Mapping And Inverse Mapping Relation In Image Compression Using Neural Network

T1003

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Abstract

Image Compression involves converting an image into a new representation that uses a smaller number of bits. The resulting representation can be used to reconstruct the original image without sacrificing the quality of the image. There are several techniques in image compression but those techniques depend on the application. This research will present a new technique in image compression for gray levels using a neural network. The 64 by L by 64 and 128 by L by 128 neural network architectures will be used to figure out the most appropriate mapping and inverse mapping relation for a particular application. Simulation is done in a personal computer to achieve at most an 8 to 1 compression ratio.