Journal 2

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1 Progress Log

Received the MPU-6050 3-axis accelerometer gyroscope modules.

Fixed an issue with the Bluetooth application where it would occasionally fail on the target device (Samsung Galaxy S6). After much speculation, the problem was traced to the androidmanifest.xml file where the permissions were not handled correctly.

Tested the sensor modules by temporarily installing them in a breadboard, wiring them up, and connecting via USB to a computer. We confirmed the rate and content of the data they provided, and tested all axes of translation (X/Y/Z) and rotation (yaw/pitch/roll).

2 Next Steps

Next we intend to establish and test a Bluetooth connection between our new sensor modules. Once we have confirmed the success of their behavior we will look into installing them in a lacrosse shaft and collecting initial data to begin developing our neural network.

3 Reflection

We still have yet to test the early stages of the Bluetooth application due to the error encountered with the Android permissions. With that out of the way we hope to soon connect the devices together and observe testing data. I will also look to begin developing an interface in which to provide functionality to the application. Such functionality will primarily include the ability to start a data recording session, track specific types of movements, store your personal usage history, and most likely more features that are undetermined as of yet.