For: Dr. Trenary

By: Christopher Carlson

CS5950 Machine Learning Assignment 2:

Iris Data Classification

Results:

The overall results of my classification attempts were very good for all methods used. I had the best results using Quadratic Discriminant Analysis, but Linear Discriminant Analysis and Logistic Regression had good results as well. I used Ruby Scripts to restructure the data into training data and testing data, though I did a poor job structuring this data. I arbitrarily chose 5 observations from each species and put them into the testing data file and I used the rest for training data.

In order to make predictions using the logistic regression method I created a training data set for each species of iris. For each training data set I modified the entries in the species column so that the possibilities were either the species the data is named after or “other”. This way a predictor can be made for each species which predicts either, “Yes, this is species x” or “No, this belongs to some other group.”