

CS 530
Assignment 7
Due: November 15

1. The file `data.txt` has a class variable and two features as columns. Using a Normal window function and Parzen Windows, find $p(x|\omega_j)$. Use $h_n = 3$ and $h_n = 5$ and compare the results. For one of these, try constant n_k and a variable method and compare the results.
2. Perform the same operation using the k-NN method. Try it for k's of 1, 3 and 5 and compare the results.
3. Finally, use half the samples as exemplars and then validate with the other half and determine the error for the k-NN Nearest Neighbor classifier. Try it for $k_n = 1, 3$ and 5.