EE 492 Weekly Report (DEC15-19)

Week 10

Project Title: Efficient Measurement of Soil Microtopography to Aid the Verification of European Space Agency and NASA Satellite Observations of Soil Moisture

Advisors: Brian Hornbuckle, ISU Agronomy and ECpE; Josh Bertram, Collaborator Instructor

Client: Brian Hornbuckle, ISU Agronomy and ECpE

Members (roles): Brant Walsh (Key concept Holder, Team communication leader), Dillon McDowell (Team Webmaster), Yan Yao Chan (Team Leader)

Weekly Summary

The group worked on setting up the Odroid, tested the voltage regulator and researched more on fabrication and circuit building.

Meeting notes:

10/26 Group Meeting

Duration: 3 hours (Brant Walsh), 2 hours (Dillon McDowell), 1 hour (Yan Yao Chan)

Members Present: All

Purpose and Goals: To work on setting up the Odroid and to test the voltage regulator.

Achievements: The voltage regulator is tested successfully despite the final results. Although the Odroid could not be initialized completely during the meeting, Mono and Libfreenect are successfully installed at the expense of one of the group members' personal time.

10/29 Group Meeting with Advisor and Collaborator Instructor

Duration: 40 minutes

Members Present: All

Purpose and Goals: To present the group's findings to the advisor and the collaborator instructor.

Achievements: The group presented the essential information and is to proceed with the tasks given prior.

Pending issues

The group has yet to receive updates on the parts and the required drill vital to the project design. Besides that, the group has to work on the libfreenect on the Odroid as well as look into building the simple switcher circuit.

Plans for next week

The group is to continue working on the libfreenect driver on the Odroid. The group will also work on power source once the power drill has been delivered.

Individual Contributions for this week

Brant Walsh (6 hours 40 minutes) – Attended the meeting with the advisor and the collaborator instructor. Worked on testing the voltage regulator and setting up the libfreenect driver on the Odroid.

Dillon McDowell (2 hours 40 minutes) – Attended the meeting with the advisor and the collaborator instructor. Worked on setting libfreenect driver on the Odroid.

Yan Yao Chan (3 hours 10 minutes) – Attended the meeting with the advisor and the collaborator instructor. Worked on testing the voltage regulator. Completed the weekly report.

Total contributions for the project

Brant Walsh (25 hours 40 minutes)

Dillon McDowell (23 hours 55 minutes)

Yan Yao Chan (26 hours 25 minutes)