Future Work:

* Implement a more robust algorithm to increase accuracy
  + Kalman Filter
  + Particle Filter
  + Neural Network
  + LDA & Kalman Filter
* Increase the number of movements the classifier recognizes
* Embed the power pack within the arm
* Provide sensory feedback to user
* Reverse Engineer Myo Band Module
* Embed Myo Band into above elbow cup for amputees

Conclusion

* Gathering Electromyography (EMG) signals is nothing new especially with the Myo Gesture Control Armband however, not many have attempted our specific approach. The Myo Armband has its own classifier onboard however it is not very versatile with a total of only 7 movements. We have begun to develop our own classifier initially based on a Linear Discriminant Analysis (LDA) with raw data collected from the Myo Armband. The goal is to accurately classify current movements with this algorithm and convert them to physical movements on a 3D printed arm. Disregarding potential costs for labor specifically software development, the hardware cost a comparatively low amount of XXXXXXXXXXXX Total cost of Pi, band, arm, boards, servos