Feature Selection

- *Thompson_lecture3.pdf*
- Linear Regression - Lasso
    - http://scikit-learn.org/stable/modules/linear_model.html#lasso
- Feature importance with forests of trees
    - http://scikit-learn.org/stable/auto_examples/ensemble/plot_forest_importances.html
- Obtenga la lista de Importancias de las features del proyecto Titanic

Feature Transformation

- *Thompson_lecture4.pdf*
- A demo of K-Means clustering on the handwritten digits data
    - http://scikit-learn.org/stable/auto_examples/cluster/plot_kmeans_digits.html
- *Classifying Eigenfaces by Gender.pdf*

Ensemble Models - Bagging and Boosting

Bagging: Random Forest

- *Fuchs_lecture_2.pdf*

Boosting: Adaboost

- *Corso_lecture-boosting.pdf* (slides 1-7, 17, 33-47)
- Example: Two-class AdaBoost
    - http://scikit-learn.org/stable/auto_examples/ensemble/plot_adaboost_twoclass.html
- Example: Decision Tree Regression with AdaBoost
    - http://scikit-learn.org/stable/auto_examples/ensemble/plot_adaboost_regression.htm

Anomaly Detection

- *AndrewNg_Lecture15.pdf*
- Novelty and Outlier Detection
    - http://scikit-learn.org/stable/modules/outlier_detection.html

Deep Learning

- *Deep Learning, Self-Taught Learning and Unsupervised Feature Learning - Andrew Ng.pdf*
  - https://www.youtube.com/watch?v=n1ViNeWhC24
- Introduction to Deep Learning with Python
  - https://www.youtube.com/watch?v=S75EdAcXHKk
  - http://www.slideshare.net/indicods/deep-learning-with-python-and-the-theano-library
- Deep Learning Tutorial (on Amazon EC2)
  - https://www.kaggle.com/c/facial-keypoints-detection/details/deep-learning-tutorial
- My solution for the Galaxy Zoo challenge
  - http://benanne.github.io/2014/04/05/galaxy-zoo.html