



Indian Institute of Information Technology Guwahati
CS640: Machine Learning

Lab 5: K-Nearest Neighbour

Date: 20.02.2020

Total Marks: 15

Deadline: 04.03.2020

Implement the following questions in Matlab:

Q.1) K-Nearest Neighbour classifier (you can fix K by empirically) and do the experiment with following datasets:

- a) USPS: Its a digit dataset with the dimension of 256
 - 1. Obtain classification result based on the given training and testing data
 - 2. Combine training and testing data, then obtain the result using 5-fold cross validation
- b) MNIST: Its a digit dataset with the dimension of 784
 - 1. Obtain classification result based on the given training and testing data
 - 2. Analyse the performance with USPS dataset

10+5 marks