

# EE 492 Progress Report    MAY15-23    Period 7 (4/20/15-4/28/15)

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**Advisors:** Daji Qiao

**Client:** Halil Ceylan

**Members (roles):**    **Brandon Wachtel, Tyler Fish (Team Communicators)**

**Mitch Balke (Team Leader)**

**Brandon Maier, Johnnie Weaver (Web Masters)**

**Trieu Nguyen, Christofer Sheafe (Key Concept Holders)**

**Project Title: Wireless Embedded Roadway Health Monitoring**

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## Period Summary

During this period, we finished putting together the PCBs and enclosures to ready them for final presentations and demonstrations. The team finished the documentation for the project and made the final changes to the presentation that will be given to the industry review panel. The poster was finalized, sent off for printing, laminated, and mounted to a board for the final demonstration.

### 4/20    Group Meeting with Advisors

**Duration:** 45 Minutes    **Members Present:** All

#### **Purpose and Goals:**

The purpose of this meeting was to demonstrate the project to our advisers and get some additional help before we began putting together the final product. We demonstrated the charging and communication systems to our advisers to show them how they worked and what we have been experiencing. Final poster was shown to them to make sure that it looked okay before sending off for printing.

#### **Meeting Notes:**

Communication transmission issues are most likely software problems  
Waiting on last pieces of charging enclosure to be printed  
Possibly make the receiving coil out of smaller wire  
Poster has been submitted  
Full system image in the requirements section of the poster  
Possibly change the layout of the poster to make it flow better

### 3/30    Group Meeting with Advisors

**Duration:** 45 Minutes    **Members Present:** All

#### **Purpose and Goals:**

The purpose of this meeting was to rehearse and give our final presentation to our advisers to get their input on what needed to change before we presented to the industry review panel. We did this to receive feedback on what was to be expected from the presentation and to make sure that we were meeting all of the specified requirements for the presentation.

#### **Meeting Notes:**

Increase block text on system diagram  
Reuse system diagram in corners to show what section we are talking about during the presentation  
Fix errors throughout the presentation  
Make text larger for easier reading at a distance

## **Individual Contributions (This Period)**

- Johnnie Weaver: Attended advisor meetings (1.5hr), attended group meeting (0.75hr), helped solder charging nodes and met with concrete guy (2.5hr), worked on presentation and design document (17.5hr), poster printing (1hr)
- Brandon Wachtel: Attended advisor meetings (1.5hr), attended group meeting (0.75hr), worked on design documentation and presentation (19.5hr), soldered boards and tested charging chip (7.5hr)
- Tyler Fish: Attended advisor meetings (1.5hr), attended group meeting (0.25hr), worked on design document and presentation (17hr), buried second node in concrete (1hr), wrote progress report (1hr)
- Mitch Balke: Attended advisor meetings (1.5hr), attended group meeting (0.75hr), assembled boards with charging circuitry (2.5hr), sensor software for new nodes (1hr), prepared node for concrete burial (1hr), worked on node software and documentation (6.75hr)
- Brandon Maier: Attended advisor meetings (1.5hr), attended group meeting (0.75hr), worked on base station networking (2hr), base station work and documentation (6hr)
- Trieu Nguyen: Attended advisor meetings (1.5hr), attended group meeting (0.75hr), worked on presentation and design document (7hr), soldered boards, made new coils, and worked on documentation (8.5hr)
- Christofer Sheafe: Attended advisor meetings (1.5hr), worked on design document (1hr), worked on presentation (1hr)

## **Total Contributions (This Period)**

Johnnie Weaver: 23.25 Hours  
Brandon Wachtel: 29.25 Hours  
Tyler Fish: 20.75 Hours  
Mitch Balke: 13.5 Hours  
Brandon Maier: 10.25 Hours  
Trieu Nguyen: 17.75 Hours  
Christofer Sheafe: 3.5 Hours

## **Total Contributions to Project**

Johnnie Weaver: 160.5 Hours  
Brandon Wachtel: 153.5 Hours  
Tyler Fish: 150.5 Hours  
Mitch Balke: 142 Hours  
Brandon Maier: 116.5 Hours  
Trieu Nguyen: 127.75 Hours  
Christofer Sheafe: 87 Hours