* Weather station app/website
* Pi file sharing
* Robot playing with pets/kids
* Flashcard app
* Security sensor (snapshot, video, email alert)

ALARM

A

Loud

Armed

Raspberry

Machine

POPS

Perpetrators

On

Porch

Scared

Security Sensor

A raspberry pi has an PIR sensor and when an object with a heat signature triggers the sensor, begins audio recording, a light will turn on, and take a snapshot/video. Then an alarm will start to ring and send a text/email alert to the owner of the intrusion and the picture of the intruder. All information will be accessible on website.

The website will have a dashboard which will list previous alarms along with their time and date. There will also be a section on the page to arm and disarm the system. Once an item from the list is clicked it will open a web page displaying the picture, the date and time, and the audio clips. If the program is completed before the deadline, weight of the intruder/s, height of the intruder/s, and projecting the owner’s voice to the device will also be added features.

Materials:

* Raspberry pi
* PIR sensor
* Camera
* Light
* Mic
* Server
* Speaker
* Weight scale
* Breadboard
* Electrical components

Programs:

1. Detect intruder
2. Activate/deactivate light
3. Camera snapshot
4. Activate/deactivate audio recording
5. Activate/deactivate Alarm
6. Communication between two pi’s (<http://www.instructables.com/id/How-to-Make-a-Raspberry-Pi-SuperComputer/>)
7. Send email
8. Send information from pi to server
9. Send information from website to server
10. Log in to the website
11. Website getting info from server
12. Website dashboard
13. Arm/Disarm from website
14. Webpage for each intruder alert

Planning: