

Literature Survey

TEAM ID : PNT2022TMID38324

BATCH:

B8-2A4E

**COLLEGE : SRI VENKATESWARAA COLLEGE OF
TECHNOLOGY**

DEPT : ELECTRONICS AND COMMUNICATION AND ENGINEERING

TEAM MEMBERS :

- **SATHEESWARI E**
- **PRIYADHARSHINI T**
- **SARANYA G**
- **MUTHU KUMARAN R**

Paper 1: Internet of Things (IOT) Based Gas Leakage Monitoring and Alerting System with MQ-2 Sensor

In 2008, LIU zhen-ya, WANG Zhen-dong, and CHEN Rong published "Intelligent residential security alarm and remote fire alarm, remote automatic alarm and toxic gas leak control system based on 89c51 single-chip computer. It can trigger an automatic alarm that automatically calls the police hotline number. It can also be an audio alarm and display the address of the generated alarm. This smart security system can control power remotely by phone. It can be used for Application of remote monitoring systems based on SMS over GSM 2002, K. Galatsis, W. Wlodarsla, K. Kalantar-Zadeh, and A. Trinchi, "A survey of gas sensors for semiconductor (MOS) gas sensors in vehicle cabins. Compare with a Moo3-based sensor that has already been manufactured. This sensor has a 74% faster response time compared to most commercial sensors tested. **Author:** Rohan Chandra Pandey, Manish Verma, Lumesh Kumar Sahu

Year: 2017

Paper 2: IOT Based Gas Leakage Detection System with Database Logging, Prediction and Smart Alerting

R.T. Mahalingham N.E. Nayagi Mastorakis proposed a system in which gas leaks detected by sensors are sent to a microcontroller so that they can process and generate audio-video alarms. A buzzer and LED are used for the alarm mechanism, and various gases are detected by the MQ5 sensor. The system uses a PIC18F1320 microcontroller to detect gas leaks and activate an alarm when certain exposure limits are exceeded. Hina Luksar, Chandana R, Nandini and others have proposed a system that constantly monitors gas leaks with sensors, and the data can be obtained in real time via the Internet. I used Xily IOT

A platform for providing real-time sensor data over the internet. Sensor data is fed into your account (Twitter or Facebook) via Xively. An advantage of the proposed system, in addition to gas leak detection, is the availability of real-time data through real-time feeds over the Internet. A paper proposed by Ashish Shrivastava, Ratnesh Prabhaker et al. The aim is to introduce designs that can automatically detect and stop gas leaks in vulnerable facilities. The system consists of GSM modules that notify you via SMS. The system not only detects gas leaks, but also warns and cuts off the main power and gas supply.

Author: Chaitali Bagwe, Vidya Ghadi, Vinayshri Naik, Neha Kunte

Year:2018

Paper 3: Internet of Things (IoT) Based Gas Leakage Monitoring and Alerting System with Mq-6 Sensor

In 2008, LIU zhen-ya, WANG Zhen-dong, and CHEN Rong published a paper titled "Residential Intelligent Alarm and Remote Control System Based on a Single Chip Computer", which describes an intelligent residential burglar alarm system, emergency call, fire alarm, Poison gas leak, remote automatic audible alarm, and remote control system based on 89c51 single chip computer. The system can trigger automatic alarms that automatically call police hotline numbers. It also becomes an audible alarm and displays the address of the generated alarm. This smart

security system can be used to control power remotely by phone. In 2008, Chen Peijiang and Jiang Xuehua, "Designing and Implementing GSM-based Remote Monitoring Systems", pointed out that wireless remote monitoring systems have more applications than SMS-based remote monitoring systems over GSM, so this The paper focuses on wireless surveillance systems. 2002

K. In Galatsis, W. Wlodarsla, K. Kalantar-Zadeh, and A. Trinch, Investigating Gas Sensors for Monitoring Air Quality in Vehicle Cabins, this paper uses metal oxide semiconductors to It focuses on the fact that the cabin air quality monitoring (MOS) can be effectively analyzed. gas sensor. In this article, we compare a commercial gas sensor with his Moo3-based sensor in production.

It had equivalent gas sensor characteristics. This sensor has a 74% faster response time compared to most commercial sensors tested. Internet of Things:

Challenges and state-of-the-art solutions in internet-scale sensor information.

author:

Rohan Chandra Pandey, Manish Verma, Lumesh Kumar Sahu, Saurabh Deshmukh

Year:2018

Paper 4: Gas Leakage Detection and Smart Alerting System

This project proposed the most common problem encountered in daily life, the lack of GAS tanks. Bring this document with you to raise awareness of gas lightening in containers and to order gas with IOT. Gas booking/ordering is done using the IOT and continuous weighing of the system is done via a load cell connected to the microcontroller (for comparison with ideal values). The RF TX & Rx modules have also been added for convenience and provide the same information. Regarding kit and gas tank safety, the MQ-2 (gas sensor), LM 35 (temperature sensor) sense the environment to detect possible faults. A change in any sensor (load cell, LM35, Mq-2) triggers a siren (60 dB).

A.LM35 (temperature sensor)

As for the sensors, in the unlikely event of a fire, a temperature sensor detects a change in high temperature (positive change) and sends a pulse to the microcontroller. The microcontroller sends updates to the internet through his IoT. Trigger siren alarm with RFRxkit

B.MQ-2 (gas sensor)

The MQ 2 sensor is basically LPG (liquefied petroleum gas) consisting of propane and butane. So when a gas leak is detected by a sensor, it sends a high pulse to the IoT-updated Mc, and you may even hear a buzzer on the [5] RF Rx kit. Then the problem can be categorized and solved.

Therefore, all components &

As explained above, sensors play a role in this paper.

Author: Shital Imade, Priyanka Rajmanes, Aishwarya Gavali, Prof. V. N. Nayakwadi

Year: 2018