

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI-

590 018



**A MICRO PROJECT REPORT ON
“Fire Sprinkler System with intelligence”**

Submitted By,

Sadvini K P

4AL20CV019

Sathyam Pawale

4AL20AI038

Akash K Acharya

4AL20IS003

Spoorthi H S

4AL20CS151

Under the Guidance of

**Ms. Shilpa
Department of Computer Science
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**DEPARTMENT OF BASIC SCIENCES
ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY
MOODBIDRI-574225, KARNATAKA**

2020-2021

ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY

MIJAR, MOODBIDRI D.K. -574225

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DEPARTMENT OF BASIC SCIENCES

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Ms. Shilpa

Mini Project Guide

Dr. Ramaprasad A.T,
HOD Physics

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Dept. Of Physics
Alva's Institute of Engg. & Technology
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ABSTRACT

When the effects of a fire have been identified, such as when a specific temperature has been achieved, a fire sprinkler discharges water. Automatic fire sprinklers work by using a fusible link that melts or a frangible glass bulb containing liquid that breaks at a predetermined temperature, allowing the plug in the orifice to be pushed out of the orifice by the water pressure in the fire sprinkler piping, resulting in water flow from the orifice. The water stream hits a deflector, which creates a precise spray pattern that supports the sprinkler type's aims (i.e., control or suppression). The spray from modern sprinkler heads is directed downward. Each automated fire sprinkler is unique.

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**A MICRO PROJECT REPORT ON
“tracking and positioning systems”**

Submitted By,

Vijay bhanu

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Siddhartha T

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Under the Guidance of

**Ms. Sowmya
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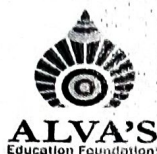
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ABSTRACT

A "tracking system," often known as a "locating system," is a device that monitors moving people or things and provides a timely, ordered series of location data for further processing. The 'Tracking and Positioning' project is part of a 'Security and Surveillance' system that needs security personnel to monitor their positions within a secured area. In common usage, the words "security" and "safety" are interchangeable, but in technical terms, "security" denotes that something is not only secure, but has also been secured. The 'Security and Surveillance' system is designed to give all-around security to a limited area (such as a research facility) as well as round-the-clock monitoring.

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**A MICRO PROJECT REPORT ON
“APPLICATION OF ROBOTICS ON FIRE FIGHTING
TECHNOLOGY”**

Submitted By,

Nagarjuna G S	4AL20EC027
Vishma D	4AL20AI049
Raviraj	4AL20IS040
Tarunkumar R	4AL20CS162

Under the Guidance of

**Dr. Ravi Kumar
Department of Chemistry**



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This is to certify that the Micro-Project entitled "APPLICATION OF ROBOTICS ON FIRE FIGHTING TECHNOLOGY" has been Successfully Completed by

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Dr. Ramaprasad A.T,
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ABSTRACT

A device that can detect and extinguish a fire on its own is long overdue. Many house fires start when someone is sleeping or is not at home. With the development of such a device, people and property can be saved at a much higher rate while sustaining relatively little damage from the fire. Our task as electrical engineers was to design and build a prototype system that could detect and extinguish a fire autonomously. It also aims to reduce air pollution. In this project, we will create a Fuzzy-based Microcontroller-controlled Robot. It is the Robot that can navigate a model structure, locate a "burning oil derrick" (lit candle), and extinguish it with the assistance of a Blower.

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**A MICRO PROJECT REPORT ON
“CONVERSION OF DIGITAL ASPECTS TO ANALOG”**

Submitted By,

Sanjay G K

4AL20EC046

Akash Santhosh Thamb

4AL20CS010

Vaishali

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Vedanth V

4AL20CS168

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ABSTRACT

A tunable analog-to-digital converter that produces M-bit samples for use with an operating circuit. To instruct the analog-to-digital converter to turn on, the operating circuit generates a first enable signal. In addition, in response to a condition, a sensor generates an analog signal. When the first enable signal is received, the tunable analog-to-digital converter includes a primary analog-to-digital converter that receives the analogue signal and converts it to a primary digital signal. A comparator and a secondary analog-to-digital converter are also included in the tunable analog-to-digital converter. The comparator compares the primary digital signal's value to a predetermined value and generates a second enable signal based on the primary digital signal's value and the predetermined value. A secondary analog-to-digital converter is used.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI-

