

Editorial

The Volume Two Issue First of the International Journal of Technology Engineering Arts Mathematics Science.

In the Volume Two Issue First of the International Journal of Technology Engineering Arts Mathematics Science, five full-length manuscripts have been published. This issue contains interesting papers on topics of Women Safety Device using Raspberry Pi, Smart Shopping Mall, IOT Based Trash Collector Boat, Home automation using IoT and Efficient Deep CNN-Based Fire Detection and Localization in Video Surveillance Application. These articles are written on the latest technology and are useful for addressing the needs of the industry as well as daily life, so this issue is useful for researchers.

Women's safety has always been a concern, even in current times with so much technological innovation. Existing women's hand-held safety gadgets require human intervention to activate, such as pressing a button or shaking the device after detecting a threat. The author offers a strategy that will address the shortcomings of current systems while also providing women with false assurances of protection. Aditi Dhumal et. al. idea attempts to create a safety device that focuses on providing security to women through devices that interact with authorities simply by pressing a button. The technology also takes video and records voices for additional inquiry. The location of the woman is also communicated to the authorities via the message. The shocking circuit was also created to protect her from the perpetrator in this system.

In the modern world, shopping has become an essential day to day activity for most of the people. And due to the COVID -19 pandemic people are afraid of going to a crowded place like shopping malls which made it difficult for people to buy their daily needs and medicines. This has made them to look for quicker, easier and safe ways to do their shopping. Some of the difficulties that people have to go through when they do shopping include standing in long queues for billing, having physical contact with other people and product they want to purchase in this pandemic era is very risky and shopping at malls is also a time consuming process. Sujit Meshram et.al. proposed an idea to avoid such situations. Contains RFID tag, Node MCU, Smart billing portal built using NodeJs, Wi-Fi and driver. All products available in the mall will be marked with RFID.

Water origins are polluted by debris waste. In India, marine trash administration and surveillance are of main concern for enforcing smart metropolia and fulfilling the task of a more hygienic India. Accordingly, this piece desires at developing a computerized approach to embark on the situation of water debris disposal. Lake cleaning IOT-based trash collector system for withdrawing the surface trash experimentations in this piece. Sachin Kokane et. al. uses TinkerCAD and Proteus software to prototype and assemble Arduino Circuit for our IOT-based trash collector boat. It will accumulate the debris from the surface of the water and discard it into the container placed behind it. With the help of motors, the boat will have forward & reverse movement.

In this age of digitization and automation, human life has become simpler as almost everything happens automatically, instead of manual home systems. IoT devices control and monitor electrical, electronic, and mechanical systems used in various systems. Devices connected to the cloud server are controlled by a single controller that helps the number of users where the number of sensors and controls are connected. Advances in technology have not only changed our lives but also expanded all aspects of our lifestyle. Many electrical appliances are constantly monitored by hand to ensure efficient operation. Here, Shivam Gosavi et. al. propose a system, which can monitor and organize any old electronic device with a mobile app, and its functionality can be effectively maintained by saving time and energy.

Fire is a devastating natural disaster that affects both people and the environment. This paper describes a unique framework for utilizing CNN to detect fire. Convolution Neural Networks have yielded state-of-art performance in image classification and other computer vision tasks. Their use in fire detection systems will significantly enhance detection accuracy, resulting in fewer fire disasters and less ecological and social consequences. Ashutosh Kulkarni et. al. show how the unique qualities of the problem at hand, as well as a wide range of fire data, can be combined to make a balance of fire detection effectiveness and precision.

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