

## **AUTOMATIC VOICE ANNOUNCEMENT BASED ROBOT FIRE ANALYSIS SYSTEM**

### **ABSTRACT**

This project is to design and develop an intelligence robot to detect fire accidents with voice announcement by using an 8 bit microcontroller. In our project the robot is designed to move automatically. The robot acts according to command given by the program. It will move all the direction like forward, reverse, left, right. The object sensor is used to sense object in front of robot mechanism. The fire sensing unit is available in robot mechanism. If fire is detected, robot will switch on the alarm unit as well as voice play back unit. Robot is defined as a mechanical design that is capable of performing human tasks or behaving in a human-like manner. Building a robot requires expertise and complex programming. It's about building systems and putting together motors, solenoids, and wires, among other important components. There are a number of sub systems that must be designed to fit together into an appropriate package suitable for carrying out the robot's task. A firefighter robot is one that has a small fire extinguisher added to it. By attaching a small fire extinguisher to the robot, the automaton put out the fires it detects can be achieved. The fire detection scheme to be put into use is relatively free of false alarms, it is anticipated that it will not over react in non-fire simulation.

