# EE/CprE/SE 491 Weekly Report MAY1622 Week XI Date (11/11/15-11/17/15)

Advisors: Daji Qiao
Client: Halil Ceylan
Co-Advisor: Christofer Sheafe ()

Members (roles):

Shen Fu (Team Leader)

Matt Rose (Team Communication Leader)

Qichen Yan (Team Webmaster)

Darnell Melvin (Team Key Concept Holder)

Project Title: Wireless Embedded Roadway Health Monitoring Network

## **Meeting notes**

#### 11/11

Started a master repository and created shell projects for Android application and embedded project.

#### 11/13

- Need to choose battery holder or design the casing in such a way that it will connect the battery to the circuit board
- Solder chip onto breakout board to start testing the microcontroller and sensor
- 1310 lib might be on TI wiki
- Move on to PCB layout now that we have design
- Get sensor from civil department (SHT10), think about how to expose the sensor to the concrete environment without ruining the board and components
- Need to choose antenna
- Start presentation

## 11/13/2015 Group Meeting with Advisers

Duration: 1 Hour Members Present: *None* Purpose and Goals:

During this meeting, our advisers were concerned that we had not chosen an antenna or how to attach the battery to the circuit. We presented our circuit layout and it was approved. Advisers would like to see a rough draft of the PCB layout.

# **Weekly Summary**

Android application has progressed to turn on device Bluetooth, search for nearby devices, and connect to base station. We have not yet chosen whether to write a Bluetooth server Android app for the base station or just harvest the data via the Bluetooth output stream.

# **Pending issues**

None

### Plans for next week

Next week, we want to have a rough first draft of the PCB layout as well as an idea of what antenna to use and how to connect it. We also need to start thinking about the enclosure and how it can help the battery connect to the circuit and how to enclose the system so that only the sensor is exposed to the harsh environment of the concrete.

# **Budget**

N/A

# **Next Meeting**

11/18/2015 4:00 PM, Coover Senior Design Lab

# **Hourly Contributions**

Team (together): 5 hours

Matt: 4 hours Shen: 4 hours Qichen: 4 hours Darnell: 4 hours