Data Transmission Rate Control in Computer Networks Using Neural Predictive Networks*

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ABSTRACT

In this paper, a novel congestion control scheme is proposed which is based on a Back Propagation (BP) neural network method. The BP neural network predicts the dynamic buffer occupancy of the bottleneck node. The proposed control scheme avoids congestion efficiently and optimizes the transmission performance as shown by the theoretic analysis and simulation results.

Keywords: BP neural network, congestion control, data transmission, computer network.