Incremental Clustering using Genetic Algorithm and Particle Swarm Optimization

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Abstract

There are many supervised clustering algorithms based on static datasets for finding their optimal clusters. Clustering is the task of organizing data into clusters such that the data objects that are similar to each other. For finding clusters of data stream of chunks, i.e. for dynamic clustering we proposed a incremental clustering algorithm which is a combination of genetic algorithm and particle swarm optimization. In this paper, first we convert diabetes dataset into rough sets by applying appropriate algorithm, then after conversion rough sets are taken as input for genetic algorithm and after processing fitted chromosomes are generated. These fitted chromosomes are taken as input for particle swarm optimization which results in producing optimized clusters without redundancy. In this paper results are also presented and their comparison from existing approach is also given.

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Index Terms

Computer Science

Algorithms
Keywords

Data mining, PSO, ACO GA, fuzzy logic etc.