SMART HELMETS FOR BIKERS FOR SAFETY MEASURE USING RF MODULE

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

BACHELOR OF TECHNOLOGY

in

ELECTRONICS & COMMUNICATION ENGINEERING

by

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ABSTRACT

As we know India is most populated country and has huge population, nowadays youth are fond of bikes and because of fashion, they neglect wearing helmet. Because of these, bike accidents are increasing day by day which causes deaths. Major deaths are due to head injuries which can be prevented by wearing a helmet.

A smart helmet is a protective head gear used by the rider which makes bike driving safer than before. The main purpose of this helmets to provide safety for the rider. This smart bike helmet system will have two modules, one on the helmet and another on the bike. An RF module can be used as wireless link for communication between transmitter and receiver. It is compulsory to wear the helmet, without which the ignition cannot turn on. And the bike will not start unless rider is wearing the helmet.

CHAPTER 6

CONCLUSION & FUTURESCOPE

6.1 CONCLUSION

The project "SMART HELMETS FOR BIKERS FOR SAFETY MEASURE USING RF MODULE" we have successfully designed and analyzed. By implementing this project, a safe journey is possible which would decrease the head injuries during accidents .this system sequentially checks whether the rider is wearing a helmet or not and it is economical and easy to use. So it has good social aspects authority. A prevention with smart helmet is better than unfortunate incident.

6.2 FUTURE SCOPE

- In future This system can be extended by adding alcohol sensor which discards the possibility of drunk and drive and hence road accidents are reduced to a greater extent.
- This system can also be expanded using GSM security feature that informs the nearest hospital and police station about the location of the place if any kind of accident happens.
- This safety system technology can further be enhanced in to four-wheeler also by replacing helmet with seatbelt.

DAM WATER LEVEL MONITORING AND GATES CONTROL SYSTEM USING GSM

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

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ABSTRACT

The dam water level monitor and control system based on GSM is a project that aims to monitor the water level in dams and control the flow of water using GSM technology. This system is designed to provide real time information about the water level in dam to the authorities responsible managing the dam. The system uses sensors to detect the water level in dam and send the data to a micro controller. The microcontroller processes the data and send it to a GSM module which then sends the data to mobile through the GSM.

In addition to monitor, the system can also control the flow of water in and out of the dam based on the water levels detected by the sensors. The system can automatically can open or close the dam gates to regulate the water flow and prevent flooding and droughts.

Overall, the dam water level monitor and control system based on GSM is an important project that can help prevent natural disasters caused by uncontrolled water flow in dams.

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CHAPTER 7

FUTURESCOPE & CONCLUSION

7.1 FUTURE SCOPE

For the purpose of the future research, the project work can be improved upon. The following areas were highlighted for this purpose.

The future of "DAM WATER LEVEL MONITORING AND GATES CONTROL SYSTEM USING GSM" technology holds great potential for more advanced monitoring.
This type of system is more helpful in situations like floods where the automated gate lifting system will check the water levels and react according the situation.
This could have a substantial benefit to the research work related to the efficient management of water at dams by reducing the manual work.

7.2 CONCLUSION

Water is one of the primary resource for human survival. But unfortunately a mammoth amount of water is being squandered by uncontrolled use.
There are certain automated water level monitoring systems in practice but they are used for various applications and have some shortness in practice.
We tried to suggest ways to tackle this problem and implement an efficient water level monitoring system using GSM. The main motto of this project work is to establish a flexible, economical and easy configurable system which can solve our water level monitoring problem. among many other issues.
We have been using a micro controller to manage the data and to reduce the cost.

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POWER SAVING SYSTEM FOR SHOPPING MALLS BASED ON VISITOR COUNT USING IOT

A major project report submitted in partial fulfillment of the requirement

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ABSTRACT

Wastage of electricity is one of the main problems which we are facing nowadays due to our negligence and forgetfulness. The major problem is associated with its generation cost, which is increasing by every passing day and putting undue burden on the consumers as they are forced to pay huge electricity bills. To overcome this problem, a powerful and efficient solution for energy efficient lighting can be adopted to save energy by optimizing home appliances, such as fans, lights, etc.

