For my team name I will be using my last name: Pitkin (creative I know).

Type of Project - Competitive Project

I will be participating in the competitive project option. I think friendly competition will be a fun motivator to tune and produce a quality final project.

Algorithms - Linear Classifiers and Naive Bayes

I enjoyed homework 2 and working with linear classifiers. Currently, for the final project I would like to work with one of the more advanced variants of the Perceptron algorithm.

I also enjoy statistics in particular Bayesian statistics. Using Naive Bayes for classification is another idea I have for the final project.

As we get more details about the competitive project and as we learn more algorithms, my vision for my final project will grow stronger.

Experiments - Hyperparameters and Algorithm Variants

We have seen that k-fold cross validation can be a powerful tool for choosing hyperparameters. I will be implementing this for my final project as this is a strong tool in the art of choosing strong hyperparameters.

In addition, we saw in homework 2 that general algorithms like Perceptron has many variants. These variants perform differently depending on the the data set being classified. For the final project, I will be experimenting with different variants in an attempt to maximize my classification accuracy.