

Locality Sensitive Hashing with KNN

KNN performs better than Naive Bayes for the following reasons:

1. In Naive Bayes, if we get same probability then there are chances that the algorithm might misclassify the values and give a wrong output.
2. In KNN, since we take odd number of K, we take the median of the classes and from that we get the nearest neighbours of a specific class and then assign the data sample to that neighbour and classify on the basis of that.
3. The results were computed much faster because we used Locality Sensitive Hashing (bipolar values) and assigned them to the data samples from which classification was done more quickly.

After executing all the steps, we get different accuracies for different values of K and L such as:

Accuracy for L=40.0 and K=3.0 is 0.6785714285714286
Accuracy for L=70.0 and K=13.0 is 0.6428571428571429
Accuracy for L=65.0 and K=19.0 is 0.6428571428571429
Accuracy for L=40.0 and K=19.0 is 0.6428571428571429
Accuracy for L=40.0 and K=17.0 is 0.6428571428571429
Accuracy for L=50.0 and K=3.0 is 0.6428571428571429
Accuracy for L=65.0 and K=5.0 is 0.6428571428571429
Accuracy for L=35.0 and K=13.0 is 0.6428571428571429
Accuracy for L=35.0 and K=9.0 is 0.6428571428571429
Accuracy for L=35.0 and K=7.0 is 0.6428571428571429
Accuracy for L=95.0 and K=5.0 is 0.6428571428571429
Accuracy for L=35.0 and K=3.0 is 0.6428571428571429
Accuracy for L=65.0 and K=11.0 is 0.6428571428571429
Accuracy for L=70.0 and K=15.0 is 0.6428571428571429
Accuracy for L=25.0 and K=3.0 is 0.6071428571428571
Accuracy for L=35.0 and K=5.0 is 0.6071428571428571
Accuracy for L=70.0 and K=17.0 is 0.6071428571428571
Accuracy for L=50.0 and K=11.0 is 0.6071428571428571
Accuracy for L=50.0 and K=7.0 is 0.6071428571428571
Accuracy for L=45.0 and K=7.0 is 0.6071428571428571