



Fast Efficient Clustering Algorithm for Balanced Data

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Abstract:

The Cluster analysis is a major technique for statistical analysis, machine learning, pattern recognition, data mining, image analysis and bioinformatics. K-means algorithm is one of the most important clustering algorithms. However, the k-means algorithm needs a large amount of computational time for handling large data sets. In this paper, we developed more efficient clustering algorithm to overcome this deficiency named Fast Balanced k-means (FBK-means). This algorithm is not only yields the best clustering results as in the k-means algorithm but also requires less computational time. The algorithm is working well in the case of balanced data.

Keywords:

Clustering; K-means algorithm; Bee algorithm; GA algorithm; FBK-means algorithm

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