

Given: Meal Data and No Meal Data of 5 subjects

Ground truth labels of Meal and No Meal for 5 subjects

Todo:

- a) Extract features from Meal and No Meal data
- b) Make sure that the features are discriminatory
- c) Trains a machine to recognize Meal or No Meal data
- d) Use k fold cross validation on the training data to evaluate your recognition system
- e) Write a function that takes one test sample as input and outputs 1 if it predicts the test sample as meal or 0 if it predicts test sample as No meal.

Grading: I will give you a set of Meal and NoMeal data that is not included in the training set.

50 points for developing a code in Python or Matlab that takes the training dataset and trains a machine model

20 points for developing a code in Python or Matlab that implements a function to take a test input and run the trained machine to provide the class label as output

30 points will be evaluated on the accuracy, F1 score, Precision and Recall results obtained by your machine. This will be compared against class average to determine the final score.