Abstract

The neural networks are widely used to solve the routing problem and to manage the congestion in the computer networks. In this paper, two methods are proposed to solve this problem. In the first method a feed forward neural network is included in a central node to determine the complete path between any pair of nodes (source, destination). In the second method a routing approach consists of two feed forward neural networks is suggested to solve the routing problem with congestion control. The proposed methods are applied for typical examples of computer networks. Results of the testing show good performance.
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**Index Terms**

Computer Science

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**Keywords**

Routing, congestion control, computer network, neural network