Abstract

The problem of finding the optimal path between two nodes is a well known problem in network analysis. Optimal routing has been widely studied for interconnection networks this paper work considers the problem of finding the optimal path. A Genetic algorithm based strategy is proposed and the algorithm has been developed to find the Optimal Path. This paper work presents a neural network based approach to the shortest path routing problem. Weights adjustment of the neurons has been used for solving the problem of optimum path. This paper presents the back propagation algorithm to solve the problem of optimum path in multi layer feed forward (MLFF) network. Even though shortest path routing algorithms are already well
established, there are researchers who are trying to find alternative methods to find shortest paths through a network. One such alternative is to use of neural network.

References


Study of Path Optimization in Packet Switching Network using Neural Network


Index Terms

Computer Science   Artificial Intelligence

Keywords

Shortest Path   Neural Network   Optimization   Packet Switching   MLff   Activation Function   Learning Rates

Algorithms