

Neural Approach for TV Image Compression Using a Hopfield Type Network

Authors: Martine Naillon, Jean-Bernard Theeten

Abstract: A self-organizing Hopfield network has been developed in the context of Vector Quantization, aiming at compression of television images. The metastable states of the spin glass-like network are used as an extra storage resource using the Minimal Overlap rule (Krauth and Mezard 1987) to learn the organization of the attractors. The self-organizing scheme devised the generation of an adaptive codebook for any given TV image.