Abstract

In cyber space digital data are easily accessed information and difficult to be monitored. It influences data ownership and copyright. Everyone can easily copy or change the copyright of that digital data. To overcome this situation, a technique is required to protect the copyright of the data. One way is to implement data hiding technique (*Steganography*), which is watermarking. Watermarking is a technique to hide data in digital data (image, audio, video), but its existence is not recognized by others.

In this final asssignment, watermarking technique is implemented in digital image using Complex Wavelet Transform (CWT) dan Singular Value Decomposition (SVD). The goal is to achieve a fine and robust watermarked image perceptibility.

In the embedding process, the SVD computation is done after the image in domain frequency. the watermarked image with scale factor 0.01 has the highest PSNR value. Endurance test of watermark image by giving disorders changes in intensity showed sharpening and jpeg compression has the best robustness compared with gaussian blur and noise.

Keywords: *watermarking, CWT, SVD.*