



FINAL YEAR PROJECT REPORT

**IOT BASED SAFETY SYSTEM FOR
UNDERGROUND COAL MINES**

**In fulfillment of the requirement
For degree of
BS (INFORMATION TECHNOLOGY)**

By

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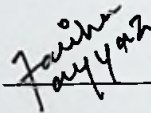
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FALL-2020**

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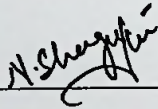
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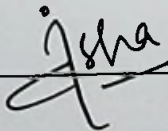
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IOT BASED SAFETY SYSTEM FOR UNDERGROUND COAL MINES

ABSTRACT

Mines are the world's most dangerous place to work because in the mines, fatality incidents occurred. A recent report states that in such mine accidents an average of around 12,000 people have died. This system will facilitate the coal mine industry to greater underground explosion. The carbon mine safety system is implemented with IoT, some gas and air quality sensors, Raspberry pi and ZigBee The device is installed in coal mine to track and regulate different parameters such as poisonous gas emission, temperature and fire detection. All sensors are constantly uploaded for analysis. Here the gas is continuously monitored if any gas level uncertainties Up, then buzzer warns staff. This device sensor senses poisonous gas presence. Temperature values are often constantly tracked and viewed on the Site and MOB APP. The built framework is primarily applied to ensure that no fatalities' exists in coal mines and to ensure workers' welfare.

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