

ECE 532 Homework 9

Due Thursday April 14 at the beginning of class

1. Problem 3, Chapter 4 of DHS
2. Problem 7, Chapter 4 of DHS
3. Problem 9, Chapter 4 of DHS
4. Implement the k-NN classifier and test its performance on the Iris dataset. Repeat the experiments you conducted in HW 6, parts 1 and 2, using the k-NN classifier instead of the multivariate Gaussian based classifier. Also, in each case experiment with $k = 1, 2, 3$. How does the performance of the k-NN classifier compare to that of the multivariate Gaussian?