sdmay23-13: Prosthetic arm
Week 10 Report
October 24 - October 30

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
Work continued on mechanical hand CAD design with the completion of the thumb joint and fingers. The amplification circuit was breadboarded and tested without EMG signals while medical pads are on the way. The motherboard schematic was finished and basic PCB work began. The BMS circuit was completed and the PCB design went into full effect. The software team continued to boilerplate embedded code generators for libs and driver generation.

Pending Issues
Research in potential calibration methods for the arm. Timing issues with group meetings have continued to be an issue but have gotten better as the weeks continue.

Plans for Upcoming Reporting Period
Finish mechanical hand design. The motor driver circuit schematic is finished. Integration of touch sensors into mechanical and motherboard design. PCB design finished for BMS circuit. First raw data tests with medical pads to get an EMG signal.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Erik Raman	Boilerplate embedded code generator work. Research in potential calibration methods for the arm.	6	34
Jack Vetsch	Parts selection for motherboard and amplification circuit based on designed parameters.	3	31

Jacob Eisbrenner	Worked on the motor driver circuit board and finished mechanical Hand design	10	58
Scott Bolek	EMG amplification circuit work and breadboard work. PCB design of power board.	6	34
Sean Gray	EMG amplification circuit work and breadboard work. PCB design of power board	6	34
Jeremy Wallace	BMS circuit breadboard work and design. BMS PCB Design.	10	42
Leo Forney	Boilerplate embedded code generator work. Research in potential calibration methods for the arm.	6	34

Gitlab Activity Summary

Nothing to report.