This project is designed in order to count the number of visitors of malls etc. The system counts both the entering and exiting visitors of malls. Depending upon the sensor interruption, the system identifies the entry and exit of the visitor.
This project provides a method for automatic control of devices such as light, fan of shopping mall. This project is designed around a NODEMCU which forms the control unit of the project

This project takes over the task of controlling the room lights and fans as well as the counting number of visitors in the mall. When somebody enters into the room then the counter is incremented by one and the main circuit gets energized, the lights will be only switched OFF until all the persons in the mall go out.

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CHAPTER 6
CONCLUSION & FUTURE SCOPE

6.1 CONCLUSION

This project deals with the usage of the energy in this competitive world of electricity. The functioning also teaches us how we can preserve electricity even in the electricity-based project. This system is an effective way of for the power management, automatic device control and together count.

In today's digital world, technology is very advanced are things are preferred to be done automatically without any human efforts. This project helps to reduce human efforts and conserve resources. More over the system is intelligent enough to take decision on its own and is economical as the components used are readily available and inexpensive.

SMART DOOR LOCK/UNLOCK SYSTEM USING IOT

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ABSTRACT

People are experiencing more security issues around the world today, and security has become the most important concern everywhere in the world; as a result, security has become increasingly important in recent years. Security refers to the safeguarding of our lives and property. It is critical to ensure the safety of people and their valuables in order to prevent illicit handling. As a result, concentrating on door lock security is critical to minimize more difficulties in the monitored area.

The goal of this project was to create an internet-connected door lock that could be simply put on a variety of doors, operated via the internet, and trusted for security. Modern homes are gradually moving away from traditional switches and towards a centralized control system with remote control switches. A smartphone-controlled system home automation system gives a modern answer. The most significant advantage of our proposed system is to build smart door lock which can be access remotely via mobile, to increase security of the house and to design and implement a cheap and open-source home automation. This project will make human lives more versatile with enhanced security, ease, and the ability to live an upper-class lifestyle, resulting in our lives becoming much simpler, finer, accessible, and stable.

CHAPTER 6

CONCLUSION & FUTURESCOPE

6.1 CONCLUSION

The project "**SMART DOOR LOCK/UNLOCK SYSTEM USING IoT**" 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.

It must be admitted that the projects and research shown here have been a great help in advancing this smart door lock technology. It is important to ensure security through various technical strategies such as fingerprint recognition, facial recognition, speech recognition etc., and to be able to handle keys through remote access.

6.2 FUTURE SCOPE

The future of smart door lock/unlock systems holds immense potential for further advancements and innovations. Here are some potential areas for future development:
Extensions within the app could also be viewing that who's passing through the door by adding the camera and sending the stream directly to the mobile device. Voice Commands can be also included to enhance the security. Motion Detection in case someone roams around the door for a longer time, then the camera will send a recording or that to the Smartphone. This can also extend to, if someone is trying to break in the door, the alarm will start beeping on a mobile device as well.

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ABSTRACT

As we know India is most populated country and has huge population, nowadays youth are fond of bikes and because of fashion, they neglect wearing helmet. Because of these, bike accidents are increasing day by day which causes deaths. Major deaths are due to head injuries which can be prevented by wearing a helmet.

A smart helmet is a protective head gear used by the rider which makes bike driving safer than before. The main purpose of this helmets to provide safety for the rider. This smart bike helmet system will have two modules, one on the helmet and another on the bike. An RF module can be used as wireless link for communication between transmitter and receiver. It is compulsory to wear the helmet, without which the ignition cannot turn on. And the bike will not start unless rider is wearing the helmet.

CHAPTER 6

CONCLUSION & FUTURESCOPE

6.1 CONCLUSION

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6.2 FUTURE SCOPE

- In future This system can be extended by adding alcohol sensor which discards the possibility of drunk and drive and hence road accidents are reduced to a greater extent.
- This system can also be expanded using GSM security feature that informs the nearest hospital and police station about the location of the place if any kind of accident happens.
- This safety system technology can further be enhanced in to four-wheeler also by replacing helmet with seatbelt.

