

sdmay23-13: Prosthetic arm

Week 13 Report

November 14 - November 18

Team Members

Erik Raman — *Software*

Jack Vetsch — *Electrical*

Jacob Eisbrenner — *Mechanical/ Electrical*

Scott Bolek — *Electrical*

Sean Gray — *Software/Electrical*

Jeremy Wallace — *Electrical*

Leo Forney — *Software*

Summary of Progress this Report

Still awaiting 3D printed parts. Redesign of all of the PCBs to reduce the size as well as clear up some electrical issues that were found when testing. EMG testing continued. BOM was generated for all necessary parts and sent off to ETG to be ordered. Testing of motor encoders and attempting to link them to specific pulse widths found in the EMG testing occurred. Sketches of the forearm have been made and dimensions are starting to be worked out.

Pending Issues

The short week and the quick turnaround from the break to the final presentation could cause a time crunch.

Plans for Upcoming Reporting Period

Finish as much as physically possible and hope to receive some parts over break that will get to the team with enough time to assemble small things for testing purposes.

***Not Finished need to fix soon Individual Contributions**

Team Member	Contribution	Weekly Hours	Total Hours
Erik Raman	Developing high level software solution for microcontroller	6	50
Jack Vetsch	Signal processing progress and EMG testing	4	42
Jacob Eisbrenner	electrical integration into the motherboard, sketches/ hand design of forearm, EMG signal testing, motor encoder testing.	4	82

Scott Bolek	Battery system design and basic motherboard prep	3	48
Sean Gray	Developing high level software solution for microcontroller	6	52
Jeremy Wallace	Amplifier design and document management	10	65
Leo Forney	Developing high level software solution for microcontroller	8	56

Gitlab Activity Summary

Nothing to report.
