Improved KNN with Feedback Support

Volume 177 - Number 1

Year of Publication: 2017

Authors:

Shubham Mishra, Harshali Patil

Abstract

This paper shows, a new method has been introduce to enhancing the performance of K-Nearest Neighbor is implemented which uses K neighbors for classifying the new data. This new classification method is called Improved K-Nearest Neighbor, IKNN. Inspired the traditional KNN algorithm, the main idea is to provide feedback that is for next iteration it should also consider previous classifications. Other than providing the feedback it also modified its distance calculating formula. In this method a weight vector for class labels vector is initialized. For each iteration this weight vector matrix will play major role for data classification. Experiments show the improvement in the accuracy of the IKNN algorithm.

References


**Index Terms**

Computer Science  
Information Systems

**Keywords**

IKNN, KNN Classification, Improved K-Nearest Neighbor, Feedback.