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IOT BASED SMART PARKING SYSTEM

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

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ABSTRACT

Now days finding parking in busy areas is very hard and there is no system to get the details of parking availability online. Imagine if you can get the parking slot availability information on your phone and you don't have roaming around to check the availability. This problem can be solved by the **IoT based smart parking system.** Using the IoT based parking system you can easily access the parking slot availability over the internet. This system can completely automate the car parking system. From your entry to the payment and exit all can be done automatically.

So here we are building an **IOT based smart Parking System** using Node MCU, Three IR sensors, and six LEDs. The three IR sensors are used to detect the parking slot availability. LEDs used indicate the availability of slots by Green and Red LEDs. Here we are using the Node MCU to show or publish the data on cloud which can be monitored from even outside or else surroundings of the area.

CONCLUSION & FUTURESCOPE

The development of IoT based smart parking information systems is one of the most demanded research problems for the growth of sustainable smart cities. It can help the drives to find a free car parking space near to their destination (market, office, or home). It will also save time and energy consumption by efficiently and accurately predicting the available car parking space.

SCOPE FOR FUTURE WORK

There are few limitations of this study. The first limitation of this study is that the decision support system predicts the availability of parking lots only considering the parking occupancy information. Further it does not consider the weather condition and social events. Future research will be devoted to considering the weather conditions and social events information along with parking lots occupancy information. Second, the proposed approach has been developed only considering the parking lots information. Further research will investigate the roadside parking space availability and traffic congestion information to reduce the impact of estimation uncertainties.

REFERENCES

PASSWORD BASED LINEMAN'S SAFTEY SYSTEM FOR CIRCUIT BREAKERS

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ABSTRACT

A circuit breaker is an automatically operated electrical switch designed to protect an electrical circuit from damage caused by overload or short circuit. Its basic function is to detect a fault condition and interrupt current flow. Unlike a fuse, which operates once and then must be replaced, a circuit breaker can be reset (either manually or automatically) to resume normal operation. When operated manually we see fatal electrical accidents to the lineman are increasing during the electric line repair due to lack of communication and coordination between the maintenance staff and the electric substation staff.

In order to avoid such accidents, the breaker can be so designed such that only authorized person can operate it with a password. This ensures security of the worker because no one can turn on the line without his permission. This system is fully controlled by the ATMEGA328P microcontroller. The password is stored in an EEPROM, interfaced to the microcontroller. A GSM module is used to enter the password and a relay to open or close circuit breaker, which is indicated by a LCD.

Chapter 6

Conclusion and Future Scope

6.1 Conclusion

- It can work on a single given known password. No other person can reclose the breaker until the stored password is entered.
- It gives no scope of password stealing. It is effective in providing safety to the working staff. It is economical and it can be easily installed.
- It can be concluded that the proposed system can be used as an effective application in the present working system and provides safety to lineman and also corrective measures can be taken.

6.2 Future Scope

- Instead of GSM 300 we can use GSM 900 which can be connected to IOT (internet of things). By using IOT we can operate the relays from any area as we can directly connect to the server.
- Wireless ultrasonic and PIR sensors can be also used.
- We can use SCADA system, to help easy trouble shoot, to identify the fault location directly and line man can easily rectify it .
- We can also use EPROMS that can be interfaced to system so the circuit breaker cannot only operate from the substation, but also from other location through wireless communication.

DRIVERS DROWSINESS DETECTION USING IOT

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ABSTRACT

The major aim of this project is to develop a drowsiness detection system by monitoring the eyes; it is believed that the symptoms of driver fatigue can be detected early enough to avoid car accident.

In such a case when drowsiness is detected, a warning signal is issued to alert the driver, their detection system provides a non-contact technique for judging different levels of driver alertness and facilities early detection of decline in alertness during in driving.

In such a case fatigue is detected, warning signal is issued to alert the driver. This system is also has additional feature of slowing down the vehicle if driver fails to respond to the alarm and the information is published to the cloud and visualized on the mobile phone or system .

