

## sdmay18-22: Adaptive Wireless Wearable Neuro-Stimulator

### Week 2 Report

September 9 - September 15

### Team Members

Kevin Wang — *Meeting Facilitator*

Kevin Simons — *Test Engineer*

Matthew Stephenson — *Report Manager*

Patrick Walsh — *Communication Manager*

Brian Weber — *Chief engineer*

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### Summary of Progress this Report

The client provided us with a hard drive of lightning data for the year 2015. It contains ascii files, with energy readings and datetimes for every day of the year. Our job is to visualize this data, so we started looking into ways that we can write a script to parse this data and then visualize it in an interactive graph. One issue for this is the amount of raw data that we have to parse, so we have to find specific big data graphing libraries.

As a team we met to discuss the initial designs for all the parts of the project. We discussed possible components that we could use for the actual hardware in our project. Realizing that these parts will need to be low power and preferably cheap and easy to integrate with. These parts will be used in the anklet that we create so they should also be very small.

We also discussed what we will do with this data once we have it. We want to create both an android app, that will be used on a local level, per-anklet. And we want to create a web app that will be used on a more global level, targetted at researchers. This was mostly a high level discussion about the big pieces we will want to have in the applications.

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### Pending Issues

Parse through Raw Data

Figure out how to access/use data

Set Git repository up

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### Plans for Upcoming Reporting Period

Get Git setup

Investigate data and figure out how to use it

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### Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Kevin Wang	Prepared for lightning talk, attend group meeting, will look into setting up the git repository and research parts.	2	6.5
Kevin Simons	Prepared for the lightning talk, started	3	7.5

	looking at the data on the hard drive from Patrick, and attended group meetings.		
Matthew Stephenson	Attended meetings, helped review slides for lighting talk, started looking at data, and compiled weekly report, will start looking at hardware parts.	3.75	7.75
Patrick Walsh	Copied the hard drive that client gave to us passed them off to Kevin S. and Matt. I also emailed client the forms to have him sign them. Additionally, attended group meetings this week.	3	8
Brian Weber	Lightning talk and group meeting, will start hardware research, and project design.	2	6.5