## GSM BASED SECURITY ALARM SYSTEM USING PIR SENSOR

## **ABSTRACT**

Generally, in security systems that are used in homes, shops, offices, etc., infrared or laser transmitters and receivers are used for accuracy and reliability. But these methods require a lot of monetary investment and infrastructure support. A simple costeffective solution for Security Systems is implemented in this project where I will explain about a PIR based Security Alarm System, in which a PIR sensor is used instead of transmitter or receiver. This saves power consumption as well as it is a low-cost implementation. PIR sensor is the short form of Passive Infrared Sensor. The main idea of the circuit is to provide security. This produces siren and send the SMS to house owner is based on PIR sensor feedback. The PIR sensor detects the IR radiations emitted from the humans and it produces a digital output. This digital output is applied to the Arduino UNO. Based on the digital signal from the PIR Sensor, Arduino UNO then triggers the siren and send the SMS to owner. Thus, it produces the sound and SMS sent when any human is detected.

## **BLOCK DIAGRAM**

