ABSTRACT

Growth of Information Technology, especially the digital information latterly experience of improvement rapidly. This improvement marked by many using and multimedia data distribution. Ease to access multimedia data causing needed a security system which can pacify the information from unconcerned sides. Various type of digital processing method for the security of various digital data types have been made available in this time.

Watermarking is one of way to protect the intellectual property of multimedia products (image/photo, audio, text, and video) by inserting information into the multimedia data. The insertion of information into multimedia data named as *watermark*, and watermark can be considered as digital signature or the digital cachet from valid owner for that multimedia product. Blind watermarking is one part of watermarking with its characteristic i.e. not being needed of image original at decoding process to see insertion message.

In this final project, Blind-Watermarking method was simulated to insert the information into digital image by *wavelet* method. After data insertion process at image result by process of Blind Watermarking, the quality of images not experience degradation very significantly, so that still be competent as a creation. It proved by PSNR value which has mean value is 40.01267 dB. The extraction images are not experience of quality degradation very significantly although without existence of verification with the original image otherwise hit by significant attack. Which is proved by Mean Opinion Score has mark 4, it is mean images have fine quality.

Keyword: Digital Image, Blind Watermarking and Wavelet Transformation.