CHAPTER-6
6.1 CONCLUSION AND FUTURE SCOPE

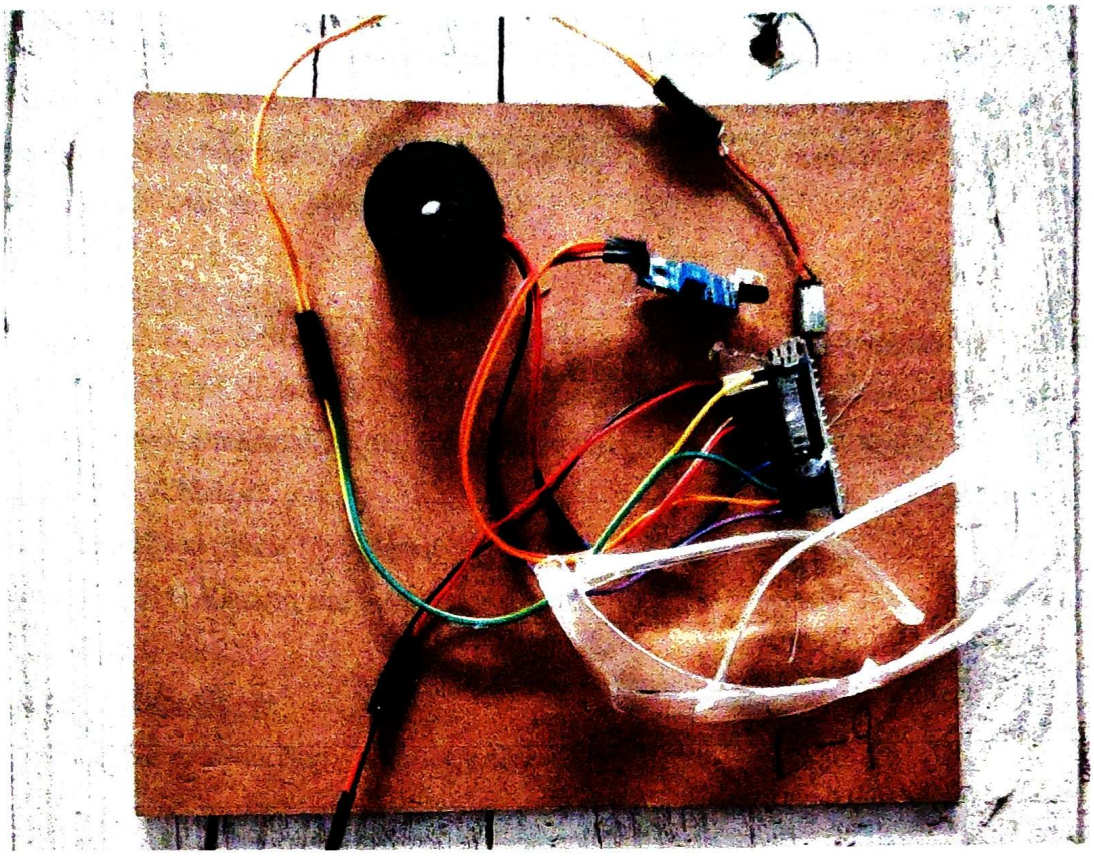

Figure:10 HARDWARE CIRCUIT

CONCLUSION : Based on the tests conducted, it clearly shows that using an IR sensor as an eye blink sensor is effective and feasible to determine if the person is in a drowsy state or not for as long as it is properly attached to a fix location of the glass. With the help of alarm modules consisting of the vibrator and the buzzer, the driver is being facilitated by the system to be awake while driving. For future works, it is recommended to explore more sensors to detect the blinking rate because the IR sensor is sensitive and not durable for long time usage. On the other hand, regarding the connection between the eye blink sensor into the Arduino, it is recommended to use any device that will transmit the output of the eye blink sensor into a wireless connection as long as it cannot affect the delay process. In other fields, image processing may be used as many researchers are now into machine learning and neural networks.

FUTURE SCOPE: This project presents drowsy driving detection and alert system using an eye blink sensor and a buzzer. Also vehicle accident detection using piezoelectric sensor and notification system with SMS to the user defined mobile or emergency numbers. IOT alert based connection is designed and implemented in embedded system domain. The proposed Vehicle accident detection sends an alert SMS regarding accident. Thus we attempt to reduce accident by detecting drowsiness of driver and notify emergency numbers using IOT connection, in case an accident occurs.

