EE 491 Weekly Report MAY1633 Week 10(11/4/15-11/10/15)

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)

Time: Nov 10th 2015

Project Title: Portable Nutrient Data Collection System Based on MEMS

Sensors and Smartphone technologies

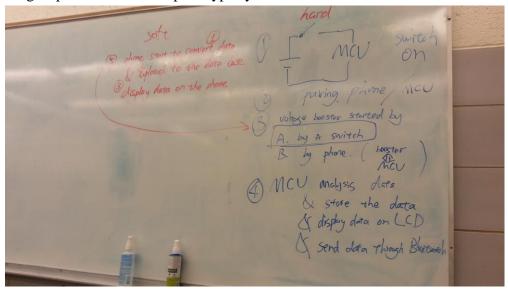
Summary and Accomplishments

The main goal of this week is to continue the work on the subsystem and discuss how the system working process.

WHO	WHAT	HOURS
Anthony	 Working on the interface of LCD and GPS (2) 	2
LiuChang	 Working on the PCB design (2) 	2
Haisong	 Build the voltage booster circuit (2) 	2
Tyler	 Working on the app design (2) 	2
Yang	 Working on the installation of Atmel Studio to set up the evaluation board 	2

Meeting notes:

1. The group discuss how the prototype system work



Basically the working process is the following:

- 1) Physical Switch to open the microcontroller
- 2) Bluetooth will start to pair with smartphone
- 3) Physical switch to start voltage booster (option: MCU active booster)
- 4) MCU analysis the data from spectrometer(decide if the data is good or bad), display data on a LCD and send data through Bluetooth
- 5) The cell phone start to convert data to readable format and comparing to the data base
- 6) Display the data on the phone

Pending issues

- 1. Anthony is working on LCD and GPS interfacing with the Bluetooth module.
- 2. Haisong is working on the transformer component of the voltage circuits.
- 3. Liuchang is working on PCB design
- 4. Tyler is working on the app design and connection between app and computer.
- 5. Yang is working on the configuration of the evaluation board.