EE 491 Weekly Report September 29--
October 5 Week 5 (9/29/14-10/5/14)

Advisors: *Timothy A Bigelow* **Client:**

Members (roles): **Aaron Tainter, Weikun Han, Haoyu Wang, Jingyu Xie**

Project Title:

Programming ultrasound functional brain imaging system

Weekly Summary

This week our group held 3 meetings. In the first meeting, we talked with professor Bigelow about some issues with the LabVIEW software. In the second meeting, we worked on the project proposal. In the 3rd meeting, developed some test programs with LabVIEW.

Meeting notes:

9/29 Group Meeting with Advisors

Duration: *1 hours* **Members Present:** **Aaron Tainter, Weikun Han, Haoyu Wang**

Purpose and Goals:

Our group discussed some issues in LabVIEW software with professor Bigelow. We went to the lab to discuss possible solutions with development. Professor Bigelow gave us NI contact information so that we could solve the problem.

Achievements:

While we are still waiting on the ultrasound hardware, professor Bigelow recommended that we develop a testing PCB to connect with lab instruments in the interim. In the next few weeks, we will develop that as well as solve the issues with labVIEW and write test programs.

10/1 Group Meeting with Project Proposal

Duration: *5 hours* **Members Present:** **Weikun Han, Haoyu Wang, Jingyu Xie**

Purpose and Goals:

In this meeting we worked on the project report.

10/3 Group Meeting with LabVIEW study

Duration: *5 hours* **Members Present: ALL**

Purpose and Goals:
Since the project is basically related to the LabVIEW, we must study more about LabVIEW. That is reason why we make the group meeting to study LabVIEW weekly. We find it easier to bounce ideas off of each other if we work on test programs together.
Achievements:

In the group meeting, we learned about **Core LabVIEW Concepts**

1. LabVIEW Environment Basics—Examine the most important building blocks for any LabVIEW application, including the front panel, block diagram, palettes, controls, and indicators.
2. Graphical Programming Basics—See how to connect functions and work with a variety of datatypes when constructing applications.
3. Common Tools—View a collection of important tools and common user functions that all users should know.
4. Debugging Tools—Learn how to use simple tools and techniques to understand the behavior of code and address problems or bugs.

Pending issues

1. labVIEW
2. The second part of the ultrasound functional brain imaging system is still not delivered from the factory.
3. We possibly need to design the PCB board which is used for test the programed project in the LabVIEW.

Plans for next week

1. Solve the labVIEW issues.
2. Contact NI support.
3. Begin working on developing PCB.
4. Develop labVIEW test programs.

Individual Contributions(this week)

1. Aaron Tainter(meeting with Bigelow - 1hr, individual project proposal work - 2.5 hrs,

labVIEW study - 5 hrs, contact the NI company - 2 hours)

2. Weikun Han(meeting with professor Bigelow- 1hours, LabVIEW study - 5 hour , study hardware background -- 2 hours)
3. Haoyu Wang(meeting with professor Bigelow- 1hours, LabVIEW study - 1 hour , plan the schedule of the project -- 0.5 hours)
4. Jingyu Xie(meeting with the group member- 1hours, LabVIEW study - 2 hour , study hardware background -- 1 hours, contact the group member -- 0.5 hr,)

Total contributions for the project (Not including weekly meeting)

Aaron Tainter (12 hr) ,

Weikun Han (13hr)

Haoyu Wang (13 hours)

Jingyu Xie (10.5 hours)