# EE 492 Weekly Report (DEC15-19)

#### Week 15

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 continues to work on the simple switcher circuits and starts focusing on the project poster as well as the final presentation.

### **Meeting notes:**

11/30 Group Meeting

**Duration:** 6 hours (Brant Walsh), 7 hours (Dillon McDowell), 5 hours (Yan Yao Chan)

**Members Present:** All

**Purpose and Goals:** To work on the power source for the device and the project poster.

**Achievements:** The group is about done with the project poster. It is also discovered that the power source, while providing enough power, needs some diagnostics and improvement.

12/1 Group Meeting

**Duration:** 3 hours (Brant Walsh), 1 hour (Dillon McDowell)

Members Present: Brant Walsh, Dillon McDowell

**Purpose and Goals:** To work on the power source for the hardware.

**Achievements:** The power source is further examined and improved.

12/3 Group Meeting with Advisor and Collaborator Instructor

**Duration:** 30 minutes

**Members Present:** All

**Purpose and Goals:** To discuss about the final presentation and project progress.

**Achievements:** The group is to continue working on the project as planned.

### **Pending issues**

The simple switcher circuits still do not work as intended.

#### Plans for next week

To continue working on the simple switcher circuits and to start assembling the hardware and parts.

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

Brant Walsh (9 hours 30 minutes) – Attended the meeting with the advisor and the collaborator instructor. Worked on the simple switcher circuits.

Dillon McDowell (8 hours 30 minutes) – Attended the meeting with the advisor and the collaborator instructor. Worked on the Kinect calibration and the project poster.

Yan Yao Chan (21 hours) – Attended the meeting with the advisor and the collaborator instructor. Worked on the simple switcher circuits and the project poster. Completed the weekly report.

## Total contributions for the project

Brant Walsh (81 hours 30 minutes)

Dillon McDowell (66 hours 50 minutes)

Yan Yao Chan (79 hours 5 minutes)