EE/CprE/SE 491 Weekly Report　MAY1622 Week IV
Date (9/22/15-9/29/15)

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

9/25

- Website needs to look more professional; clean up homepage, look at last year's site
- Look into using a Gantt chart for timeline
- If we can combine any parts on the board that would help save space
  - MCU + RTC (EFM32 Gecko)
  - MCU + RF (CC2530)
  - Does MSP430 have internal clock?
  - Move flash memory to MCU
- Do more research on components (plan for Monday's meeting)
- Don't forget about antenna design
- Understand circuit design to help with research
- Look into how hub will communicate with app
- Edit website and documents for grammar and spelling
- Start thinking about Android design

9/28

- EFM32 can combine RTC and MCU
  - Apparently so can MSP430
  - Ask Chris why their team didn't use onboard RTC
- CC2530 can combine RF and MCU
  - At the cost of power efficiency
- Creator CI20 over Raspberry PI
  - Dual boots Linux and Android, easier to talk to Android app

9/25/2015 Group Meeting with Advisors
Duration: 1 Hour
Members Present: *All*
Purpose and Goals:

The team presented its preliminary findings for replacing circuit elements. Daji wants us to make the website look more professional and have more information. We talked about different microcontrollers that could combine certain elements of the circuit to reduce space needed. The team decided that Android app design should start, with conceptual sketches being the first deliverable. Daji wants us to edit our work as there are many spelling and grammatical errors.

Weekly Summary

This week, our team started researching different chips which combine RTC, RF transceiver, flash memory, etc into the microcontroller to save on space. We talked about Android design and using a different platform than the Raspberry Pi as our hub module. We know what needs to be done and we're getting a better understanding as to how it will be done.

Pending issues

None

Plans for next week

Next week the team plans to order microcontroller(s) to experiment what the tradeoffs are in regards to size vs battery usage, as we have three microcontrollers that we're currently eyeing for different traits. We're planning on having better content for the website as well as editing all of our documents for technical correctness.

Budget

N/A

Next Meeting

9/30/2015 4:00 PM, COOVER TLA