First Progress Report

Our project is structured to enable three work streams to proceed in parallel –hardware build, grip recognition modelling, and user interaction schemes.

## Hardware Build

<**Varun**, please fill out this section>

## Grip Recognition Modelling

<**Zahid**, please fill out this section>

* ***Achieved***: We were able to couple the machine learning library with the android prototype. We can now validate the accuracy of different machine learning algorithms using a training dataset. Currently, the training dataset is the accelerometer data collected from the device. However, once the pressure sensors are deployed in the device, we will replace them with the pressure data and run the same algorithms.
* ***Upcoming***: We will apply the most accurate machine learning model on the pressure data. The data will be collected from the testing subjects and will represent different activities of the subjects on the phone. We will then use these models in real time to execute different user interactions depending on the identified patterns.

## User Interaction Schemes

* ***Achieved***:
* ***Upcoming***: