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Patent Search

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Inventor

Name	Address	Country	Nation
Kalangi Balasubramanyam Assistant Professor, ECE Department	St.Martin's Engineering College, Dhulapally Kompally	India	India
Gadi Sanjeev Assistant Professor, ECE Department	St.Martin's Engineering College, Dhulapally Kompally	India	India
K. Pawan Kalyan Student, ECE Department	St.Martin's Engineering College, Dhulapally Kompally	India	India
L. Sri Karan Student, ECE Department	St.Martin's Engineering College, Dhulapally Kompally	India	India
R. Arun Kumar Student, ECE Department	St.Martin's Engineering College, Dhulapally Kompally	India	India
G. Shirisha Student, ECE Department	St.Martin's Engineering College, Dhulapally Kompally	India	India
M. Vennela Reddy Student, ECE Department	St.Martin's Engineering College, Dhulapally Kompally	India	India
Nikitha Kashiwale Student, ECE Department	St.Martin's Engineering College, Dhulapally Kompally	India	India
K. Prathyusha Student, ECE Department	St.Martin's Engineering College, Dhulapally Kompally	India	India
T. Lohit SaiKiran Student, ECE Department	St.Martin's Engineering College, Dhulapally Kompally	India	India
K. Bhavana Student, ECE Department	St.Martin's Engineering College, Dhulapally Kompally	India	India
Ch. Mounika Student, ECE Department	St.Martin's Engineering College, Dhulapally Kompally	India	India
K. Harika Student, ECE Department	St.Martin's Engineering College, Dhulapally Kompally	India	India
D. Swarupa Rani Student, ECE Department	St.Martin's Engineering College, Dhulapally Kompally	India	India

Applicant

Name	Address	Country	Nationality
St. Martin's Engineering College	St.Martin's Engineering College, Dhulapally Kompally	India	India

Abstract:

This invention helps people who were working in coal mines. A control system uses microcontroller and a Wi-Fi communication system to transfer the coal mine environment data acquired through the MQ 135 in coal mine and detect hazardous gas and provide safety against fire explosion, poisoned gases like CO, CO₂, CH₄ and alert people in t and Temperature and Humidity status will be displays in IOT as well as LCD. The system constantly transmits coal mine environment data to the microcontroller, which not processes this data and keeps on transmitting it to the online web server over a WiFi connection. This data is live updated to be viewed on the online server system. Also, s allows user to set alerts for particular instances, the system provides alerts to user if the Sensor parameters cross those values. Thus, the IOT based Sensor reporting syst provides an efficient internet-based Sensor reporting system for users

Complete Specification

Description: Coal Mines are used to extract coal from the ground. The increase in need for the electricity paved a way to the usage of coal for its energy content. Apart from that, to extract iron from iron ore and in cement production coal is used as a fuel. The increased demand for coal leads to the large development of coal mines all over the world. As a result, the miners working in these mines are large in number and their safety becomes paramount. The wirings in the underground mines need constant supervision. Manual Intervention required for this safety measure is huge and time consuming. The major factors which cause

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a problem for the miners working underground are temperature, humidity and CO2 content in the air. So, the system monitors the parameters which are crucial for safety and then they are transmitted regularly to the Base Station eliminating the manual labor required for that. If the measured values exceed the predefined threshold, then the alarm is turned ON. The transmitted data through wireless technology is viewed at the base station. , C , C , C , Claims: 1. We claim that the system has a best accuracy of around 80%.

2. We claim that real time analysis and monitoring of harmful gases in underground mines achieved effectively.

3. We claim that our system is capable of storing the nervous data by analyzing and comparing with

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