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


**Index Terms**

Computer Science  
Artificial Intelligence

**Keywords**

Shortest Path  
Neural Network  
Optimization  
Packet Switching  
MLFF  
Activation Function  
Learning Rates  
Algorithms