Overall Structure of the Course

- What is machine learning?
- Supervised learning/unsupervised learning.
- Supervised learning algorithms
    1. kNN
    2. Naive Bayes
    3. Decision trees - random forests, gradient boosted trees.
    4. Regression and regularization.
    5. Optimization with gradient descent
    6. Neural networks and backpropagation.
- Unsupervised learning algorithms
    1. Clustering methods - k-means and hierarchical clustering.
    2. EM algorithm and mixture models (including LDA/topic models)
    3. Social network analysis.

Projects and Due Dates

3 problem sets and 1 final project.

Problem Sets

Problem Set 1
Due **June 4th, 2018 11:59PM Pacific** (Monday Section)
Due **June 5th, 2018 11:59PM Pacific** (Tuesday Sections)

Problem Set 2
Due **July 2nd, 2018 11:59PM Pacific** (Monday Section)
Due **July 3rd, 2018 11:59PM Pacific** (Tuesday Sections)

Problem Set 3
Due **July 30th, 2018 11:59PM Pacific** (Tuesday Sections)
Due **July 31st, 2018 11:59PM Pacific** (Tuesday Sections)

The code for all problem sets is posted on our shared Github site:
https://github.com/ljanastas/207-Applied-Machine-Learning/tree/master/Projects

You may submit your problem sets as early as you want!