

## **ABSTRACT**

*The rapid development of information technology in the world today also encourage the growth of many fields and the misuse of these technologies. One is the field of communication and information including multimedia, which includes the creation of files or documents in the form of text, sound, images and video. The ease of manipulating, engineering and distributing digital documents such as multimedia documents can be detrimental to the owner.*

*Watermarking is a form of Steganography (a technique for hiding information on a medium without being noticed easily). The watermarking technique will insert a digital information called Watermark into a digital data called a carrier or medium. Inserted watermarks can be plain text, audio, image or video depending on the capabilities of the media they are on. Watermarking is usually done for copyright protection against a digital data in accordance with ITU-T standards. This final project discusses the watermarking system on the image of watermarked watermark in the form of text. The methods used are DWT - LWT and SVD (Discrete Wavelet Transform - Lifting Wavelet Transform and Singular Value Decomposition) methods and insertion process using QIM.*

*The result of watermarking image on matlab showed bit error rate approaching zero without attack and PSNR value which is at 40 dB at nbit 5 upwards. With QIM insertion technique on watermarking image PSNR value becomes better than without QIM. But it can be seen for resistance to attacks tend to be fixed or fluctuate.*

*Keywords: Watermarking, Steganography, DWT - LWT - SVD, QIM, PSNR, Bit Error Rate.*