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GSM BASED INDUSTRIAL SECURITY SYSTEM

A major project report submitted in partial fulfillment of the requirement

for the award of the degree of

BACHELOR OF TECHNOLOGY

in

ELECTRONICS & COMMUNICATION ENGINEERING

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ABSTRACT

Security and automation is a prime concern in our day-to-day life. The approach to home and industrial automation and security system design is almost standardized nowadays whenever we go security and safety comes first comes first so security plays a vital role the emerging technology. So we have developed a system for industry security.

In this project we tried to increase the standard by combining new techniques and developed a low cost industrial automated security system The design of simple hardware circuit enables every user to use this wireless home security system with IR sensor fire sensor.

Previously there is no sensors to detect instruction and any abnormal conditions in Industry that may cause fire accidents and un- authorized persons may enters into Industries and it is wired system which is Difficult to maintain and needed -Internet access. We loss so many wireless in Industries.

To overcome that problems, we used GSM module based security system. It provide enhanced security as whenever a signal from sensor occurs, a text messages sent to desired number to take necessary actions (police station, forestation, owner). It is less cost and can be maintained easily than any other security device.

CHAPTER 6

CONCLUSION & FUTURE SCOPE

6.1 CONCLUSION

In this project presentation the fire detection and intrusion detection alerting system will be done through SMS. The main aim is providing security system or an accidents avoiding system for an industry, workers safety and security.

6.2 FUTURE SCOPE:

- We can monitor more parameters & devices as well as we can control these devices in Industrial automation.
- A Voice announcement system can be added to indicate device conditions.

ELECTRONIC VOICE GUIDER IN MUSEUMS AND EXPO'S

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

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ABSTRACT

An Electronic Voice Guider is presented as new type of audio guide for museums. The device consists of a IR sensor equipped with voice IC. The EOT board capable of recognizing artworks using features from accelerated segment test (FAST) keypoints and random forest classifiers and is able to be used for an entire day without the need to recharge the batteries. The main benefit, which is simplicity of use and the user preference of the proposed system over traditional audio gudies.

In existing system there will be a person who guide in the museum, but by this system there can be reduce of human power. Visitors enters the exhibition and receives a voice IC which is ready to use. No other devices will be handed out. The visitors enter museum and start exploring the exhibition. The voice guider employees embedded technology and natural language processing to interact with visitors in a conservational manner.

The device is user friendly, portable can be used in various languages, making it accessible to of wide range of visitors. Additionally, the device can collect data on visitors preference and behaviour which can be used to enhance the exhibition design.

CHAPTER 6

CONCLUSION & FUTURE SCOPE

The results presented in this article demonstrate the potential of replacing traditional museum audioguides with the proposed system. The complete system was thoroughly evaluated under real conditions. Moreover, the pilot test took place during the opening hours of the museum. Since two different scenarios have been considered, the system is configurable according to what each visitor demands. This fact, and the wearable hands-free nature of the system, are the main reasons why the user experience was satisfactory.

Moreover, the power consumption performance of the proposed device and implementation allows the museum to only charge the device outside of opening hours, as it is able to function for a minimum of 5:30 hours in the most demanding scenario without charging.

Finally, based on this study, we also conclude that the painting recognition module should be improved in further work, since it is the weakest point of the system. This might be done by replacing the camera by another one with a wider view angle, or by improving the physical management of the camera using mechanical stabilization, as the main problem of the current prototype is that variations in the way the user wears the device produces significant changes on the image or impedes capturing the painting at all.

AN INTELLIGENT GARBAGE BIN BASED ON IOT MODE

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

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in

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ABSTRACT

All human beings throw waste in the dustbin or some other different places. The waste is plastics, degradable and non-degradable. All people are trying to put the waste in the dustbin or garbage bin only. In cities, there are many public places where we see dustbins or garbage bins are placed but there are overflowing.

This creates unhygienic conditions in the surrounding. And it also creates some serious diseases. At the same time, an odour extends throughout the city, degrading the environment. The recycling bin is a waste management process, but they are limited space in a garbage bin, it does not require extra waste.

Waste disposal is an efficient method of eliminating garbage disposed of in commercial settings such as businesses, classrooms, colleges, shopping centres, and other public areas. We have to design the project, whether the dustbin is full or not and the waste level of the trash bin is measured. The NodeMCU and the ultrasonic sensor is a hardware components for measuring the garbage bin.