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**A MICRO PROJECT REPORT ON
“Buzz incoming and outing call router”**

Submitted By,

Spoorthi Prakash S

4AL20EC055

Anirudh H N

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4AL20ME014

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ABSTRACT

I prepared an microprocessor-based system, which is capable of routing all the incoming and outgoing calls in the telephones by various parties by initializing the give switches. Especially this is very useful in the areas like hilly stations where the tele density is extremely poor. I prepared it for the purpose of utilizing it for the routing the incoming calls for master to slave instrument located in the various locations in the word. I designed it in such a way that further this instrument will not allow the parties to do any of the outgoing call from the slave locations from any point of the world

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**A MICRO PROJECT REPORT ON
“Easy Telecom Billing System”**

Submitted By,

Sharath S Kanchan	4AL20CS130
Jeswin	4AL20AI018
Rahul Leimapokpam	4AL20CV017
Sayeed Abdul Rahman	4AL20CS127

Under the Guidance of

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ABSTRACT

The Telecom Billing System Project is similar to the operations carried out by telecommunications firms. Where, one can perform actions such as adding a record with a name, phone number, and payment amount. one can also make payments by simply entering phone number instead of corresponding name. This project also uses the file handling mechanism to save data in a specific file. This project will teach us how to use the file handling method to insert, list, search, and delete records from a file. The Telecom Billing System project was written in Code-Blocks with the gcc compiler, so it will not run in Turbo C

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**A MICRO PROJECT REPORT ON
“ELECTRONIC VOTING MACHINE PROJECT USING
8051 MICROCONTROLLER”**

Submitted By,

Bhoomika	4AL20CS029
Fathimathul Ramzeena	4AL20CS039
Shivadeep	4AL20AI040
Yesudas Basavaraj	4AL20CV027
Hanchimani	

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This is to certify that the Micro-Project entitled **"ELECTRONIC VOTING MACHINE PROJECT USING 8051 MICROCONTROLLER"** has been Successfully Completed by

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ABSTRACT

This project is done mainly because we face many problems while voting. So now I would like to abstract about my project. This project is designed for electronic voting machine by using Fingerprint identification method. we used 8051 microcontroller And then simulated with in proteus ISIS using PIC18F4520. The microcontroller Program was written in C in MPLAB IDE. It's less time consuming and cost effective. At last we would like to conclude our topic as it is very useful for society and it is also used in some other countries.

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A MICRO PROJECT REPORT ON
“Digital security for printer using GSM”

Submitted By,

M Madhusudan	4AL20CS072
Hamsa N	4AL20CS044
Ankith D	4AL20CS017
Cheekati Navajeevan	4AL20EC009

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ABSTRACT

This system involves reading the data from PC and the data is embedded in the security kit with password protection. GSM printers can be controlled using office, home or any screen printing techniques. This system is used to read the printing statement from printer and send it to the microcontroller through RS232 communication. The printer or PC can be operated through remote GSM SMS control using mobile communications

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**A MICRO PROJECT REPORT ON
“ELECTRIC BILLING USING SMART PHONE BY GSM
TECHNOLOGY”**

Submitted By,

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Mohammed Uzair Pasha	4AL20CS078
Libina Lal	4AL20EC020

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ABSTRACT

In this micro-project we prepared an system which automatically sends the SMS for each and every customer of electric billing this mobile billing system will cost for every two months by using my new system called GSM technology and it also consist auto billing and also automatic SMS reply system which gives quick answer to customer . This system will reduce work as by doing auto billing for all.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI-

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**A MICRO PROJECT REPORT ON
“Switching and Signaling in Telecommunication network”**

Submitted By,

Veena Sadashiv Talawar	4AL20EC059
Karthika M	4AL20CS058
Rakshitha R	4AL20CS109
Rakshitha S	4AL20EC040

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ABSTRACT

In this project one can energize any electrical device in our home, from any where in the world and we can do it without paying for telephone call, with telephone triggered switches we can do just that. The device described here is a circuit, which responds to the sound of the telephone deli, there is no need to make any hard wire connections to the telephone line, and it is this feature which permits you to build and use this device without any permission from the department of telecommunications.

