VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI–

590 018

A MICRO PROJECT REPORT ON

"SYSTEMATIC ANALYSIS OF LOCATING AND ASSITING CONSUMER"

Submitted By,

Vishal Gururaj Angadi	4AL20CV026
Shriprasad D Joshi	4AL20AI042
Deekshith	4AL20IS014
Suraj K S	4AL20CS155

Under the Guidance of

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2020–2021

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Mrs. Saskshi Kamath
Mini Project Guide

Dr. Ramaprasad A.T,
HOD Physics

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ABSTRACT

The 'Tracking and positioning' project is part of a 'Security and Surveillance' system that requires monitoring security personnel's positions within the secured area. In general, the word "security" is synonymous with "safety," but as a technical term, "security" means that something is not only secure, but has also been secured. The 'Security and Surveillance' system seeks to provide all-around security to a restricted area (such as a research lab) while also monitoring the area around the clock to prevent a potential security breach.

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VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI–590 018

A MICRO PROJECT REPORT ON

"INDICATION OF CONSUMPTION OF ENERGY"

Submitted By,

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Thejas	4AL20AI047
Moolya Goutami Bhaskar	4AL20IS030
Taniya Kashinath Bant	4AL20CS159

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ABSTRACT

Hospital electricity demands are distinguished by the need for high-quality, guaranteed supplies. The existence of captive electricity uses, as well as the size and consistency of the electrical and heat loads required by hospitals, are factors that could support the installation of natural gas-fired cogeneration plants (CHP). The goal of this paper is to estimate the technical potential of CHP in hospitals. This potential is evaluated using a classification of hospitals based on specific energy consumption indicators, taking into account gas-fueled engines associated with absorption cooling systems. A potential figure of approximately 500 MWe was obtained, but effective implementation is hampered by the inherent challenges of the hospital sector.

B15

VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI-590 018

A MICRO PROJECT REPORT ON

"Departmental Store Management System"

Submitted By,

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Bhoomika	4AL20AI009
Pavan kumar V	4AL20CS091
Rithik R.M	4AL20CS116

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ABSTRACT

The Departmental Store Management System is a non-graphic console-based application written in the C programming language. This programme may be used in any department shop where one can add, modify, search, delete, and show product information. This project also employs the file handling approach, which allows us to save all of the goods data, such as rate, product name, and price, in a single file. The data is saved in the file, and you can access it at any time

B13

VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI-590 018

A MICRO PROJECT REPORT ON

"GSM Path Planning For Blind Person Using Ultrasonic"

Submitted By,

M R Bharath	4AL20CV007
Prathik N R	4AL20AI032
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Shreya R	4AL20CS143

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ABSTRACT

This project describes the system architecture for a navigation tool for visually impaired persons. The major parts are: a multi-sensory system (comprising stereo vision, acoustic range finding and movement sensors), a mapper, a warning system and a tactile human-machine interface. The sensory parts are described in more detail, and the first experimental results are presented. The main Objectives are Approximately 1% of the human population is visually impaired, with roughly 10% of that group being completely blind. Mobility issues are one of the side effects of being sight impaired. Many technologies are currently available for worldwide navigation. Handheld GPS systems for the blind, for example, are now accessible in outdoor scenarios. Local path planning and collision avoidance are not useful techniques for local navigation. Traditional navigational aids, such as a guide dog and a cane, are valued, but they do not fully handle local navigational issues. The use of guiding dogs on a broad scale is not feasible (the training capacity in the Netherlands is about 100 guide dogs yearly; just enough to help about 1000 users). The cane is very confining.

B26

VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI-590 018

A MICRO PROJECT REPORT ON

"Sonar-based security system based on a microcontroller"

Submitted By,

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Akshata Jagadeesh Hunashimara D	4AL20CS011
Adwith kumar	4AL20ME001
Veeresh Madiwalar	4AL20CS170

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ABSTRACT

This project is built on the RADAR principle. A SONAR module is installed on a stepper motor in this project. The SONAR module puts out ultrasonic waves and scans the room as the stepper motor turns. As a result, if this project is placed in the centre of a room, it may scan the entire area, and the scanning range is determined by the SONAR module employed. The range of a Polaroid 6500 series sonar ranging module is approximately 6" to 35ft.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI–

590 018

A MICRO PROJECT REPORT ON

"Meteorological Weather Plant"

Submitted By,

Soumya N	4AL20EC054
Amrutha G K	4AL20CS014
Chandan Bhosle	4AL20ME004
Vinay P Hundekar	4AL20CS171

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ABSTRACT

Few years ago, I was in a state where all my outdoor plans would get cancelled simply because I relied on the weather apps. Reality then hit me that this apps where feeding me with data from station based miles away and they weren't gonna give me 100% accurate reports. Then I invented a device "Meteorological Weather Plant", fast forward I'm always ahead of mother nature and I can easily tell her next move (i.e weather pattern). This Meteorological Weather Plant give results in a very small accurate value within fraction of seconds and records accuracy of the weather, like temperature, pressure, wind speed, rain fall and humidity. This device consists of LCD display, a mobile wireless protocol and hardware protocols, sensing unit and alarm system.

