

# EE 492 Weekly Report    MAY1633    Week 13(4/14/16-4/20/16)

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**Advisors: Dr. Daji Qiao, Dr. Long Que**

**Client:**

**Members (roles):**    Schilling, Anthony (Team Leader)  
                              Bennett, Tyler (Concept Keeper)  
                              Li, Liuchang (Web Master)  
                              Lin, Haisong  
                              Tian, Yang (Communication Leader)  
                              Wang, Wentai

**Time: April 20<sup>th</sup> 2016**

**Project Title:    Portable Nutrient Data Collection System Based on MEMS  
                              Sensors and Smartphone technologies**

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## Summary and Accomplishments

This week we spend most of our time on making the poster and gathering the data for the final presentation and final document.

WHO	WHAT	HOURS
Anthony	<ul style="list-style-type: none"><li>▪ Sam L21 Bluetooth data transmission</li><li>▪ Using the GPIO pin to provide voltage for switch</li><li>▪ Design the poster and making draft for the final document</li></ul>	15
LiuChang	<ul style="list-style-type: none"><li>▪ PCB soldering and testing</li><li>▪ Design the poster and make draft for the final document</li></ul>	16
Haisong	<ul style="list-style-type: none"><li>▪ Improvement of the circuits</li><li>▪ Design the poster and make draft for the final document</li></ul>	12
Tyler	<ul style="list-style-type: none"><li>▪ Program coding for the cell phone app</li><li>▪ Using the current data to do the plotting spectrum</li></ul>	14
Yang	<ul style="list-style-type: none"><li>▪ Contact the technician from the company which made the spectrometer</li><li>▪ Examine the firmware version of the spectrometer and testing</li><li>▪ Design the poster and make draft for the final document</li></ul>	20
Wentai	<ul style="list-style-type: none"><li>▪ Data transmission method testing and consider other possible transmission alternatives</li><li>▪ Design the poster and make draft for the final document</li></ul>	18

## **Meeting notes:**

1. Implement the poster. From the feedback, “organization and content are good. You can work on the design.” We think our color match are fine, but the structures may not look well, but the size is pretty much restricted, then we decide not to make any change.
2. PCB board components are arrived and Liuchang uses the oven to solder it. But some soldering issue, such as two pins are connected together or the surface mount parts are too small to make alignment.
3. According to the company, the firmware may look good, but before that some discussion is made for modification of the firmware version’s issue.

## **Pending issues**

1. All group members are working on the poster design and final document draft.
2. Tyler is working on the data plotting and it can plot some spectrum.
3. Anthony and Wentai are working on the switch control.
4. Yang is working on all the organization of the final document.
5. Liuchang is working on the soldering of the components.