

*Under the Aegis of VEDA....*



# ETHAMITES

[magazine@aec.edu.in](mailto:magazine@aec.edu.in)

*The E-Technical Magazine..*

VOLUME 5

ISSUE 1

JUN-NOV

2021-22

DEPARTMENT OF  
ELECTRONICS AND COMMUNICATION ENGINEERING



**ADITYA**  
**ENGINEERING COLLEGE (A)**

APPROVED BY AICTE  
NEW DELHI AND AFFILIATED TO  
JNTU KAKINADA

## VISION

- To become a centre of excellence in the field of Electronics and Communication Engineering with technological capability, professional commitment and social responsibility.

## MISSION

M1: Provide quality education, well-equipped laboratory facilities and industry collaboration.

M2: Promote cutting edge technologies to serve the needs of the society and industry through innovative research.

M3: Inculcate professional ethics and personality development skills.

## PROGRAM EDUCATIONAL OBJECTIVES (PEO)

The graduates of the Program will

PEO1: Adapt the learning culture needed for a successful professional career and pursue research.

PEO2: Build modern electronic systems by considering technical, environmental and social contexts.

PEO3: Communicate effectively and demonstrate leadership qualities with professional ethics.

## INNOVATED ARTICLE

## THE FUTURE OF CLOTHING TECHNOLOGY-DIGITALTRENDS

Before fashion existed, humans wore clothes to prevent themselves from freezing to death on cold winter nights, burning to death in the hot sun, or being slashed to death as they crawled through the undergrowth in search of the next meal. Even when fashion, branding, and commercialism spawned the first wave of trendy high-tech fabrics like Gore-Tex and Spandex thousands of years later, nothing much changed: They were still designed to keep us drier, warmer, cooler, or safer, and still a far cry from what most of us would consider smart, tech-infused clothing.



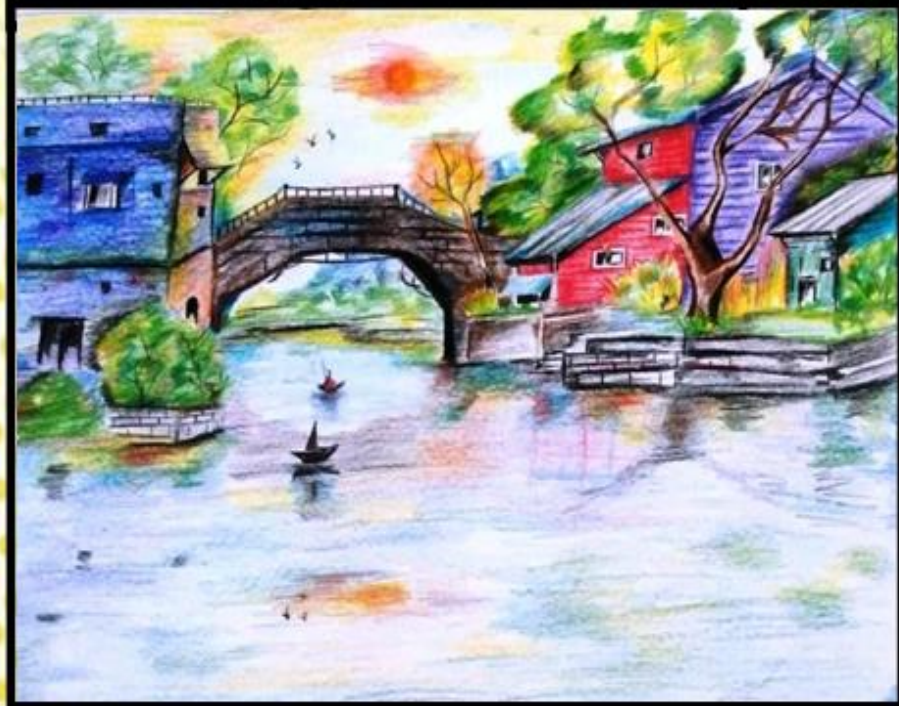
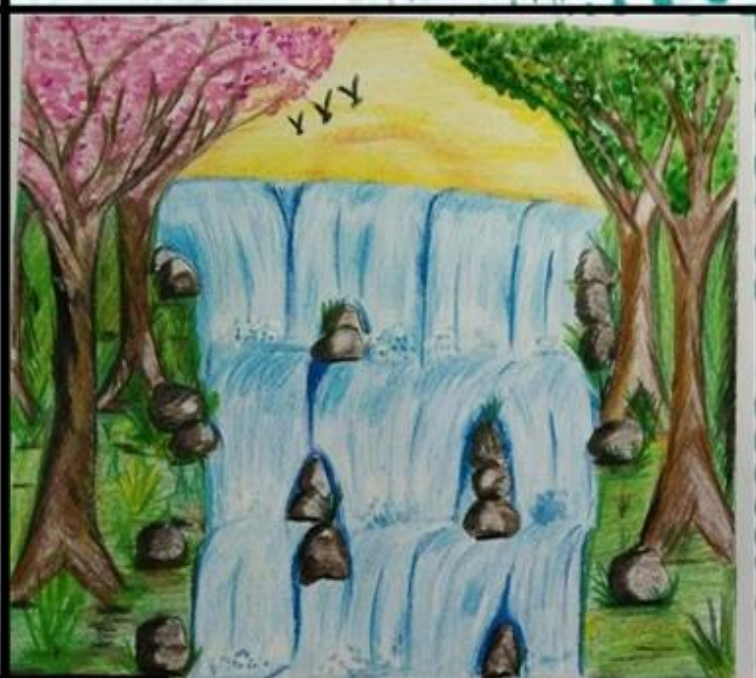
Then came the smart phone. Its connectivity, millions of apps, and eventual common to everyone and had a handheld computer that could connect to, monitor, and control other things. It changed the way companies thought about smart products. Shoes with pedometers built in to the heel were suddenly possible. T-shirts could monitor our heart beat. Someone even thought messenger bags with smart phone-connected speakers were a good idea.

