EE/CprE/SE 491 Weekly Report MAY1622 Week VI Date (10/7/15-10/13/15)

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

Meeting notes

10/9

- For part acquisition email Leland Harker, copy Mani, Daji, Sumit
- Look into IAR and Z-Stack for 8051 chip
- Other chips to consider:
 - o CC2650
 - o CC2530A
 - o CC1110Fx/1111Fx
- Things we need to get along with mcu:
 - Evaluation board
 - Debugger
- Smaller mcu and smaller transceiver instead of eliminating parts?
- Meet to work out Multisim design
- Look at datasheets for parts needed when deciding which to use

10/12

- CC1310 looks like the best choice
 - Eliminates RTC and RF transceiver.
 - Much smaller and uses little power
- Starting to create chip in Multisim

10/9/2015 Group Meeting with Advisors

Duration: 1 Hour

Members Present: *All* Purpose and Goals:

The team had little to present this week, as team members have been very busy and doing more research on which parts to use. Daji reiterated what he would like to see next time: parts should be chosen and potentially ordered.

Weekly Summary

This week, on 10/13, our team had a research session all together and found a great replacement for the system, the CC1310. It will greatly reduce the size of the circuit and use less power than before, making it a splendid replacement. The team started to create the CC1310 in Multisim today (10/13), which is the first step for the circuit design.

Pending issues

None

Plans for next week

Next week we would like to have the parts so that we can start testing them and potentially writing software for them.

Budget

Need to purchase a chip from TI, as well as the evaluation board and debugger.

Next Meeting

10/16/2015 4:00 PM, COOVER 3138