Gas Detector Alarm System

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Ghana lost close to GHS 86 million between January and September of 2016 alone. Within that same period about 4373 fire outbreaks were recorded. Majority of these cases were as a result of LPG leakage. 90 percent of outbreaks recorded would have been controlled or prevented if distress calls were received on time according to the Ghana National fire service. This worrying situation inspired me to develop a system which uses internet technologies to detect LPG leakages and transmit information to facility owners for prompt action. I employed an MQ5 gas sensor attached to a micro-controller with a buzzer. This was then connected to a Raspberry Pi single board computer for data transmission. The results show a 30 second average latency between the detection of the gas and reception of the alert. My project can be used at homes to monitor LPG levels in the kitchen as well as in restricted areas such as chemical laboratories and factories, restaurants and cafés.

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