B34

VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI-590 018

A MICRO PROJECT REPORT ON

"A Simple Personal Dairy Management"

Submitted By,

Tejashwini J	4AL20CS161
Malini K A	4AL20AI023
Ajay R	4AL20EC003
Shebin Thomas	4AL20CS133

Under the Guidance of

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Department of Chemistry

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ABSTRACT

This is one of the most impressive C programming projects. Personal Dairy Management is a console-based application that does not make use of graphics. The Personal Dairy Management System is used to keep an individual's personal data, as the name implies. We can store information such as a person's name, phone number, address, date of birth, and residence. One may also keep track of vital information such as meeting details and other activities. To store the data in the file, this project use the file handling mechanism. One must first enter the password before one can read, update, or delete the record. Viewing the main menu or adding records does not necessitate the use of a password

B48

VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI-590 018

A MICRO PROJECT REPORT ON

"An advanced reflective colour sensor system for different applications"

Submitted By,

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This is to certify that the Micro-Project entitled **"An advanced reflective colour sensor system for different applications"** has been Successfully Completed by

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ABSTRACT

In many industries, the ability to sense colour precisely can be crucial. In this paper, a novel reflective colour sensing system is presented for process monitoring and control applications textile industries. The system is developed using a solid state RGB sensor and a smart signal processing algorithm implemented on micro-controller architecture. A hybrid neural network comprising Self organizing mapping and Back propagation architecture is used for colour zone classification and exact colour identification of papers. Demonstrator applications and simulation results are discussed to highlight the importance of sensor and accuracy in measurement.

B48

VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI–590 018

A MICRO PROJECT REPORT ON

"Fabrication Of Intelligent Voice Operated Fire Extinguisher For Vehicle"

Submitted By,

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Divya Brahmanand Netalkar	4AL20CS036
Puttaraj C Tembadamani	4AL20AI035
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Under the Guidance of

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Department of Chemistry

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ABSTRACT

This project aims on implementing a voice operated intelligent fire extinguisher for vehicle.This can be achieved by connecting a speech input. Advantages of this system is that it's handfree,time saving and fast data input operators. As soon as the speech input gets the command the sprinklers fitted can be moved in any direction. The system should consist a recognization System to avoid obstacles and understand the meaning of speech command .

VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI–

590 018

A MICRO PROJECT REPORT ON

"USAGE REDIO FREQUENCY IDENTIFICATION DEVICES TO HELP BLIND PEOPLES"

Submitted By,

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ABSTRACT

location and tracking system becomes very important to our future world of pervasive computing, whereinformation is all around us. Location is one of the most needed information for emerging and future applications. Since the public use of GPS satellite is allowed, several state-of-the-art devices become part of our life, e.g. a car navigator and a mobile However, location phone with a built-in GPS receiver. information for indoor environments is still very limited. Several techniques are proposed to get location information in buildings such as using a radio signal triangulation, a radio signal (beacon) emitter, or signal fingerprinting. Using Radio Frequency Identification (RFID) tags is a new way of giving location information to users. Due to its passive communication circuit, RFID tags can be embedded almost anywhere without an energy source. The tags stores location information and gives it to any reader that is within a proximity range which can be up to 10-15meters for UHF RFID systems. We propose an RFID-based system for navigation in a building for blind people or visually impaired. The system relies on the location information on the tag, a user's destination, and a routing server where the shortest The route from the user's current location to the destination. The navigation device communicates with the routing server using GPRS networks. We build a prototype based on our design and show some results. We found that there are some delay problems in the devices which are the communication delay due to the cold start cycle of a GPRS modem and the voice delay due to the file transfer delay from a MMC module.

B63

VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI-590 018

A MICRO PROJECT REPORT ON

"NAVIGATION MULTI PROCESSOR SYSTEM"

Submitted By,

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Punya N	4AL20CS103
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ABSTRACT

In this project we prepared an system which will be used to control and monitoring the transceiver or the navigation receiver in any corner of the world with the optional of the glide slope receiver and which optional audio amplifier in the aircraft at any point

B69

VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI-590 018

A MICRO PROJECT REPORT ON

"Use of radio frequency identification devices to assist blind people"

Submitted By,

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Khushi V Ksheerasagar	4AL20CS061
Sahana G S	4AL20CS121
Sangamesh Biradar	4AL20EC045

Under the Guidance of

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ABSTRACT

In our future world of pervasive computing, where information is all around us, a location and tracking system becomes critical. One of the most important pieces of information for emerging and future applications is location. Since the public use of GPS satellites is permitted, a variety of cutting-edge equipment, such as a car navigator and a mobile phone, have become a part of our daily lives. Location phone with built-in GPS receiver, on the other hand. There is still a scarcity of knowledge about interior surroundings. Using a radio signal triangulation, a radio signal (beacon) emitter, or signal fingerprinting, several ways for obtaining position information in buildings have been proposed. RFID tags are a novel means of providing consumers with location information

