

Intruder alert system

IOT BASED RASPBERRY PI HOME SECURITY SYSTEM WITH EMAIL ALERT.

Requirement specification document :

This Capstone project is about building a low cost simple Raspberry Pi based Intruder Alert System, which not only alert you through an email but also sends the picture of Intruder when it detects any.

In this Project, we will build a Home Security System using PIR Sensor and PI Camera. This system will detect the presence of Intruder and quickly alert the user by sending him a alert mail. This mail will also contain the Picture of the Intruder, captured by Pi camera. Raspberry Pi is used to control the whole system.

Components Required:

Raspberry Pi

Pi Camera

PIR Sensor

LED

Bread Board

Resistor (1k)

Connecting wires

Power supply

User perspective:

This system can be installed at the main door of your home or office and you can monitor it from anywhere in the world using your Email over internet.

Designer perspective:

Whenever anyone or intruder comes in range of PIR sensor, PIR Sensor triggers the Pi Camera through Raspberry Pi. Raspberry pi sends commands to Pi camera to click the picture and save it. After it, Raspberry Pi creates a mail and sends it to the defined mail address with recently clicked images. The mail contains a message and picture of intruder as attachment.

Constraints:

- No false alarm protection
- No instant connection to police support
- Reliant on internet connection