
EE 491 Weekly Report (Group 22) October 12 -- October 19 Week 7 (10/12/14-10/19/14)

Advisors: *Timothy A Bigelow*

Client:

Members (roles): Aaron Tainter (Programming Lead), Weikun Han (Documents), Haoyu Wang (Presentations), Jingyu Xie (Scheduler)

Project Title:

Programming ultrasound functional brain imaging system

Weekly Summary

This week our group held 2 meetings. In the first meeting, we talked to professor Bigelow about project design and some issues happened in design for a PCB test board.

In the second meeting, we as the group to design the PCB test board use the circuit design suite. We found some issues in our design so we talked to Lee in the tech shop. We redesigned our PCB and ordered parts from NI.

Meeting notes:

10/12 **Group Meeting with Advisor**

Duration: *1 hours*

Members Present: Aaron Tainter, Weikun Han, Haoyu Wang

Purpose and Goals:

Our weekly meeting with Professor Bigelow

Achievements:

We talked about PCB design problem and discussed the pin information about the PCB test board we need. Since the cable we are using is 68 pins, and we only need 16 channels for our project, we need know the NI DAQ card and the channel we are going to use. We also talked about the LabVIEW issue in our project. Clarifications for more design requirements were also discussed.

10/15 **Group Meeting for PCB development**

Duration: *1.5 hours*

Members Present: Weikun Han, Haoyu Wang, Jinyu Xie

Purpose and Goals:

In this meeting group members discussed some issue that happened with PCB development.

Achievements:

We used the software circuit design suite to design our PCB. And for the first part we used Multisim. There are still some questions about the the data sheet information. The professor suggested we use the scenario rather than the BNC because the scenario will save more space on the PCB board. We also talked about how it will interface with the hardware.

Pending issues

1. Develop PCB board
2. Finish website
3. Work on labVIEW concepts and contact NI about test board alternatives

Plans for next week

1. Continue website development (Aaron)
2. Continue troubleshooting with NI support. (Aaron)
3. Begin working on developing PCB. (Weikun Han, Haoyu Wang, Jingyu Xie)
4. Develop labVIEW test programs. (Whole team)

Individual Contributions(this week)

1. Aaron Tainter(meeting with Bigelow - 1hr, website work - 2 hrs, troubleshooting NI hardware 2hrs)
2. Weikun Han (meeting with Bigelow - 1 hour, discuss issues happened in design PCB test board - 1.5 hours, LabVIEW study - 3 hours, LabVIEW programing practice - 1.5 hours, PCB test board design 3 hours)
3. Jinyu Xie (individual meeting with professor Bigelow - 1 hour, design PCB test board - 0.5 hours, LabVIEW study - 2 hours, hardware devices port information check - 0.5 hours)
4. Haoyu Wang (meeting with Bigelow - 1 hour, design PCB test board - 0.5 hours, LabVIEW study - 1.5 hours, test board information search - 0.5 hours, communication with group member and set up meeting time - 0.5 hours)

