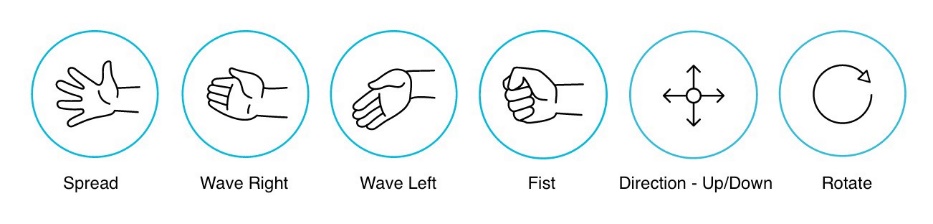
Sean McGuire

Gesture based UI project

GitHub: <https://github.com/smcguire56/GestureBasedUIProject>

For my project I will be using the Myo Armband to develop a real-life driving experience in a unity game. The game will be developed in unity and coded in C# and will be focused mostly on the first person steering of a car going around a simple 3D track. At the end of the project I will aim to get the Myo Armband to connect to the game as a user gesture-based control for various gestures such as steering the car, changing gear, and pausing the game.



From the image above these are some of the primitive gestures the armband can provide and through further research I will aim to apply some if not all these gestures for my game.



The Myo armband works by using many sensors to detect small changes in the muscles it is in contact with. Using these sensors, the software can take in the raw input from 8 of the sensors and graph the changes to time. For my project in gesture-based UI I can use these inputs to make the user believe they are driving a car in this game and hopefully make it feel as realistic as possible.

The software and languages I will be using for this project are Unity and C#.

For tracking my progress throughout the project, I will be using GitHub.

* What I’ve got so far:
  + The game is now converted to just drag racing mode now as I am only testing one of the features for double tap.
  + The UI allows the user to double tap their fingers in game to change the gear and make the car go faster.
  + The terrain in the game is in 3D.
  + The AI other driver is set currently to a max speed, will change later.
  + At the moment the car can either win the game or lose.

Final update:

I’ve got 2 different gestures working now, the double tap still working for the change gear mechanic and now there is a boost function when user clenches fist.

This allows the user to gain a more advantage.