

ABSTRACT

The rapidly growing development and progress of information technology has impacts on all aspects of human life. One of them is the Internet, with the internet one can communicate and exchange information quickly and easily. However, technological development is not directly proportional to the security and confidentiality of data. It is because often there are times when information of private nature can be easily accessed by irresponsible people. Therefore it is necessary to develop techniques to maintain the security and confidentiality of information or data transmitted. One of the ways is through the Steganography and Cryptography techniques.

Steganographic technique is used to hide a secret message into another media, so that between the original image and the stego image there is not much differences seen in plain sight. Whereas cryptographic technique is used to maintain the confidentiality of the data that you want to send. In studies that have been done before, with modified bits selection rules, MELSB can improve the SNR of stego-audio better than ELSB, with the result that the scheme MELSB provides SNR greater than ELSB.

In this final project a comparison will be conducted between the MELSB method with Four Neighbors method and a test will be conducted to see which of these two schemes better. Cryptographic technique used is Chaining Hill Chipher. Whereas the steganographic technique used in the insertion of a message is the Modified Enhanced LSB method and Four neighbors method. The results of this final project is Mean Square Error (MSE) and Peak Signal to Noise Ratio (PSNR) amounted 0.83975 and 112.88115 for MELSB method, and amounted 17.06415 and 83.267475 for Four Neighbors methods, Mean Opinion Subject (MOS) obtain result as big 4.666 for MELSB method and amounted 4.598 for Four Neighbros method, Bit Error Rate (BER) and the Character Error Rate (CER) = 0 for both method and the value of Avalanche Effect amounted 22.054%.

keyword : Steganography, Kriptography, Modified Enhanced LSB, Four neighbors, Chaining Hill Chipher.