

CS-481 Artificial Intelligence
Winter 2025

Assignment #6 (15 points)

Due Thursday, March 20, 2025

1. Write up the code for the Bayes Plug-in Rules classifier and test on the training and test data sets provided in BB. (5 points)
2. There are two options for this homework based on your interests (10 points):
 - a. Perceptron – write the code to train the Perceptron. You can do either batch or incremental training. Run it on the same dataset as above and compare the results.
 - b. Use a Neural Network library in the language of your choice (Python or MATLAB are probably easiest). Use the data sets for the plug-in rule homework to train and test it.
 - i. Implement and test a single hidden layer network
 - ii. Implement and test a two-hidden layer network

NOTE: For the perceptron only - write your own code rather than using a library.