ABSTRACT

Several examples of *image compression* technology being improved at present are JPEG and MPEG. These technologies are able to create high quality image with a high level of compression ratio. Unfortunately, these technologies need a long and difficult computation process.

The problem having become the object of final assignment research and development is how to realize *Neural Network* method in image reconstruction. By this method, we needn't have done the computation process which wastes much time in compressing an image.

In this final assignment, it will be made a software to realize Neural Network method as a tool for *Neural Network* performance observation in image *compression* and *decompression* process or *image reconstruction* process. The observation is made by altering the neuron composition on input and hidden layer. Having finished the observation, the analysis will be made based on its result and theory.

From its result, it says that the quality of image compression with Neural Network method is really influenced by the composition of neuron number on input and hidden layer. The lower neuron number, the higher quality of image compression result. The factor of ratio is depending on the comparison between neuron number in input layer and in hidden layer.

Keywords : *Image Compression, Neural Network, Image Reconstruction, Compression and Decompression.*