Brainstorm

and Idea prioritization



• Based on the temperature readings and if any Gases are present the exhaust fans are powered ON.

Industry-specific intelligent fire management system

TOPIC

• A microcontroller based model for industries safety, which can detect gas leakage hazardous fire as well as take action to extinguish the fire.

• Employing gas sensor, flame sensor and temperature sensor to detect any changes in the environment.

• Emergency alerts are notified to the authorities and Fire station via FAST2SMS.

 Upon detection of the same, the system disconnects the building's primary power source and shuts the main gas valve.

• With the assistance of sensors, the system continuously senses leakage of gases and fire occurrence.

• If any flame is detected the sprinklers will be switched on automatically

PERSON 1

PERSON 2

• It also notifies the manager via GSM

PERSON 3

PERSON 4

• By analyzing the transmitted images, an algorithm is able to recognize the source of fire and activate an alarm, thereby ensuring the safety of

the enterprise • The algorithm

deploys various

characteristics of

flame images

during data

processing.

• The mixed Gaussian model is used to distinguish the dynamic area from the static background and the color

characteristics of pixels in the RGB model are analyzed to detect fire

The present status of the smoke level, temperature of the room, sprinkler status will be updated in remote server for further server

This IoT-based project detects the nearby flame using an Infrared Flame Sensor and then NodeMCU Tiggers the relay to extinguish the fire automatically

We can register up to three phone numbers. Here, we use GSM SIM800l module for alerting the user about the fire.

A person has to discover the fire in order to turn the fire alarm on. This scenario causes a significant amount of delay, which can ultimately lead to a lot of loss.