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## EE 492 Weekly Report (DEC15-19)

### Week 8

**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)

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### Weekly Summary

The group had several meetings with different groups of members each time. Each meeting was planned differently to accomplish certain tasks such as Kinect data acquisition, data processing interface and appropriate power source.

### Meeting notes:

10/12 Group Meeting

**Duration:** 3 hours 20 minutes

**Members Present:** Brant Walsh, Dillon McDowell

**Purpose and Goals:** To work on the interface between the Kinect and the computing system.

**Achievements:** The Kinect could not work through Dillon's computer despite numerous attempts.

10/15 Group Meeting with Collaborator Instructor

**Duration:** 50 minutes

**Members Present:** Dillon McDowell, Yan Yao Chan

**Purpose and Goals:** To present the current progress of the research and the project design so far to both the advisor and the collaborator instructor.

**Achievements:** More potential issues on the entire design are discovered and will be taken into account during the next group meeting.

## **Pending issues**

Despite favoring towards the power drill battery, the group has not decided on which brand and model of the said battery to be ordered. Besides that, the Kinect still does not connect to the operating system correctly.

## **Plans for next week**

To solve the interface issue between the Kinect and the computer interface. Moreover, a final list of power drill battery will be reviewed and a suitable battery will be chosen for purchase.

## **Individual Contributions for this week**

Brant Walsh (3 hours 20 minutes) – Attended the meeting with the collaborator instructor and worked on the Kinect's interface with the computing system.

Dillon McDowell (4 hours 10 minutes) – Attended the meeting with the collaborator instructor and worked on the Kinect's interface with the computing system.

Yan Yao Chan (3 hours 40 minutes) – Attended the meeting with the collaborator instructor. Researched on power drill battery for potential power source and completed the weekly report.

## **Total contributions for the project**

Brant Walsh (12 hours)

Dillon McDowell (16 hours 20 minutes)

Yan Yao Chan (16 hours 35 minutes)