Abstract

In this paper we empirically investigate various sizes of training sets with the aim of determining the optimum training set size for generalization ability of an ANN trained on forecasting TCP/IP network traffic trends. We found from both the simulation experiments and literature that the best training set size can be obtained by selecting training samples randomly, between the interval $5 \times N_W$ and $10 \times N_W$ in number, depending on the difficulty of the problem under consideration.

References

- E. Richards, "Generalization in Neural Networks, Experiments in Speech
Recognition, University of Colorado, 1991.

**Index Terms**

Computer Science

Networks

**Keywords**

Generalization ability  Artificial Neural Networks and Training set size.