temperature, soil moisture (Transistor circuit) and light of the natural environment that are continuously modified and controlled in order optimize them to achieve maximum plant growth and yield.

It communicates with the various sensor modules in real-time in order to control the greenhouse by actuating a cooler (fan), water pump (petro-card system), Buzzer and artificial lights (bulbs) respectively according to the necessary condition of the crops. An integrated Liquid crystal display (LCD) is also used for real time display of data acquired from the various sensors and the status of the various devices. Also, the use of easily available components reduces the manufacturing and maintenance costs. The design is quite flexible as the software can be changed any time. It can thus be made to the specific requirements of the user. This makes the proposed system to be an economical, portable and a low maintenance solution for greenhouse applications, especially in rural areas and for small scale agriculturists.

CHAPTER 6

CONCLUSION & FUTURE SCOPE

6.1 CONCLUSION

The project "AGRICULTURE MONITORING & CONTROLLING" has been successfully designed and tested.

It has been developed by integrating features of all the hardware components used. Presence of every module has been reasoned out and placed carefully thus contributing to the best working of the unit.

Secondly, using highly advanced IC's and with the help of growing technology the project has been successfully implemented.

6.2 FUTURE SCOPE

This study is a review on controlling an electronic device apply for temperature and soil moisture process using Android based Smart phone application in order to address the issues of flexibility and functionality. Beside, this study in future will also develop a low cost and flexible for agriculture control due to not to incorporate with an expensive components such as high end personal computers. On peak of that, now anyone, from anytime and anywhere can have connectivity for anything and it is expected that these connections will extend and create an entirely advanced dynamic network of the internet of things.

EMBEDDED SECURITY SYSTEM USING ULTRASONIC SENSOR

*A mini project report submitted in partial fulfillment of the requirements
for the award of the degree of*

BACHELOR OF TECHNOLOGY

in

ELECTRONICS & COMMUNICATION ENGINEERING

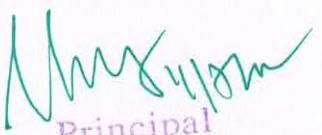
by

M.SUSMITHA	(17S41A0440)
M.UTTEJA	(17S41A0443)
MD.RASHEED	(17S41A0445)
P.RUCHITHA	(17S41A0448)

*Under the Guidance of
Mr.M.KRANTHI KUMAR
Assistant Professor*



Department of Electronics and Communication Engineering
VAAGESWARI COLLEGE OF ENGINEERING
(Affiliated to JNTUH Hyderabad & Approved by AICTE New Delhi)
Ramakrishna colony, Karimnagar-505527
February 2021


Principal
Vaageswari College of Engineering
KARIMNAGAR-505 527.

**Department of Electronics and Communication Engineering
VAAGESWARI COLLEGE OF ENGINEERING**



CERTIFICATE

This is certify to that the mini project report entitled "**EMBEDDED SECURITY SYSTEM USING ULTRASONIC SENSOR**" submitted by the following students in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in ECE, and is a bonafide record of the work performed by

M.SUSMITHA

(17S41A0440)

M.UTTEJA

(17S41A0443)

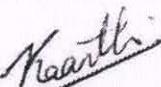
MD.RASHEED

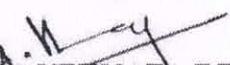
(17S41A0445)

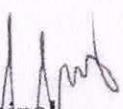
P.RUCHITHA

(17S41A0448)

The work embodied in this mini project report has not been submitted to any other institution for the award of any degree.


Mr. M. KRANTHI KUMAR
Assistant Prof.
Internal Guide


Mr. A. VENKATA REDDY
Associate Prof.
Head of the Dept.


Principal
Dr. Ch. SRINIVAS

External Examiner

ABSTRACT

Now a day's every system is automated in order to face new challenges in the present day situation. Automated systems have less manual operations, so that the flexibility, reliabilities are high and accurate. Hence every field prefers automated control systems. Especially in the field of electronics automated systems are doing better performance.

Now a days theft cases are increasing rapidly. To prevent these, security for homes is mandatory. Even we have security systems like CC cameras but everyone cannot afford. For such cases we have done this project for security and automatic door opening system and everyone can buy it.

We might have seen automatic door opening systems at banks, shopping malls etc., where as soon as a person approach the door (at about 2 or 3feet) ,the door open by sliding in reverse direction. This type of system is very useful as you do not stand by the door and open it whenever a guest comes.

