Predicting The Word From Brain Activity

- **Description**
  There is a dictionary of 60 words and there are 300 persons. Each word has an associated 218 – D feature vector where the features describe some human defined attributes. Each person is being shown a word from the dictionary along with its “Line Drawing” and then FMRI image of the brain is captured which is represented as a 21764 – D feature vector of voxel intensities.

- **Problem/Goal**
  The goal is to predict which word (from two candidate words) the person was thinking about, given the FMRI image of their brain.

- **Prior work on this problem:**
  Carnegie Mellon University has worked earlier on this problem with the following set of modifications:

  1. The word was predicted from the dictionary of all 60 words rather than from two candidate words.

  2. The prediction for a certain person was done by the training data from a different person, and the results were up to 90% accurate.

  Link: http://www.cs.cmu.edu/afs/cs/project/theo-73/www/index.html

- **Possible Data Sets**

  Link: https://www.dropbox.com/s/o0g26iamb8fdz5v/fMRI.zip?dl=0

- **Project Members**

  1. Aaditya Aanand – 14002
  2. Aryaman – 14139
  3. Pulkit Sharma – 14504