

EEL 6814

Homework II

Due February 2, 2016

In this problem you will design several classifiers to distinguish between three types of flowers using measurements of petal and sepal length and width. The dataset is called the IRIS data and it is in the course WEB site

First you should design the optimal Bayes classifier. Please show all your work, and plot the data and the separation surface for both methods.

The second method should be a linear classifier, using the Fisher discriminant or any other method that you judge convenient such as the Perceptron (but please specify what you use).

I also would like you to provide a confusion matrix as the rating of each classifier. Can you estimate the Bayes error?