The purpose of this mini project is to design an Automated door opening system with intruder alert using ultrasonic sensors. So, in this case ultrasonic sensors used as a distance measurement sensor. Using this distance value, we will turn buzzer ON or OFF and also automatically opens and closes the door by detecting a person or object based up on the user selected mode.

CHAPTER 6

CONCLUSION AND FUTURE SCOPE

6.1 CONCLUSION

- We have gained practical knowledge of electronic equipment, communications and designing
- This low cost system design is used to improve standard living in home. As this system can be used in order to provide security to the user.
- Meet the need to automatic life to give a advantage of the technology advancement.

6.2 FUTURE SCOPE

- By using controller microcontroller we can implement the intelligent system in future.
- In future it can be used as an advanced tracking system along with high intensity camera to track a real target.
- The advantage of this unit is that to run the system we can use video camera and other sensors to see the live moving target from anywhere in the world.
- Further developments could relax these restrictions by allowing range detection from the video image and implementing tracking and prediction of a moving target, but these features proved impossible to include within our timeframe. Target acquisition occurs via processing of an image stream from a single webcam, making use of foreground segmentation and detection, together with a calibrated pinhole model to convert from pixel distances into real-world Cartesian coordinates.
- This uses a camera mounted on the barrel to read a calibrated fan pattern printed behind the launcher base, providing pose feedback by detecting and recording movement from a origin. We also show results for ballistic light tests conducted on the foam missiles, allow the calculation of the desired launcher pose given a target location.

MICRO CONTROL BASED WATER LEVEL INDICATOR

*A mini project report submitted in partial fulfillment of the requirements
for the award of the degree of*

BACHELOR OF TECHNOLOGY

in

ELECTRONICS & COMMUNICATION ENGINEERING

by

K.ANUSHA	(17S41A0436)
T.DIVYA	(18S45A0429)
V.SRAVANTHI	(18S45A0432)
S.SAI KRISHNA	(18S45A0435)

Under the guidance of

Mr.A.VENKATA REDDY M.Tech.Ph.D

Associate Professor & HOD



**DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING
VAAGESWARI COLLEGE OF ENGINEERING**

(Affiliated to JNTU, Hyderabad & Approved by AICTE)
Ramakrishna Colony, Karimnagar-505 527

February -2021


Principal
Vaageswari College of Engineering
KARIMNAGAR-505 527.

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING
VAAGESWARI COLLEGE OF ENGINEERING
(Affiliated to JNTU, Hyderabad & Approved by AICTE)
Ramakrishna Colony, Karimnagar-505 527



CERTIFICATE

This is to certify that the Mini Project Report entitled "**MICRO CONTROL BASED WATER LEVEL INDICATOR**" submitted by following students, in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in ECE, is a bonafide record of the work performed by

K.ANUSHA	(17S41A0436)
T.DIVYA	(18S45A0429)
V.SRAVANTHI	(18S45A0432)
S.SAI KRISHNA	(18S45A0435)

The work embodied in this Mini Project Report has not been submitted to any other institution for the award of any degree.

INTERNAL GUIDE
Mr.A.VENKATA REDDY M.Tech.Ph.D
Associate Professor & HOD

HEAD OF THE DEPT
Mr.A.VENKATA REDDY
Associate Professor

PRINCIPAL
Dr. CH.SRINIVAS

EXTERNAL EXAMINER

Principal
Vaageswari College of Engineering
KARIMNAGAR-505 527.

ABSTRACT

This project deals with "Development of an embedded system for automatic water Tank control" using micro controller AT89S52 and quadrupled op-amp (LM324) acts as sensor. The project deals with level control of water in water tank and as well as in boilers in thermal plant for the safety purpose the control of water level in water tank is accomplished by controlling in put flow from water motor With help of microcontroller. As it has three levels max, medium, low, as the microcontroller automatically off the motor when the tank is full or reaches the MAX level. Turn on the water motor when the liquid level or water level in the water tank goes to low level. As the sensing circuit is constructed with help of OPAMP LM324 which acts as the comparator for comparing water at different levels and sends the signal to microcontroller thus microcontroller performs appropriate action For indication led's are also there to represent at three different levels this technique is easiest as well as very much cost effective

CHAPTER 6

CONCLUSION & FUTURE SCOPE

6.1 CONCLUSION

The project "MICRO CONTROLLER BASED LEVEL INDICATOR" has been successfully designed and tested. Integrating features of all the hardware components used have developed it. Presence of every module has been reasoned out and placed carefully thus contributing to the best working of the unit. Secondly, using highly advanced IC's and with the help of growing technology the project has been successfully implemented.

