Abstract

Because of the massive increase in the size of the data it becomes troublesome to perform effective analysis using the current traditional techniques. Big data put forward a lot of challenges due to its several characteristics like volume, velocity, variety, variability, value and complexity. Today there is not only a necessity for efficient data mining techniques to process large volume of data but in addition a need for a means to meet the computational requirements to process such huge volume of data. The objective of this paper is to classify big data using Fuzzy K-Nearest Neighbor classifier, and to provide a comparative study between the results of the proposed systems and the method reviewed in the literature. In this paper we implemented the Fuzzy K-Nearest Neighbor method using the MapReduce paradigm to process on big data. Results on different data sets show that the proposed Fuzzy K-Nearest Neighbor method outperforms a better performance than the method reviewed in the literature.


10. Zhiqiang Liu; Hongyan Li ; Gaoshan Miao.MapReduce-based Backpropagation Neural Network over large scale mobile data

11. Changlong Li1, Xuehai Zhou1, Kun Lu1. Implementation of Artificial Neural Networks in MapReduce Optimization.


**Index Terms**

Computer Science  Fuzzy Systems
Keywords

Big data; Classification; Fuzzy k-nearest neighbor; Fuzzy logic; Hadoop; MapReduce