BerryIMU Gesture Data Breakdown

File Directory	Command	Gesture	Variable	Threshold	Accuracy (20 trials)
Right_data	Volume up	Tilt right	accYangle	-180 < aYa < -70	60%
Left_data	Volume down	Tilt left	accYangle	180 > aYa > 70	60%
Flick_right_data	Channel up	Flick left	difference_gyro_Z	d_g_Z < -20	90%
Flick_left_data	Channel down	Flick right	difference_gyro_Z	d_g_Z > 20	85%
Flick_up_data	Power on	Flick up	difference_gyro_X	d_g_X < -40	95%
Flick_down_data	Power off	Flick down	difference_gyro_X	d_g_X > 40	35%

BerryIMU gestures with their corresponding commands, as well as the accuracy percentages of each gesture being successfully recognized as its corresponding command, in addition to the variable measured alongside its threshold. Each gesture/command combo underwent 20 trials, wherein no output was observed by Sierra such that whether or not a gesture worked correctly was unknown until after the trial ended. AccYangle is a reading taken from the original BerryIMU code Sierra modified from lab 4. Difference_gyro_X and difference_gyro_Z are faux derivatives that Sierra created in order to detect change over time between readings of the gyroscope's sensors, allowing her to detect large changes in its readings in order to accurately recognize a gesture.

Each directory contains an excel spreadsheet that graphs out each trial of each gesture. Not every graph is correctly labeled, as Sierra only took graphs of interest for such things as the final project report. From there, she put the number of correctly detected gestures somewhere beneath the graphs. All the other files in these directories just contain raw data. The excel spreadsheet compiles them together in a more compact format, but still without labels. For what exactly is being measured, please refer to the above table.