CHAPTER 6

CONCLUSION &FUTURE SCOPE

CONCLUSION

Consider the significance of a lack of cleanliness anywhere in the workplace and the need to create a more breathing-friendly atmosphere. Such a system ensures that the recycling bin is cleaned when the dustbin volume exceeds a certain point. Using an ultrasonic sensor and a NodeMCU, each proposes the design of a smart dustbin system. Garbage collection bin vehicles operate continuously in cities and towns, concentrating on regional growth, and all of these dustbins might not always be complete. By the proposed method of this device will track the rubbish within dustbins that are located in the city. People can use their electronic devices to view the accuracy of these trash cans at each time. Smart dustbin or garbage bin makes garbage collection more efficient. Any discarded object that has been passed to a party, a crowded room, a social structure, a school, or an apartment is considered waste. The project focuses on "IoT technology" and how it can be used in "Smart City applications" (IOT). The initiative will aim to minimize the use of trash cans in the future. The main purpose is to clean the dustbin and better clean the environment. By continuously using this system to find a maximum height of rubbish in a dustbin that is placed in it. If a dustbin is nearly 70 percent, a mail notification can be sent immediately. It helps to keep the environment clean and without causing any kind of disease.

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FUTURE SCOPE

This method described above is to move towards IOT implantation. All smart dustbin methods based on IOT are very helpful for cleaning waste. An Ultrasonic sensor utilizes the maximum peaks of rubbish on a dustbin. Many devices may be used in a variety of systems

LOW CURRENCY ALERTING SYSTEM IN ATM USING GSM

A major project report submitted in partial fulfillment of the requirement

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ABSTRACT

Now a days different technology makes advanced world . The automation and computerization has been installed Automatic Teller Machine (ATM) has increased and simplify the financial and banking activity . The idea of designing this project is born by observing the real- life situations happening around us. This project overcomes the older technology used in the ATMs. This project deals with low currency alert in ATM machine. Whenever low currency occur IR sensor used here. In the same way here IR sensor used to detect currency status, whenever cash in the machine getting down i . e , if money is at low level it sends an alert message to bank authority, if it is low immediately buzzer will beep and sends warning message to banking authority.

CHAPTER 6

CONCLUSION & FUTURE SCOPE

6.1 CONCLUSION

As we all know, this most of the ATMs have been targeted by the level of currency if some of the sensors like IR sensor will be activated, then the buzzer will warn the sound and the corresponding alert message will be sent to designated user. A buzzer is also used to warn the sound, which is used to intimate the customer. So, that customer can't go to further process.

6.2 FUTURE SCOPE:

In future, the extension of this project can be done by using suitable sensors for detecting Currency level, and then sending an SMS to control department through GSM modem forSuitable. This system can be extend by using GPS and GSM in future.

TRAFFIC PRIORITY FOR AMBULANCE USING RFID

A major project report submitted in partial fulfillment of the requirement

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ABSTRACT

Traffic congestion is becoming a grave problem in many big cities of the country. Unpredictable failure of traffic signals, poor law enforcement and bad traffic management has led to this grave problem of traffic congestion. The road traffic management strategy determines the objectives, roles, responsibilities and operational principles of Regional Transport Office (RTO). The main aim of this project is to provide a smart way to monitor and control traffic congestion on roads and emergency service vehicles. The appropriate places for placing radio frequency readers are selected so that the radio frequency tags on ambulance and fire-extinguisher truck can be read easily by the reader. The proposed system is designed to accept information about any emergency cases such as the passing of president, or any other VIP persons, ambulances, or fire extinguisher trucks using radio frequency identification technology

CHAPTER 6

CONCLUSION & FUTURE SCOPE

In this project we aim to design an Arduino based Traffic Congestion control system with automatic signal clearance for the Emergency Vehicle by using an Arduino Mega, RFID Module and an IR Sensor. The system could automatically works with the simulated program in the Arduino Processor Kit and the Ambulance can also move from the Traffic Signal smoothly. The system aims to provides better flexibility to manage the Traffic. The Automatic traffic light control system is productive and it reduces the traffic in urban areas, and also it decreases the time consumption due to heavy traffic. And this system helps to the Ambulance Vehicle to reach Hospital without stuck at the Traffic Signal. This model experiences a delay in switching over the traffic signal to the appropriate traffic line at which the Ambulance RFID tag is read out by the RFID reader. This can be avoided with the usage of fast processing handheld processors like raspberry pi. Further the enhance version must include controlling of two traffic line when another ambulance at the same junction requires traffic clearance. This can be achieved by more practical traffic analysis and intelligence which demands the need of a machine learning system.

