

10/14/2012

Weekly Report 10/8 - 10/14

Group: 13-17

Advisor: Prof. Somani

Client: Josh Mandich/ Venture Lights

Accomplishments:

- Talked about board availability, camera options with other boards
- Working client-server SQL demo
- Image processing steps outlines
- Can purchase Raspberry Pi if we don't need it before December
- Decided that waiting for Raspberry Pi is the best option
 - Better, higher resolution camera
 - Lower cost

Plan for the coming week:

- Eric: Start coding network program to send files
- Michael: Look at alternative cameras, more research on live video motion detection, look at possibility of demo with webcam
- James: Find out more about images we need to store and how to store them. Think about how to display in UI. Look at threading for multiple clients
- Intae: Further research on IR sensor integration with Raspberry Pi and power consumption
- David: Get Tesseract OCR and OpenCV setup for testing, look into pattern recognition and font training

Pending Issues:

- No meeting on Monday, next meeting is a week from Monday

Individual Contributions:

- Eric: Distributors are backlogged on orders until December. Talked to Dr. Mina about purchasing: we should send an e-mail to Dr. Somani, and he will send to Dr. Mina
- Michael: Can use OpenMax API with camera, should be easier to use with C. Have not heard from distributors about camera release date or possibility of early sample. If we need to go with BeagleBoard, Leopard sells 3MP and 5MP cameras, but they aren't hardware accelerated
- James: Demo works, allows you to execute SQL queries from client to server. Command line interface right now, but will convert to a nicer UI. May want to discard state and emergency vehicles
- David: Have a basic outline of the image processing steps before sending to OCR, looks like OpenCV will be able to provide all of the filters we need
- Intae: IR sensor can be influenced by weather, so motion detection with camera may be a better option. Need to do more research on integrating sensor with Raspberry Pi