

EE 492 Weekly Report MAY1633 Week 5(2/11/16-2/17/16)

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: Feb 17th 2016

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

Summary and Accomplishments

This week the basic prototype of subsystems are made. More details are discussed to meet out design requirement.

WHO	WHAT	HOURS
Anthony	<ul style="list-style-type: none">▪ Bluetooth module chip program testing	5.5
LiuChang	<ul style="list-style-type: none">▪ PCB design	6
Haisong	<ul style="list-style-type: none">▪ Voltage booster and micro discharger fabrication▪ Size estimation	4
Tyler	<ul style="list-style-type: none">▪ Make a simple prototype for the cell phone app	4.5
Yang	<ul style="list-style-type: none">▪ Bluetooth chip ability identification▪ Data transmission research	7

Meeting notes:

1. Micro discharge device is finished. To minimize the size of the system, it needs to be considered to cooperate Bluetooth chip design.
2. PCB design is finished, some data transmission test should be done before send it out for fabrication.
3. Bluetooth module test is finished. Cell phone can receive Bluetooth signal while doing the test.
4. New group member is included. Wentai will focused on internal design improvement, such as the case design.

Pending issues

1. Anthony is working on the Bluetooth connection between the cell phone and chip
2. Tyler is working on the app skeleton and adding more components.
3. Haisong is working on estimation of the micro discharger devices and voltage booster circuit.
4. Liuchang is working on the PCB design of the board.
5. Yang is working on data transmission from spectrometer to SAM L21 MCU.
6. Wentai is working on the case design for the device.