

LITERATURE SURVEY ON INDUSTRY SPECIFIC INTELLIGENT FIRE MANAGEMENT SYSTEM

IOT BASED FIRE DETECTION AND AUTOMATIC WATER SPRINKLER SYSTEM

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Summary:In this paper, Fire detection systems, particularly vision-based systems, identify flames before any loss or destruction occurs. In this model, a novel vision-based technology is created that uses a camera to detect flames over long distances. An immediate alert is generated on android application. The goal of the proposed system is to notify the

remote user when a fire accident occurs. By using camera method, the report is automatically generated and delivered to the person immediately following the fire is detected in any part of the frame using Wi-Fi/GSM.

Methodology: Following the detection of a fire, our technology will take real-time photos of the surrounding area. The flame sensor determines whether or not there is a fire or flame present. A photo transistor is used in this explicit flame detector. The infrared spectral band is used by flame detection systems. Carbon dioxide, which is produced by the combustion of organic compound materials, has a resonance frequency in this range. Put anything that can catch fire in front of the flame sensor. The flame sensor is triggered when it detects a fire or flame. As temperature increases the temperature sensor will detect and it will trigger the buzzer and buzzer will blow. The water pump is connected to a IC. If a flame is detected, IC activates the dc motor and water pump. The sprinklers connected to the pump will sprinkle the water throughout the fire affected area

Fire Detection, Monitoring and Alerting System based on IOT

Published year: 2019

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Lekhak D Chheda

Journal name:International Journal of Research in Engineering, Science and Management

Summary:Internet of Things refers to connecting things and people through internet, it has imposed itself as the New business practices in different sectors. To make quick and efficient response in real time, IoT enhances the way and provides emergency managers with the necessary information and communication to make use of those assets. In this paper it is proposed that a quick response for fire hazards is evaluated and examined by using IoT based model. Fire is one of the major reasons of accidental deaths in the world. To implement this proposed system a low-cost Wi-Fi module, gas detection sensor, Flame detection sensor, buzzer to alert and temperature sensors are used. The sensors detects and alerts the local emergency with the data collected by the system, and alerts organizations like fire departments, police stations and

hospitals by sending the exact location to both user and operator through module which all are well connected with.

Methodology:IoT framework concentrates on public safety and livelihood service sector The fire detecting system with IoT standardized design methods The spark Detection sensor PT333B is used to sense the spark, the Flammable gas sensor MQ-6 is used to detect the gases like LPG/LNG and the GPS module is to obtain device location. These sensors along with Wi-Fi micro-controller are connected via Internet.

IoT Based Automatic Fire AlarmSystem

Published year:2020

Author name:A.Jeevanandham,SivamuruganP

Journal name: Bulletin of scientific research

Summary: Fire identifiers are utilized to recognize the fire or smoke at a beginning time and can help in sparing lives. Right now, IOT based alarm has been planned utilizing temperature and smoke sensor. By utilizing the temperature sensor, smoke sensor and there is a simple to advanced convertor, which changes over the simple signs got at the sensor end to

computerized and afterward transmits them to a smaller scale controller and to the Arduino. The small-scale controller is modified to turn on the ringer, when the temperature and the smoke arrive at an edge esteem. Simultaneously, Arduino sends the information to the Wi-Fi module ESP8266. ESP8266 will then the accompanying information to the IOT site, where, approved individuals can take fitting measure so as to check the fire. The gadget id is the one-of-a-kind id given to a gadget, which would enable the work force to get data identified with the area, where the fire is detected

Methodology:lot must be self-contained for searchoperation, decision making based on the real-time data orcurrent condition (object detection), intelligent decision(software program) for the immediate surrounding environment **or condition is to perform the task**