INDUSTRY-SPECIFIC INTELLIGENT FIRE MANAGEMENT SYSTEM

Team ID	**PNT2022TMID17652**
Team Leader	**Manikandan**
Team Member 1	**Kannaka Subbu Lakshmi**
Team Member 2	**Bhavithra**
Team Member 3	**Arunagirinathan**

Journal Title	Author Name	Year	Technology Used	Proposed System
IOT-Based Fire Alarm system	Asma Mahgoub, Abdulla Al-Ali, Nourhan Tarnad, Rana Elsherif, Loay Ismail	2019	IOT	The proposed system is an ad-hoe network that consists of several nodes distributed over the house. Each of these nodes consist of a microcontroller (ESP8266 nodeMCU) connected to smoke, temperature, humidity, flame, methane and Carbon Monoxide sensors that continuously sense the surrounding environment to detect the presence of fire. The nodes communicate with a centralised node implemented with a raspberry Pi microcontroller integrated with a 4G module. Once fire is detected by the node, it sends a signal to a centralized node that is triggered to send SMS to the fire department and the user.
A smart fire detection system using iot technology with automatic water sprinkler	Hamood Alqourabah, Amgad Muneer, Suliman Mohamed Fati	2021	IOT	A smart fire detection system that would not only detect the fire using integrated sensors but also alert property owners, emergency services, and local police stations to protect lives and valuable assets simultaneously. The signals from those detectors go through the system algorithm to check the fire's potentiality and then broadcast the predicted result to various parties using GSM modem associated with the system. The main feature of the proposed system is to minimize false alarms, which, in turn, makes this system more reliable.

GSM based smart fire and high-temperature detection system	Ravindra Koggalage, Manjula Welihindaand Hasitha Nuwan	2021	IOT	This paper discusses a GSM and Arduino-based system for swift and precise fire hazard detection. A smart fire and high-temperature detection system is developed as a workaround using GSM, smoke/temperature sensors, and Arduino technology. An increase in internal temperature is detected by a temperature sensor, and smoke from the fire is detected by a smoke sensor. In the event of a fire, a short message service (SMS) alert will be sent to the user via the GSM module. Additionally, the power supply of the specific building will be turned off when a fire is discovered after a signal is transmitted via a microcontroller to the main power supply circuit breaker. The test's outcomes are listed and discussed in this paper
A Smart Fire Detection using IoT Technology with Automatic Water Sprinkler	Hamood Alqourabah,Amgad Muneer,Suliman Mohamed Fati	2020	IOT	Signals from the integrated detectors for heat, smoke, and flame are processed by the system algorithm to determine whether a fire is likely before being broadcast by GSM modem to various parties. The fire service now has access to the essential data thanks to the use of an IoT technology, which allows for the collection of real-world data without endangering human lives. Finally, reducing false alarms is the major component of the suggested solution, making it more dependable. A system is created in this project that can detect fire and activate the fire alarm, evaluate the situation and start an automatic water sprinkler even if the water unit was designed separately, and analyse the data obtained using the Ubidots Platform, which results in a faster response

Mobile Fire Evacuation System for Large Public Buildings Based on Artificial Intelligence and IoT	HUIXIAN JIANG	2019	IOT and Artificial Intelligence	The mobile terminal intelligent fire evacuation prototype system for large public buildings is implemented based on the construction of indoor maps and road network models, indoor positioning technology and dynamic evacuation model by ant colony algorithms, using ArcGIS Android SDK 10.1 to provide users with GIS spatial graphics expression interface, to design prototype system on Android platform. The system interface is designed with Material Design style.
A survey of Internet of Things in fire detection and fire industries	S.R.Vijayalakshmi, S. Muruganand	2017	IOT	This essay provides a summary of recent developments in IoT technology, research, and applications in the fire-related industries. This article conducted a survey to identify research issues and trends in the fire industries and systematically presents the results. The fire IoT intends to connect various devices via fire-related networks. To support the IoT, service-oriented architecture is used. For the purpose of monitoring fire and goods, those levels interact. A portion of the layer needed for fire monitoring and industry is functionally realised in this research. With the help of an RFID-tagged object, a WSN node with sensors, and a video node for product and fire monitoring, the sensing layer is effectively accomplished. The network layer connects everything, such as sensor networks and mobile networks.