

ABSTRACT

Steganography is the science or art of disguising the existence of information. There are various methods in steganography, in this digital era steganography is widely used on media such as image, audio and video. In general, steganography is done with a single insertion process and uses one cover to hide information, but in this research I used two digital cover image and two insertion process to trick the one who has no right in accessing the information. Spread Spectrum Image Steganography is used for the first insertion method in the spatial domain, whereas in the second insertion the Discrete Wavelet Transform method is used to transform the second cover image into frequency domain and the message is inserted by modifying the singular value using the Singular Value Decomposition method. The results show that the resulting stego-file has good imperceptibility and robustness. It is measured based on PSNR and SNR values on both insertion processes, SSIM on second insertion and BER at the extraction process.

Keywords: Steganography, Double Steganography, Discrete Wavelet Transform, Singular Value Decomposition, Spread Spectrum Image Steganography