A Study on Neural Network Based on Contractive Mapping Genetic Algorithm

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ABSTRACT

BP algorithm for multilayer feedforward neural network depends on value of weights of neural network, which will not converge or converge to local minimum. A new method employing contractive mapping genetic algorithm to learning of multilayer feedforward neural network was proposed in this paper. The algorithm provides an effective method of global convergence of BP network by introducing fixed point, which not depends on the value of weight.

Keywords: Neural Network; Genetic Algorithm; Contractive Mapping; Fixed Point