Nanotechnology has made fibers smarter. Conductive yarns mean the fabrics that we wear and sit and sleep on can suddenly communicate with our devices. And 3D printing could change the way we think about, produce, wear, and even buy clothes.

By  
B.Sri Vidya  
21A91A04I4  
II-year ECE-D



## CREATIVE CORNER



Hand Art  
by  
A.Sai Lakshmi  
21A91A0401



## INNOVATION IDEA

PROJECTIDEA**ANTI HARASSMENT DEVICE****OBJECTIVE**

To create a safety environment for women

**ABSTRACT**

Today in current global scenario, the prime question in every girl's mind taking into account the ever rising increase of issues on women harassment in recent past, is only about her safety and security. The only thought haunting every girl is when they will be able to move freely on the streets even in odd hours without worrying about their security. This paper suggests a new perspective to use technology to protect women. The system resembles a normal clothes which when activated, tracks the location of the victim using GPS(Global positioning system) and sends emergency messages using GSM(Global system for mobile communication), to three emergency contacts and the police control room. The system also incorporates a screaming alarm that uses real time clock, to call out for help and also generates an electric shock to injure the attacker for self defense.

**DESCRIPTION OF THE INNOVATION**

The design is implemented using an embedded microcontroller, in a modular form to be adaptable to different types of location tracking. Based on the total design of the system, the hardware and software of the system is a real-time monitoring of the women's body condition and location details in order to provide immediate help. The lady can protect herself by pressing the switch there by it produces the electric shock and helps to deter the person harassing her. The software is developed in embedded C language to demonstrate the system capability in providing real-time response. Using the location information supplied by this system, the location is traceable using GPS through Google Map.

If switch 1 is pressed it obtains location information from the GPS and prepares a text SMS containing the present location information and sends SMS through GSM modem to the pre-programmed mobile number. Once the message is sent to the pre-defined number it displays LCD, and if it's noted then it displays-error instruction in the LCD. Similarly if switch 2 is found to be pressed, it activates the buzzer to make loud shouting sound to catch the attention of the near by people for help. It also prepares the high voltage electric shock circuit to be ready to give a non-lethal shock to the attacker.

On the other case if any of the parameter values are abnormal or any variation is detected, then also it obtains location information from the GPS and prepares a text SMS containing the present location information and sends it to the predefined number or pre-programmed mobile number.

G.Deepika

20A91A0413,

III ECE-A

## STUDENT ACTIVITIES

### BLANKET DRIVE

For most of us, the idea of winter means cuddling under the blanket for warmth, lying in our comfort zone and sipping coffee sitting beside the fire. But for those on the streets, with every drop in the temperatures it's a fight for survival. Youth Red cross Unit came with an idea of collecting old blankets and clothes from the students and distribute them the needy. Team has made a target of count of the blankets and then campaign was run throughout the campus, set up collection points at hostels and college points for three days. The flow of old clothes was more than the blankets. So, Volunteer team has bought new Blankets and reached the target of no. of blankets. The Distribution has been started at same time of around 9:30 PM in two different locations namely Rajahmundry and Kakinada on 13-11-2021.







# EDITORIAL BOARD

## Editor-in-Chief

**Dr.M.Sreenivasa Reddy, Director**

## Associate Editors

**Dr. G.Sridevi, Professor & HOD**

**Mr.V.Satyanarayana, Assistant Professor**

**Mrs.G.Jyothirmai, Assistant Professor**

**Mr. Bhagat Kumar, Assistant Professor**

## Assistant Editors

**P.Sai Achyuth, IV B.Tech**

**G.Tarun, IV B.Tech**

**P. Dhanunjay, III B.Tech**

**P.Greeshmanth, III B.Tech**

**G.Praveen, III B.Tech**

**B.Sai Teja, III B.Tech**

**K.Raghuvarma, III B.Tech**

**T.D.K.V.V.S.Sairam, II B.Tech**

**V.Edukondalu, II B.Tech**

