

Use Of Multilayer Feedforward Neural Networks In Identification Andcontrol Of Wiener Model

Al-Duwaish, H. Karim, M.N. Chandrasekar, V.;Dept. of Electr. Eng., King Fahd Univ. of Pet.Miner., Dhahran;

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King Fahd University of Petroleum & Minerals

<http://www.kfupm.edu.sa>

Summary

The problem of identification and control of a Wiener model is studied. The proposed identification model uses a hybrid model consisting of a linear autoregressive moving average model in cascade with a multilayer feedforward neural network. A two-step procedure is proposed to estimate the linear and nonlinear parts separately. Control of the Wiener model can be achieved by inserting the inverse of the static nonlinearity in the appropriate loop locations. Simulation results illustrate the performance of the proposed method

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