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LPG Gas Leakage Detector With Exhaust Fan And SMS Alert

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Abstract: *Liquefied Petroleum Gas (LPG) is widely used for domestic and industrial purposes due to its efficiency and convenience. However, LPG leakage poses a serious risk as it can lead to fire hazards, explosions, and health issues.*
This project presents an LPG Gas Leakage Detection System integrated with an exhaust fan and SMS alert mechanism to enhance safety and provide real-time monitoring.
The system uses a gas sensor (such as MQ-2) to continuously monitor the presence of LPG in the environment. When the gas concentration exceeds a predefined threshold, the system immediately triggers an alert. An exhaust fan is automatically activated to ventilate the area and reduce gas accumulation. Simultaneously, a GSM module sends an SMS notification to the user, informing them about the leakage so that prompt action can be taken even if they are not physically present.
The proposed system is cost-effective, reliable, and easy to install, making it suitable for homes, kitchens, and small industries. By combining detection, ventilation, and remote alert features, this project significantly reduces the risks associated with LPG leakage and improves overall safety.

Keywords*: Arduino-based radar system*

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