Abstract

Traveler Salesman Problem (TSP) is one the most famous and important problems in the field of operation research and optimization. This problem is a NP-Hard problem and it is aimed to find a minimum Hamiltonian cycle in a connected and weighed graph. In the last decades, many innovative algorithms have been presented to solve this problem but most of them are inappropriate and inefficient and have high complexity. In this paper, we combined Hopfield
neural network with genetic algorithm to solve this problem, and showed that the results of the algorithm are more efficient that the other similar algorithms.

Reference

Key words

Travelers Salesman Problem
Hopfield Neural Network
NP-Hard Problem

Genetic Algorithm