ABSTRACT

 \mathbf{ON}

Fire Detection System

Submitted to

DEPARTMENT

Of

COMPUTER SCIENCE AND ENGINEERING

AIML

By

Kashetty Aneesh 245320748020

M Raghava Ruthwik 245320748027

Katta Praneeth Kumar 245320748306

Under the guidance of

Mrs. S. Swapna

ASSISTANT PROFESSOR



NEIL GOGTE INSTITUTE OF TECHNOLOGY

Kachivanisingaram Village, Hyderabad, Telangana 500058.

April-2022

ABSTRACT

Fire plays a major role in providing light and heat but it is very dangerous as it spreads rapidly. So we need to be more cautious in monitoring it. Our project deals with monitoring of fire using camera. This mechanism gives out an alert sound and also sends an alert to the respective User or nearby fire station.

INTRODUCTION:

Our project aimed to detect fire by using the image processing technology that will alert people by early detection of fire. As there are many automatic fire alarm systems already existed like the sensor method, they has some limitations and designed to sense fire with the smoke, limited areas. To reduce limitations and to optimize with new technology, this project is proposed. The entire code is written in pure python language using the open CV library for image processing.

EXISTING SYSTEM:

Most of the existing "Fire Detection Systems" consists of only hardware i.e the detection sensors. They only detect fire & smoke then alert just by an alarm. They have some limitations and designed to sense fire with the smoke, which is limited to areas. To reduce limitations and to optimize with new technology, this project is proposed.

PROPOSED SYSTEM:

In our proposed system we are trying to develop a detector which detects the fire and alerts the user. The user has to give his Camera access to the system where it takes the real-time video as input and pre-processes the data to the model where it detects the fire(if any found) and plays the alarm which alerts the victims, this system also sends an alert to the user or nearby Fire Station by an email or SMS.