

## **INDUSTRY SPECIFIED – INTELLIGENT FIRE MANAGEMENT SYSTEM**

### **ABSTRACT**

Fire Detection Systems are now widely used in various safety and security applications. The major fire accidents occur due to electric short circuit. It leads to the damage caused by fire and IoT Technology is used to control such kind of risks. Traditional fire detection systems are not much more effective and quicker to alert the owner about fire, in case if no one is present on the location. To overcome this problem in this paper we present the design and development of IoT based Fire Detection System that combines qualities for fire, temperature, smoke detection, sending alert Text Message about the fire to the user along with onsite alarm (buzzer), updating temperature, humidity and smoke to the cloud on every 15 seconds, and it also moves manually with the help of Android Applications. The Fire Detection System consists of four main parts: Multiple sensors, communication systems (Bluetooth GSM, Node MCU), motion planning (Manual patrolling), and Android application for manual patrolling of the system. This Fire Detection System can be used in College, Office, and Industry for safety purposes.