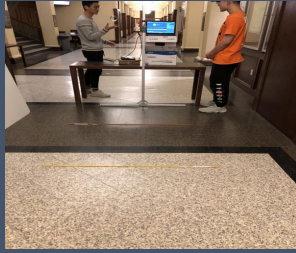


IR Sensor Analyzer

Team 30

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 Advisor : Frank Zhou
 Mostayed Ahmed



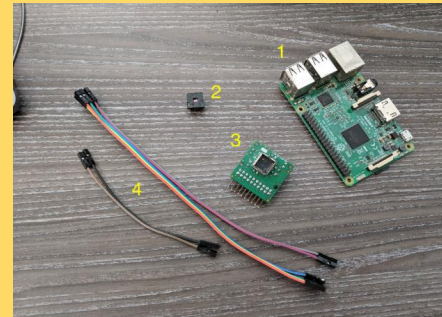
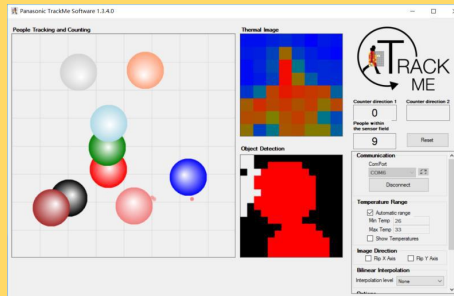
Present Goals

1. Use Matlab to transform Grid-eye element temperature data into black-or-white image
2. Summarize the testing data of Grid-eye sensor and Lypton IR Sensor

work accomplished

We have finished the following work :

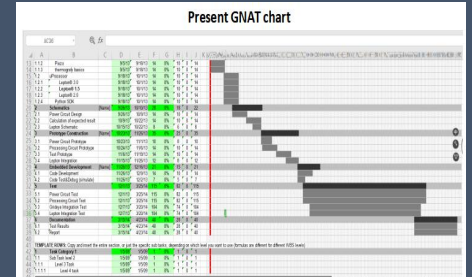
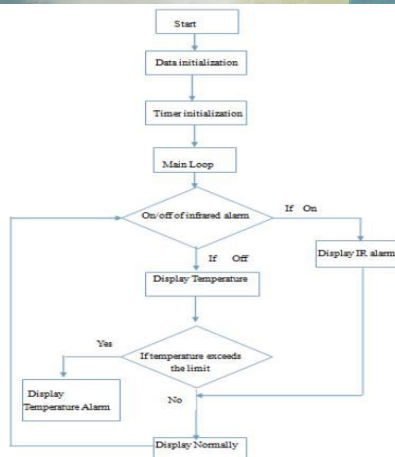
1. Grid-eye IR sensor with Track Me software Testing
2. Lypton IR sensor Testing
3. Raspberry Pi learning



what testing has been accomplished

We have finished the following testing :

1. Grid-eye IR sensor with Track-me software
 - 1.1 Range of Detection
 - 1.2 Optimal Range of Detection
 - 1.3 Single Human body detection
 - 1.4 One-head testing with board
 - 1.5 Two-hands testing with board
 - 1.6 Human with/without coat testing
2. Lypton series IR sensor
 - 2.1 Range of Detection
 - 2.2 Optimal Range of Detection
 - 2.3 Single Human body detection
 - 2.4 One-head testing with board
 - 2.5 Two-hands testing with board
 - 2.6 Human with/without coat testing



What finished testing would be accomplished if the University was open.

If the university was open, we can get access of the lab and finish the next part of the design.

First we will dig inside of Lepton IR camera with more tests. For example, how it will perform when there is only a big image of a human (such as a statue of a portrait) rather than a real human body.

Furthermore, we will analyze the result and determine whether the expensive sensor is suitable for our design of the museum safety camera.

Final Status

1. The maximum range and angle should be similar to our simulation, which is based on the parameters given by the instruction.
2. The raspberry should be worked well on both of the equipment and we can directly analyze the pictures and data from it.
3. Will both of the equipment work well on our design of the museum safety camera.
4. If they both can be used, which is more suitable for our design, or there should be a choice between them, more accurate than Grid-eye and cheaper than Lepton.