Abstract

The ability for recalling pattern which is stored, make Hopfield net use for face recognition. As good as neuron in human being, Hopfield net has the abillity to recall the informations whis are strore in it.

Different from the other artificial neural network, it has no learning process. Dataset for learning which usually learn in a long time, Hopfield just store them in its memory as a weight of neural network.

Face recognition is done by maping face image into binary image, then it is stored in Hopfield network. Hopfield neural network computes its output recursively in time until the system become stable. The output is Hopfield prediction for face and its similarity.

The analysis of system for AT&T laborlatory database which is done, show that Hopfield net can be used for Face Recognition.

Keywords: Hopfield nets, Wavelet transform, Face Recognition.