ABSTRACT

The development of digital technology and the internet today has given the ease of access and distribution of information in digital format. The ease which creates some new problems for example the copyright and ownership of data. Each person can freely exchange and access information they want. In addition everyone can easily recognize that the data belonged to him. Many tools already taken to provide or protect digital data, such as: encryption, copy protection, visible marking, marking the header, and so on. But all of these have their respective weaknesses. Digital watermarking is one of the data protection techniques by inserting the data or information through the media of the watermark text, voice, image, or video so that the insertion is not seen by the human senses.

Adding a watermark into a multimedia content regardless of its quality can be used as an authentic evidence of ownership of data. Digital watermarking in the process this time, will use Singular Value Decomposition method (SVD). Furthermore, we use the Integer Wavelet Transform (IWT).

The conditions that tested is the palce of insertion data. Insertion in the sub-band HH will produce good results of watermarked image with PSNR value between 30-60 dB. Likewise with the extracted image will produce better PSNR value when insertion process carried out in sub-band HH. Invisibility has a Trade-Off with robustness. The smaller the scale factor is used, the image of the embedding will be more invisible, while the image will be more robust if use scale factor as large as possible.

Key word: SVD, IWT, Watermarking