## ASU Smart Home Project Part 2

- A. An explanation of how you approached the current problem.
  - a. The problem was quite challenging to me. I figured the best way was to loop over both test and traindata folders and then run the methods provided for me. Hoping this would be enough.
  - b. As for calculating the cosine similarity, I approached the concept mainly by research. I had no idea what this was or how it worked. Thankfully, tensorflow proved quite useful.

## B. Solution for the problem.

- a. It turns out I had to store the extracted features from each folder into their own dictionary and keep track of the gesture with its attempt.
- b. After doing that for traindata folder, test data folder proved to be simpler.
- c. Cosine Similarity was thankfully provided by tensor flow. I merely kept track of which was the minimum difference, along with the correct label.
- d. I had to make a series of helper functions found in utils.py. These functions provide mapping switches between traindata and test folders.
- e. Wrote merely the output label into the Results.csv file.