

ABSTRACT

Security and confidentiality of data is very important as the development of the exchange of information through digital media. To ensure the security and confidentiality of data is needed a technique to secure the data, one of them with steganography. Steganography is a method used to hide messages using digital media such as images, audio, and video. With the presence of steganography is expected to prevent data theft and misuse of data so that information can be up to the recipient safely.

In this final project, made steganographic system to insert the message (.txt) in the video (.avi) uncompressed. Before doing the insertion will be performed on the framing process video signals and to select the frame to be inserted secret message will be determined by the level of frequency of the audio signal contained in the video footage. The method used to insert the message is Discrete Wavelet Transform (DWT). The message insertion is done by replacing the coefficient values below the threshold value with a secret message.

Final results of this research is a system that inserts the data into a video text messages. By using the method of insertion DWT, testing several video frame size, length of message, and the value of the frequency range, the result Peak Signal to Noise Ratio (PSNR) is good. The results obtained are the largest PSNR dB 104.6178 and obtained the smallest MSE value of 2.21×10^{-6} . Most computing time obtained in the insertion process is 14.48626 seconds while the extraction process is 5.37692 seconds. Results Mean Opinion Score (MOS) were found to have an average total value of 3.9 which means tersisipi with good video quality.

Keyword : Steganography, Discrete Wavelet Transform, Treshold, FFT, video