Abstract

The K-Means algorithm is the widely used clustering technique. The performance of the K-Means algorithm depends highly on original cluster centers and converges to local minima. This paper proposes hybrid Artificial Fish Swarm Means (AFSK-Means) based clustering algorithm, by combining Particle Swarm Optimization with K-Means (PSOK) and Artificial Fish Swarm Algorithm based K-Means (AFSA). The basic idea is to search around the global
solution by AFSK-Means and to increase the information exchange among genes. The effectiveness of the clustering algorithm depends on finding optimal clusters. The Clustering result shows the improved performance of hybrid clustering algorithm AFSK-Means in finding the best solution compared with the algorithms K-Means and PSOK-Means.

References

- D’haeseleer, P., Wen, X., Fuhrman, S., Somogyi, R. Mining the Gene


- M Thangarasu, R Manavalan, &quot;Tree-Based Mining with Sentiment Analysis for Discovering Patterns of Human Interaction in Meetings Tamil Document&quot;, International Journal of Computational Intelligence and Informatics, Vol. 3, pp. 151-159

**Index Terms**

Computer Science

Artificial Intelligence

**Keywords**

Hybrid Evolutionary Optimization Algorithm  Data Clustering  K-means clustering
Artificial Fish Swarm Algorithm

Particle Swarm Optimization