Abstract

Ant colony optimization algorithms have been applied to many combinatorial optimization problems, ranging from quadratic assignment to protein folding or routing vehicles and a lot of derived methods have been adapted to dynamic problems in real variables, stochastic problems, multi-targets and parallel implementations. It has also been used to classification of the data set based on the attribute. It has been observed that construct solution and pheromone update play an important role in the ACO algorithm. The selection of the pheromone update is based on the construct solution which is further based on the probability function and initial selection. So if the selection of the pheromone done properly then ACO algorithm will terminate in less number of the iteration and it will be produce the good result. It has further observed that difference result have been possible for the different selection of the construct and pheromone on the same data set. Therefore, in this paper an effort has been made to suggest the techniques to select the initial construct and pheromone update for data set and the classification has to be done using the concept of clustering.
15. D. P. Singh, J. P. Choudhury and M. De,”A Comparative Study to Select a Soft


**Index Terms**

- Computer Science
- Databases

**Keywords**

Data mining, soft computing, Ant colony optimization, Particle swarm optimization, fuzzy, neural network, data mining preprocessing.