## EE 492 Weekly Report (DEC15-19)

#### Week 16

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 wraps up the senior design project including the project design, project assembly and the final document as well as the presentation document.

### **Meeting notes:**

12/7 Group Meeting

Duration: 8 hours (Brant Walsh), 8 hours (Dillon McDowell), 6 hours (Yan Yao Chan)

**Members Present:** All

**Purpose and Goals:** To work on the buck converters and the final document.

**Achievements:** The buck converters are modified and tested for various output voltage.

12/8 Group Meeting

**Duration:** 5 hours (Brant Walsh), 4 hours (Dillon McDowell), 1 hour (Yan Yao Chan)

**Members Present:** All

**Purpose and Goals:** To work on the final document and the buck converters.

**Achievements:** The group completed the final document. Aside from the final document, the group has also ordered a new adapter for the Kinect since it failed to function properly.

12/10 Group Meeting

**Duration:** 8 hours

**Members Present:** All

Purpose and Goals: To work on the final presentation document.

**Achievements:** The final presentation document is completed and uploaded to the group

website.

### **Pending issues**

The group has yet to give a presentation and demonstration to the Industry Review Panel and the department in general.

#### Plans before next week

To give a presentation and demonstration about our senior design project and what the group has achieved throughout the semester.

#### **Individual Contributions for this week**

Brant Walsh (21 hours) – Worked on the simple switcher circuits and the final document as well as the final presentation document. Attended the group presentation and project demonstration session.

Dillon McDowell (20 hours) – Worked on the project poster and the final document as well as the final presentation document. Attended the group presentation and project demonstration session.

Yan Yao Chan (15 hours 30 minutes) – Worked on the simple switcher circuits and the project poster. Completed the weekly report and worked on the final document as well as the final presentation document. Attended the group presentation and project demonstration session.

# **Total contributions for the project**

Brant Walsh (102 hours 30 minutes)

Dillon McDowell (86 hours 50 minutes)

Yan Yao Chan (94 hours 35 minutes)