ABSTRACT

This is the era in which all people use the Internet for their daily needs. There conducting online transactions, make payments with Internet banking, online gaming, and others. Therefore we need a Digital Watermarking technique, which is to embed digital data in a secret file into another data, but it is not known to exist by human senses.

In this final project will be the analysis and implementation of the watermarking in the image file using the histogram-based reversible hiding with Multiple Scanning Data Value Difference Histogram, which previously no research on Scanning Single Value Histogram. This final project design using MATLAB.

In this scheme is expected to file a watermark can be extracted from the image file while maintaining quality. Performance parameters tested in this thesis is PSNR and how much capacity of bits that can be inserted. Capacity of bits that can be inserted in the image of the host will be different from one host to another host. This method uses two scanning techniques, ie horizontal and vertical. Each of these techniques will compare the large capacity of bits that can be inserted, then choose the techniques to be used.