

# EE 491 Weekly Report **MAY15-23 Week 14 (12/1/14-12/7/14)**

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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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## Weekly Summary

Finished up initial prototypes, final version of the project plan, and final version of the design document. Started working on the PowerPoint for our final presentation. Redesigned and built the charging circuit. Continued working on talking between the microcontroller and the antenna.

## Meeting notes:

Table of Contents start on right side

2 spaces after periods

Justified paragraphs

15-20 slides for presentation

HUB – Raspberry PI, USB port, possibility for more ports

Use single mode on oscillators for finding times for power consumption

Detailed schedule for next Friday

Make sure to understand the bigger picture of the project

What are our different options and why did we chose this solution

No 1<sup>st</sup> person tense in design document and project plan

Update parts list in the design document

Add more content to some of the sections

Image citation and caption for all images within the design document

Add decimals to sublevel numbers

Justify paragraphs

Increase Figure/Flowchart font size

Increase line thickness in flowchart

No more than 3 colors allowed for the presentation

## 10/24/14 Group Meeting with Advisers

**Duration:** 1 hour      **Members Present:** All

### Purpose and Goals:

Presented our design document and project plan for review and approval before final submission. They gave us some minor suggestions for implementation before submission. Updated our advisers on the current status of the project. Notified advisers of our presentation date and time to allow them to come to it.

## Pending issues

Testing and debugging our prototypes

Over winter break, we hope to do some minor testing

## Plans for next week

Final presentation for semester 1 of senior design. We will present on Wednesday, December 10 at 1pm.

## **Individual Contributions (this week)**

Johnnie Weaver: Attended group meeting (3.25hr), attended adviser meeting (1hr), updated website (0.75hr), helped solder charging circuit and chip orders (0.5hr), worked on design document and project plan (7hr), worked on presentation slides (2hr)

Brandon Wachtel: Attended group meeting (1.75hr), attended adviser meeting (1hr), worked on design document and project plan (4hr), worked on charging circuit (1hr), wrote weekly report (0.5hr)

Tyler Fish: Attended group meeting (3.25hr), attended adviser meeting (1hr), worked on design document and project plan (7hr), worked on presentation slides (2hr), wrote weekly report (0.5hr)

Mitch Balke: Attended group meeting (2.5hr), attended adviser meeting (1hr), RF transceiver configuration and transmission and reception modes (5hr), worked on SHT71 sensor code (0.5hr), worked on design document, project plan, and presentation slides (6hr)

Brandon Maier: Attended group meeting (2.75hr), attended adviser meeting (1hr), worked on RF code (2hr), worked on presentation slides and documents (8hr)

Trieu Nguyen: Attended group meeting (3.25hr), attended adviser meeting (1hr), worked on project plan and design document (5hr)

Christofer Sheafe: Attended group meeting (2.25hr), attended adviser meeting (1hr), moved test equipment to the antenna lab (0.75hr), market research of whip antennas (0.5hr)

## **Total weekly contributions (this week) for the project**

Johnnie Weaver: 14.5 Hours  
Brandon Wachtel: 8.25 Hours  
Tyler Fish: 13.75 Hours  
Mitch Balke: 15 Hours  
Brandon Maier: 13.75 Hours  
Trieu Nguyen: 9.25 Hours  
Christofer Sheafe: 4.5 Hours

## **Total contributions for the project**

Johnnie Weaver: 62 Hours  
Brandon Wachtel: 64.25 Hours  
Tyler Fish: 64.75 Hours  
Mitch Balke: 62.5 Hours  
Brandon Maier: 59 Hours  
Trieu Nguyen: 51.25 Hours  
Christofer Sheafe: 48.5 Hours