

# EE/CprE 492 Bi-Weekly Report

**01/12/18 - 01/27/18**

**Sd may 18-22: Adaptive Wireless Wearable Neuro-Stimulator**

**Swamy Ponpandi / Adan Cervantes**

## **Team Members**

Kevin Wang — Meeting Facilitator

Kevin Simons — Test Engineer

Matthew Stephenson — Report Manager

Patrick Walsh — Communications Manager

Brian Weber — Chief Engineer

## **Weekly Summary**

We started our weeks with a planning session to regroup and figure out what needed to be done, this involved creating tracking tickets on our git board. We finished up with the data-analysis part of the project and are sending that code to our client so he can run it when he gets more data. We deployed a basic web app that right now is a login page and an example graph, and started learning how to connect php to MySQL as that seems to be the easiest route for the website moving forward.

Android App:

In the past two weeks, we planned out our work for the android app and began development again. We assigned tasks to each person working on the android app, and have made sure that we have a good place to keep up with our development flow. We have been working on implementing navigation for the options in the settings menu so that the user has a way to see the about page, FAQ, and the various options we are planning on having for the device. We have also started working on figuring out how to code the Bluetooth module of the app, and we are working with the device team to figure out what format data will be transmitted in.

## **Past Week Accomplishments**

- Completed data-analysis graphs
- Deployed basic web application to get familiar with the workflow

## Pending Issues

- Connect php with MySQL database in order to load our stored data on the website
- Implement navigation functionality in the settings tab of app.
- Read data from a sensor on the device.

## Individual Contributions

<u>Name</u>	<u>Contribution</u>	<u>Weekly Hours</u>	<u>Cumulative Hours</u>
Kevin Wang	Continued on figuring how to configure app for bluetooth connection. Wrote some code for connecting to Bluetooth device, untested and written for spoofed data in current state.	3	6
Kevin Simons	Sent our client another email with the final data-analysis graphs, will be sending him the MATLAB code so he can create the graphs with any future data. I then created a basic login page with php to deploy to our website, and began researching how to connect php with our MySQL database.	4	8
Matthew Stephenson	Wrote code for interfacing with temperature sensor on Arduino. Waiting on parts to be able to test. Should be getting those end of this week start of next. Started working on a template document for data transmitted between the wearable and Android app. Attended group and faculty adviser meetings.	4	8
Patrick Walsh	Set up several meetings with advisor and set up a time for weekly meetings with advisor. Spoke with client and arranged shipment of sensors to us. Started working	6	12

	on implementation of navigation for the settings tab options.		
Brian Weber	Research using an arduino board, with temperature and heart rate sensors	3	6

## **Comments**

We spent a bit of our first week back planning what work we still needed to complete and created corresponding tickets on our board in git to track what is needed and who is doing what.

## **Plan for Upcoming Week**

Connect php to MySQL in order to load some real data onto the website and show that data in a graph automatically.

Finish stand-in Bluetooth code in preparation for connecting actual hardware. This includes writing code to take in an expected input stream for the application to process. Get option navigation for at least one option working so that it can be replicated for the rest of the options that will be available.

## **Summary of Advisor Meeting**

First Meeting (January 12, 2018):

Touched base on current status of project since last term for first meeting. This was to establish goals and deadlines going forward. We also went over how the presentation for 491 went, and the things that we need to work on going forward.

Second Meeting (January 19, 2018):

Advisor requested update on components for evaluation board and expected timeframe for receiving components. He suggested working on code for hardware components even before they were received in order to have advanced preparations. We established our weekly meeting time with our advisor.

Third Meeting (January 26, 2018):

Advisor advised that we focus more on the hardware aspect of the project, as it is an integral part and important deliverable and we now have devices to test with. He also provided advice for implementing navigation in the settings tab.