ABSTRACT

Steganography is the science and art of hiding secret message, so that the existence of the message is not detected by human senses. Digital steganography uses digital media as cover, such as image, sound, text, and video. Hidden secret data can also be image, sound, text, or video. To determine whether or not the secret message in the media, it needs steganalysis.

In this final project, it is implemented digital image steganalysis on Android Mini PC. Before classifying, first pre-processing image to simplify the process. After pre-processing, the identification process is carried out using the statistical characteristics, such as *mean*, *variance*, *skewness*, and *kurtosis* of the image in DWT domain. Then the classification is performed by backpropagation Artificial Neural Network (ANN) for determining whether or not there is a hidden message in a digital image.

The results obtained in this final project is a program on Android Mini PC that can classify whether or not there is a secret message hidden in a digital image using Artificial Neural Network. The level of accuracy obtained is up to 66.7%, while the average processing time is 3.16 seconds.

Keywords: steganalysis, digital image, Artificial Neural Network, and Android Mini PC.