

Department of Electrical and Computer Engineering

University of Massachusetts Lowell

EECE 5440 Computational Data Modeling I

Assignment #3

1. Consider the problem of multi-class classification for identification using the given 3 class data sets hw3_class0.dat, hw3_class1.dat, and hw3_class2.dat. Each data set is comprised of 50 realizations of measurement of 4 features.

- a. Assign x_1, x_2, x_3 to enumerated classes (0,1,2) respectively. Assign features for each enumerated class labeled (0,1,2,3) respectively.
- b. Using half of the data construct and train the model using 1-K encoding solving the resulting equations using the least-square approach. Compute the fitting error and confusion matrix. Test accuracy using the remaining data.