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VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI–590 018

A MICRO PROJECT REPORT ON

"Attendence monitoring intelligent classroom"

Submitted By,

Darshan M	4AL20IS012
Krishna Vijaya Sapagale	4AL20CS062
Sanket R Durgekar	4AL20CS126
Shree Devi	4AL20EC050

Under the Guidance of

Dr. Shashi Kumar K
Department of Physics

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2020–2021

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CERTIFICATE

This is to certify that the Micro-Project entitled **"Attendence monitoring intelligent classroom"** has been Successfully Completed by

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Dr. Shashi Kumar K
Mini Project Guide

Dr. Ramaprasad A.T,
HOD Physics

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ABSTRACT

Intelligent automation has now established itself in every field throughout the world. Our project is a step forward in the management of classroom attendance and power in colleges and institutions. The utilisation of low-cost technology for highly reliable applications, together with newly developed algorithms, allows the automation process to reach consumers at a lower and more consistent cost.

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VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI-590 018

A MICRO PROJECT REPORT ON

"Automatic Road Reflector Light"

Submitted By,

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Manish N	4AL20CS068
Swathi M V	4AL20CS158
Abhishek R Bhat	4AL20IS001

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ABSTRACT

The Automatic Road Reflector is a basic yet effective solution that will assist us in automating traditional road reflectors. A raised pavement marker is a safety item that is used on the road at night to guide vehicles down the path. The Automatic Road Reflector system is intended to take the place of the current safety equipment. The suggested system is intended to detect and respond to the intensity of ambient light. When the ambient light is reduced during low light, the system detects this and turns on the reflector. When there is bright light, on the other hand, the system will go into power conservation mode and save energy. A photoresistor, also known as a light-dependent resistor, is used to detect light intensity. The Light Dependent Resistor is used in light sensing because it works on the basic principle of photoconductivity. The word photoconductivity refers to a phenomena in which a substance's conductivity increases when it comes into contact with light. In general, the LDR is made up of a substance that has low conductivity in darkness and enhances its conductive property when it comes into contact with light. A typical light-dependent resistor has a resistance of 1MOhm in the dark and a resistance of a few KOhm in the light. The Automatic Road Reflector can be quite useful in guiding cars on their way at night. The colour of the LED can be adjusted to meet a variety of requirements. They can be used to split the road, indicate a curve, or indicate a road exit. They're especially beneficial in places like airports and airport hangers, where many colours of road reflectors are employed for diverse functions

VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI-590 018

A MICRO PROJECT REPORT ON

"Synchronously Blinking Emergency Light"

Submitted By,

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Manoj	**4AL20CS070**
Yeshaswini R	**4AL20CS173**
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ABSTRACT

If the mains energy fails and there is no backup power, visibility becomes a problem at night. Due to poor visibility, the likelihood of a person being injured as a result of falling over or colliding with household items increases. This can be avoided with the Smart Emergency Light system. The system includes a light sensor that detects ambient light. The sensor detects when the intensity of light falls below the level of visibility (which occurs frequently due to power outages at night), and notifies the system. The system replies by turning on a slew of white LEDs that are wired to it. This aids in restoring visibility by restoring a normal light intensity level. The LEDs will stay on until the system is turned on. When the system is turned off and on again, the system begins a new scan of the ambient light intensity level. An LDR is a light-dependent component that uses ambient light to generate a level of output at its terminals. As a result, a bright environment differs from a gloomy environment with few or no lights. This value is used to programme a timer IC to turn on the LEDs linked to it for a set period of time. If the ambient light remains low, the LEDs will remain on since the timer IC receives the trigger from the LDR. Synchronously blinking emergency lights can help maintain visibility in this fashion.

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VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI–590 018

A MICRO PROJECT REPORT ON

"Plant Moisture Monitoring System"

Submitted By,

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Sashreeth H S	4AL20AI036
Varshini K L	4AL20EC058
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ABSTRACT

Planting a tree in an environment where the seed or plant would not receive adequate water from natural sources such as rain or ground water in its early stages has always been a cause of concern for tree planters. This is where a self-contained moisture monitoring system for plants can help. The technology keeps track of the soil's moisture level in real time. If it is discovered during monitoring that the soil moisture level is lower than recommended, an audible visual alarm will be triggered. This alarm is then received by the plant's caretaker. The alarm goes off when the plant is watered, and the monitoring cycle continues. We utilise a timer IC to clock the monitoring process in this system. The moisture level of the soil is detected using a moisture level sensor. A visual alarm is provided by an LED, while an auditory alarm is provided by a buzzer to the plant's caretaker. Thus, using a simple combinational circuit and a sensor, we can help save a plant by maintaining the moisture level of the plant's soil and thus keeping the plant healthy in this project.