cmsc726: Admin

Supervised Learning Topics

- Concept Learning
  - Version Spaces
- Parametric Methods:
  - Generative Methods, model P(X|Y), P(Y)
  - Discriminitive Methods, model P(Y|X)
  - Simple Linear Models
- Non-parametric Methods:
  - Decision Trees
  - Nearest Neighbor
  - SVMs
- Semi-parametric
  - Neural Networks
- Evaluation Methods
- Computational Learning Theory
  - VC dimension/Structural Risk Minimization
- Bias-Variance Trade-off
- Ensemble methods

Administrivia

- **Thu Mar 30**
  - Midterm
  - closed book/notes
  - covers through today
- **Tue Apr 4**
  - Your Problem Part 2 due
  - Using WEKA, compare the performance of the new methods we have seen (DecisionTrees, kNN, Neural Networks, SVMs) on your dataset
  - Implement a linear threshold unit (single node neural net) (LTU). Implement an ensemble method of your choice, and use it with your LR, NB, and/or LTU.
  - Compare and contrast. What does best? Why?
- **Tue Apr 11**
  - Project Proposal Version 2 due