**You are what you think you are**

In this project, we will focus on identifying an individual using their brain waves. We will first collect Electroencephalogram (EEG) data from wearable sensors from all four group members. We will then apply signal processing algorithms to clean the data and then use machine learning techniques to identify the person.

Task 1: Understand data (100 subjects) such as format and distribute the data to each member

Task 2-5: Use pre-processing algorithms provided by IMPACT lab to clean data

Task 6: Write code to extract frequency domain feature from EEG signal

Task 7: Write Naiive Bayes classifier based algorithm

Task 8: Evaluate its accuracy

Task 9: Develop UI such as (which user will be used, show hyper parameters)

Task 10: Backend process for mobile application

Task 11: Evaluate its execution time and power consumption

Task 12-15: Different conventional machine learning algorithm implementation

Task 16: Setup cloud server and Fog server

Task 17: Figure out the measured communication delay between fog, cloud, and mobile

Task 18: Develop algorithm for best offload tactic taking in the account for execution time, power consumption, and communication delay

Task 19: Compare latency authentication for fog VS. Cloud VS. Mobile

Task 20: Compare power consumption for fog VS. Cloud VS. Mobile