Abstract

Unsupervised classification is one of the primary research areas in data mining. Clustering algorithm partitions a data set into several groups based on the similarity. Quick reduct algorithm is used to find a minimal feature subset from the original feature space while retaining a suitably high accuracy in representing the original features. Fuzzy-C-Mean (FCM) clustering algorithm is one of the most popular clustering methods since it is an efficient, straightforward, easy to implement and sensitive to initialization. Since, the weakness is easily trapped in local optima. In this paper proposes hybrid Fuzzy c means with an evolutionary algorithm known as Ant Colony Algorithm (ACO) for clustering problem in order to flee from local optima by utilizing the merits of both algorithms FCM and ACO. The experimental results confirm the efficiency of the proposed method.

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Index Terms
Keywords
Fuzzy Clustering  Ant Colony Optimization  Fuzzy C Means  Particle Swarm Optimization