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## EE 492 Weekly Report (DEC15-19)

### Week 6

**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

Each group member completed their respective research tasks such as possible new embedded board, processing software and power sources for the system.

### Meeting notes:

10/01 Group Meeting with Dr. Hornbuckle

**Duration:** 50 minutes

**Members Present:** All

**Purpose and Goals:** To discuss what each group member found that can be useful to the senior design project.

**Achievements:** The group discussed what each group member found respectively to the advisor and each group member is to submit what they found to the client as necessary.

### Pending issues

The power supply aspect has yet to be determined so far. As of now the team has decided to try modifying existing power adapter to see if building a custom power supply is feasible.

## **Plans for next week**

To decide on what power source to be used for the project and to start working on hardware implementation once the ordered embedded board arrives.

## **Individual Contributions for this week**

Brant Walsh (1 hour) – Attended the meeting with Dr. Hornbuckle. Researched and placed an order on embedded board to be used for the project.

Dillon McDowell (5 hours 50 minutes) – Attended the meeting with Dr. Hornbuckle. Researched on Mono the C# compiler and possible MATLAB implementation.

Yan Yao Chan (1 hour 50 minutes) – Attended the meeting with Dr. Hornbuckle. Researched on possible power sources for the project and completed the weekly report.

## **Total contributions for the project**

Brant Walsh (6 hours 55 minutes)

Dillon McDowell (11 hours 20 minutes)

Yan Yao Chan (9 hours 35 minutes)