
EE 491 Weekly Report (Group 22)

November 3 -- November 9 Week 10 (11/3/14-11/9/14)

Advisors: *Timothy A Bigelow*

Client:

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

Project Title:

Programming ultrasound functional brain imaging system

Weekly Summary

In this week our advisor is back to town, we made our formal meeting with group members and Dr. Bigelow. During the meeting, we confirmed the final goal of the project, talked about the PC Board design. Professor Bigelow confirmed that we are not able to get the hardware in the end of semester, So we will need to discuss options for the future tasks involved in the project. Specific tasks were assigned to our 3 group members in order to prepare for when we finally receive the hardware next semester.

We also worked individually on other components of the project. These include: PCB test board development which is going to be finished at the end of this semester, configuration of NI 5752 cards, initialization of I/O on the labview system and reading the NI hardware documentation. We have had major problems with configuring the NI system because the correct software components were not installed before shipping the unit. Time was spent communicating with NI engineers to get the project working correctly. Additionally, we added some contents to the project website.

Meeting notes:

11/3 Group Meeting with Dr. Bigelow

Duration: 1.5 hours

Members Present: Aaron Tainter, Haoyu Wang, Jingyu Xie

Purpose and Goals:

Our weekly meeting with Group members and Dr. Bigelow. Dr. Bigelow reallocated tasks to 3 of us to make sure we can make tasks complete on time. Also, he showed his idea of how

the PCB Board is going to look like and what specific features need to develop. The NI team support will directly contact with Aaron to solve the software issues.

Achievements:

We talked about issues that need to be solved in the next few weeks while we are still waiting on NI hardware and we have already started to design the adaptor which is the most important part of the hardware. Aaron was tasked with communication with NI technical support team. Jingyu was told to finish developing the test board and the initial configuration of NI cards, while Haoyu was told to go through NI hardware documentation so that we have information about the parts when we receive them and know how to deal with the operation of the hardware.

Pending issues

1. Finish PCB board.
2. Configure NI cards with labVIEW program
3. Develop a simple I/O program to test them.
4. Need to figure out how to make the device work properly

Plans for next week

1. Configure NI system and Develop I/O program. (Aaron)
2. Continue working on developing PCB. (Jingyu Xie)
3. Go through NI hardware documentation. (Haoyu Wang)

Individual Contributions(this week)

1. Aaron Tainter(configuring NI cards/dev work/contacting NI 5.5hrs, meeting with group - 1 hour)
2. Haoyu Wang(Research work on NI documentation 1hr, meeting with group 1hr)
3. Jingyu Xie(Developing PCB board - 3hr, meeting with group 1hr)