Abstract

In this paper, Cluster analysis is a group objects like observations, events etc based on the information that are found in the data describing the objects or their relations. The main goal of the clustering is that the objects in a group will be similar or related to one other and different from (or unrelated to) the objects in other groups. In this paper, proposed a hybrid model of PSABC algorithm. The PSABC algorithm is a combination of Particle Swarm Algorithm (PSO) and Artificial Bee Colony (ABC) Algorithm used for data clustering on benchmark problems. The PSABC algorithm is compared with other existing classification techniques to evaluate the performance of the proposed approach. Thirteen of typical test data sets from the UCI Machine Learning Repository are used to demonstrate the results of the techniques. The simulation results indicate that PSABC algorithm can efficiently be used for multivariate data clustering.

References

A Hybrid Clustering Approach using Artificial Bee Colony (ABC) and Particle Swarm Optimization

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**Index Terms**

Computer Science  
Artificial Intelligence

**Keywords**

Clustering  Classification  Artificial Bee Colony  Particle Swarm Algorithm.