

Homework 8

CS 5233 – Fall 2007
Tom Bylander, Instructor

assigned November 5, 2007
due November 12, 2007

Consider the examples in Exercise 20.15. Use examples 3 through 12 as the training data, and use examples 1, 2, 13, and 14 as the test data. Do the following exercises.

1. (50 pts.) Apply naive Bayes using Laplace's rule of succession.
2. (50 pts.) Perform one pass using the perceptron algorithm given in the class notes. Use a learning rate of 1.
3. (Shared Extra Credit, 100 pts.) Perform multiple passes of the perceptron algorithm given in the class notes until convergence. A learning rate of 1 might not be appropriate.