6.2 FUTURE SCOPE

This is an effective system for knowing the level of water in the tank. This project can also be successfully implemented in minor and major projects for knowing the level of water. Instead of employing electric probes for knowing the level of water we can also use the signaling method. The level of water is known by the time taken by the signal to come back.

ULTRASONIC BASED REVERSE PARKING GUIDANCE SYSTEM

*A mini project report submitted in partial fulfillment of the requirements
for the award of the degree of*

BACHELOR OF TECHNOLOGY

in

ELECTRONICS & COMMUNICATION ENGINEERING

by

S.RUCHITHA (17S41A0454)

V.ANIL (17S41A0459)

N.SOUMYA (18S45A0428)

S.ANUSHA (16S45A0428)

T.MAMATHA (15S41A04E6)

Under the Guidance of

Dr. K. KEERTI KUMAR

Associate Professor



**DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING
VAAGESHWARI COLLEGE OF ENGINEERING**

(Affiliated to JNTU, Hyderabad & Approved by AICTE)

Ramakrishna Colony, Karimnagar-505 527

February -2021

Uma
Vaageswari College of Engineering
KARIMNAGAR-505 527.

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING
VAAGESWARI COLLEGE OF ENGINEERING

(Affiliated to JNTU, Hyderabad & Approved by AICTE)
Ramakrishna Colony, Karimnagar-505 527

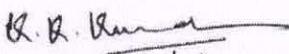


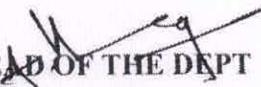
CERTIFICATE

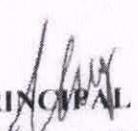
This is to certify that the Mini Project Report entitled "**ULTRASONIC BASED REVERSE PARKING GUIDANCE SYSTEM**" submitted by following students, in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in ECE, is a bonafide record of the work performed by

S.RUCHITHA	(17S41A0454)
V.ANIL	(17S41A0459)
N.SOUMYA	(18S45A0428)
S.ANUSHA	(16S45A0428)
T.MAMATHA	(15S41A04E6)

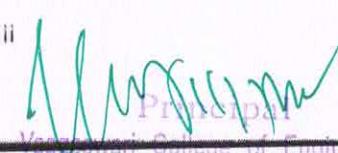
The work embodied in this Mini Project Report has not been submitted to any other institution for the award of any degree.


INTERNAL GUIDE
Dr. K. KEERTI KUMAR
Associate Professor


HEAD OF THE DEPT
Mr.A. VENKATA REDDY
Associate Professor


PRINCIPAL
Dr. CH.SRINIVAS

EXTERNAL EXAMINER

ii

Prasad
Vaageswari College of Engineering
KARIMNAGAR-505 527.

ABSTRACT

With the development of automobile industry, the number of private cars is greatly increasing. Correspondingly, the number of rookie drivers is increasing as well. For the rookie drivers, how to backing is always a troublesome operation. Many of them complained that their valuable cars are easily got damaged by obstacles that are hardly seen through their rearview mirror. So in this project, a new type system has been designed: smart system of ultrasonic car parking with different display mode, audio mode and smart mode.

The ultrasonic sensor used in security technology such as car collision avoidance and distance measurement, is the best device can be used in detecting obstruction behind the car when backing up. In this paper, we analyze the interference of ultrasonic signal when transmitting and receiving, and then resolve it by software. There is a blind area and distance limitation in ultrasonic distance measurement. The result of project shows that the system's efficiency is not 100% successfully because of error of the ultrasonic sensor sensitivity itself. The system cannot display the exact distance between car and the obstacle although the entire output modes are successfully functioning.

CHAPTER 6

CONCLUSION AND FUTURESCOPE

6.1 Conclusion

The project "ULTRASONIC BASED REVERSE CAR PARKING GUIDANCE SYSTEM" has been successfully designed and tested.

It has been developed by integrating features of all the hardware components used. Presence of every module has been reasoned out and placed carefully thus contributing to the best working of the unit.

6.2 FutureScope

- 1.Using it in robots.
- 2.Making it available for all types of vehicle.
- 3.Using several sensors to get proper reading around the whole car not in just reverse direction.
- 4.Automatic Car Parking
- 5.Effective implementation on Intelligent Parking Assist System (IPAS), also known as the Advanced Parking Guidance System (APGS).