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**A MICRO PROJECT REPORT ON
"Digital stopwatch"(Chronometer)"**

Submitted By,

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4AL20IS002

Kavya

4AL20CS059

Ramyashree

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Ranjitha R

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Under the Guidance of

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ABSTRACT

Digital Stopwatches (also called as chronometers) are used as timekeepers in variety of fields, including sports. Analog or digital stopwatches are available. Because of their higher accuracy and ease of use, digital stopwatches are far more common than analogue stopwatches. We attempted to create a digital stopwatch with reasonable accuracy and dependability in this project. This stopwatch has a maximum count of 9 minutes and 59.9 seconds. It has a precision of one tenth of a second. The circuit is relatively simple and straightforward to construct. The circuit's heart is a steady mv, which is followed by counter and decoder stages. The circuit is powered by a 5-volt DC source. The time is displayed on a seven - segment LED display with a common anode type.

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**A MICRO PROJECT REPORT ON
“Piezoelectric Based Visitor Sensing Welcome Mat”**

Submitted By,

Nandan M R	4AL20IS031
Harshitha M	4AL20CS066
Sinchana R Naik	4AL20CS149
Umesh	4AL20EC057

Under the Guidance of

**Ms. Shilpa
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ABSTRACT

What kind of doormat do you have? Is it just a simple carpet for wiping your feet before entering? A doormat should be capable of much more. As a result, we've created a project that alerts you when a visitor or guest approaches the doormat. We use piezoelectric sensors here, which use the piezoelectric phenomenon to convert acceleration, force, and pressure into electric impulses. This notifies the user by turning on the buzzer. As a result, there is no need for a doorbell because the doormat can automatically identify visitors and alert them on their behalf. Mat can actively detect whether there is a change in pressure from someone or something standing or sitting on the Mat thanks to the built-in Piezo sensor. It's also not just a doormat. It's a weight-sensitive layer of smart foam that you can place under your doormat or anywhere else in your home where pressure-sensitive responses are required.

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A MICRO PROJECT REPORT ON
“Health Monitoring System using 7-Segment Display & Atmega Microcontroller”

Submitted By,

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Spandana	4AL20CS150
Vishwanath M	4AL20EC063

Under the Guidance of

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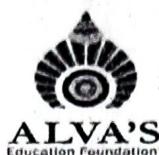
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MOODBIDRI-574225, KARNATAKA

2020-2021

ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY

MIJAR, MOOBBIDRI D.K. -574225

KARNATAKA



DEPARTMENT OF BASIC SCIENCES

CERTIFICATE

This is to certify that the Micro-Project entitled **“Health Monitoring System using 7-Segment Display & Atmega Microcontroller”** has been Successfully Completed by

Nesara S Gowda	4AL20IS033
Mallikarjuna N P	4AL20CS067
Spandana	4AL20CS150
Vishwanath M	4AL20EC063

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

Mr. Sandeep Kumar
Mini Project Guide

Dr. Ramaprasad A.T,
HOD Physics

H. O. D.

Dept. Of Physics
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ABSTRACT

This health monitoring system is a highly valuable tool for keeping track of a patient's health data. This system continuously monitors the patient's heart rate and temperature reading. We use two 7 segment modules to display the parameters in our health monitoring system project since the display has a longer viewing distance. We can also set an upper and lower limit for the temperature and heartbeat. If the temperature rises above the specified high limit or falls below the set low limit while monitoring, the buzzer rings and the load switches off. When the heartbeat sensor is removed, the system senses a low heartbeat, the buzzer sounds, and the load is turned off. In an emergency, this buzzer can assist the patient's well-wishers in taking action. The bulb turns on and the alert goes off when the temperature and heart rate are in control

VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI-

590 018



**A MICRO PROJECT REPORT ON
“Automated Night Lighting System”**

Submitted By,

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Manoj M	4AL20CS069
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Under the Guidance of

**Mrs. Saskshi Kamath
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ABSTRACT

We present a completely automated night lighting system that detects light conditions and turns on or off a load or bulb based on the intensity of the light. To achieve this objective, the system employs an LDR, a 555 timer, and relay-based circuitry with an AC load connection. The circuitry uses a 555 timer-based circuit to drive a relay for a set time period when the light intensity falling on the LDR falls below a certain level. As long as there are night/low light circumstances, this procedure continues and the load is switched on via a relay. The mechanism turned off the load to turn off the lighting as soon as the lighting increased. Thus we have a fully automated night lighting system.