Safety Clothing for Mining

Radha G^1 , Sivasubramanian R^2 , Ugendran R^3 , Mahalakshmi M M^4 , Revilla Jyosthna⁵, Pannave K^6 , Anju L^7 , Subhashini K S^8

¹²³⁴⁵⁶Student, Electronics and Communication Engineering, Sri Venkateswara College of Engineering, Sriperumbudur

⁷⁸Assistant Professor, Electronics and Communication Engineering, Sri Venkateswara College of Engineering, Sriperumbudur

PROBLEM STATEMENT

Work clothing that has sensors embedded in it to securely transmit data to managers about hazardous conditions and the workers' physical conditions, improving safety overall.

ABSTRACT

Engineer is the person who is always been interested in providing best alternative solution to any social problem to meet the scarcity. Keeping this mindset and visualizing social problems in several countries, it is observed that annually several people die working inside coal mines. By identifying this problem, this project suggests a wearable smart jacket design for securing the life of coal miners. This Prototype senses the various health related parameters i.e. the presence of hazardous gas (Carbon monoxide, Methane, Smoke, Hydrogen Sulphide), updated temperature/humidity & global positioning of miner. All these parameters will then be transmitted through a Wi-Fi shield to a dynamic internet protocol. In this way, one may monitor all labours working inside the mines and moreover in case of disaster the life of miner can be secured immediately.