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Multi-Cluster Overlapping K-Means Extension Algorithm (MCOKE)

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Abstract : Clustering involves the partitioning of n objects into k clusters. Many clustering algorithms use hard-partitioning techniques where each object is assigned to one cluster. In this paper, we propose an overlapping algorithm MCOKE which allows objects to belong to one or more clusters. The algorithm is different from fuzzy clustering techniques because objects that overlap are assigned a membership value of 1 (one) as opposed to a fuzzy membership degree. The algorithm is also different from other overlapping algorithms that require a similarity threshold to be defined as a priority which can be difficult to determine by novice users.

Keywords : data mining, k-means, MCOKE, overlapping
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