ARMY ASSISTANT ROBOT

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ABSTRACT

A Specially designed robot for spying the enemy movements and have some of the special functions. This project is to design a robot which is controlled in wireless mode and have some safety to our army soldiers

This project will replace a army soldier whose life is always at risk to gather the information near the opponent soldiers where there is high chance of getting caught in this case we will lose a full life of a soldier.

In our case if we get caught there is no loss of any lives but a robot in this way, we can replace our spy humans with our **Army Assistant Robots**

This robot movements are controlled fully wireless and the camera placed on the top of the robot gives us the live streaming capability and shows the movement of the terrorist, by watching this we can use some of the additional weapons attached to the robot-like smoke, siren, invisible mode and also can be self-destroyed if it is detected by the terrorists.

CHAPTER 8

FUTURE SCOPE

In future we can add some features in advancement to the robot for efficient working, desired operation and accurate results such night vision camera to take the images and videos recording, also we can add gun firing on target with exact vision of camera.

Highly efficient cameras can be also which can detect and capture the terrorist faces and match them with criminal databases

The motors can also be replaced to high speeds which can helps in moving the robot very fast and another main aspect is making the range high were the NRFs can be updated to achieve high control range.

SOLAR POWER BASED AGRICULTURE FIELD MONITORING AND GRASS CUTTING ROBOT USING IoT

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ABSTRACT

Agriculture is the backbone of rural India. Farmers face problems such as lack of timely availability of efficient workforce, as many have migrated from country side. Hence, to reduce the burden of farmers, automation in the field of farming is necessary and for farming it needs more electricity to run motors so, if we use solar energy for that, it is better to us to save power for future purpose. Thinking about the abundance of sunlight in India, this paper discusses about the design and development of solar powered Agribot for farm monitoring using IoT that also mechanizes irrigation system. To provide smart agriculture system that leads to automation of farming processes which saving the time and energy required for performing repetitive farming tasks and increasing the productivity of yield and to reduce the burden of farmers. The Agribot is developed using a Node MCU which is programmed such that it measures the moisture level in the soil using soil moisture sensor which gives a brief prediction about the water needed in that area. The raw data is uploaded in the cloud using IoT for further analysis. There is a scope for improvement in these fields using IoT Technology. So, we are designing an IoT based robot that will monitor the crop. Our crop monitoring and grass cutting system is efficient and affordable which will help the Indian farmers.

CHAPTER 6

CONCLUSION & FUTURE SCOPE

6.1 CONCLUSION

In conclusion,Solar power based agriculture monitoring and grass cutting robot using IoT is a game-changer in the agriculture industry.This technology offers numerous benefits, features and applications that can revolutionize farming practices and increase yields.With the increasing demand for sustainable and efficient agriculture ,solar power based agriculture monitoring and grass cutting robot using IoT is the way forward.It improves efficiency ,reduces costs, and benefits the environment.The project Agribot which works as an IoT device is proposed for remote farm monitoring, analysis and furthermore irrigating the farm. The Agribot developed here is fully PV powered and subsequently it generates solar energy when there is no irrigation. Agribot is a superior decision as compared with fixed automated and computerization devices that help in observing and water system as it requires less equipment compared with a fixed framework. Here Agribot is developed which can water the fields and transfer the information gained at different positions to the cloud. Further at the receiving end, the information is handled and examined for helpful data and expectation which gives an analysis and prediction and planning on how to improve the irrigation practice.The technology has the potential to revolutionalize the way we grow crops.The future of farming is sustainable, eficient ,and powered by the sun. With the increasing demand for sustainable and efficient agriculture, "Solar Power Based Agriculture Field Monitoring and Grass Cutting Robot using IoT"is the way forward.