10/21/2012
Weekly Report 10/15 - 10/21

Group: 13-17
Advisor: Prof. Somani
Client: Josh Mandich/ Venture Lights

Accomplishments:
- Discussed using alternative boards, confirmed that waiting for Raspberry Pi is the best option
  ● More powerful, better features
  ● Higher resolution camera, better at night
  ● Lower cost

Plan for the coming week:
- Eric:Get Java code from James to test network code, put in order for Raspberry Pi's, look at sending images over network
- Michael: Continue looking into motion detection algorithms, look at possibility of demo
- James: Work on threading for sockets program, push code for Eric to test with, look at sending images over network
- Intae: Look at comparing viability of IR sensor vs. camera motion detection, continue looking at reducing power consumption
- David: Continue researching OpenCV code, start running test programs. Look into possibilities for image processing demo

Pending Issues:
- Design document due Saturday
  ● Look at sample design doc, contribute anything you can
  ● Try to have some done by Wednesday, should be ready to compile by Friday
- Senior design homework due Tuesday
- Will need to consider what will happen if something other than a car sets off the motion detection

Individual Contributions:
- Eric: Basic framework for network code is done, ready to test with James' code
- Michael: To do motion detection on camera, camera would provide low quality VGA images. Buffer the previous image, and compare pixels RGB values to current image. If pixels change, switch to high resolution and take pictures.
- James: Asked Josh about how to store images, what needs to be displayed in UI. Could set up a password on server, would need to supply info about device to connect
- David: Set up OpenCV for testing, started looking at code syntax and sample programs
- Intae: Should be able to directly connect IR sensor to Raspberry Pi. Looked at reducing power consumption