

Hopfield Neuron Based Fuzzy Engineering Optimization

This paper presents an engineering optimization method where the continuous Hopfield neural network model is used as the basis to solve the crisp or fuzzy constrained optimization problem. In our work we found that the solution process is independent to the synaptic conductances and the input current so that the method can be simplified. The presented method had been applied to the engineering designs that display it's usefulness, satisfaction and potential. The computing algorithm is given herein for a designer who can program the design without difficulty.