Neural networks with counter-propagation learning strategy used for modelling

Jure Zupan, Marjana Novic
National Institute of Chemistry, Ljubljana, Slovenia

Johann Gasteiger
CCC, University of Erlangen, Nürnberg, Nägelsbachstrasse 25, 91052 Erlangen, Germany

Abstract

The neural networks employing the counter-propagation learning strategy are described and their use for making complex models and inverse models is explained. Two examples show how such modelling strategy can yield satisfactory results for the investigated systems. The first example describes building a model for quantitative prediction of the so called 'colour change' factor. The second example shows the generation of the forward and inverse model for the control of a chemical process in a non-isothermic continuously stirred tank reactor (CSTR).

CILS27_1995

Questions about the manuscript:

Prof. Jure Zupan
phone: xx-386-61-1760-279
fax: xx-386-61-1259-244
E-mail: jure.zupan@ki.si