

ABSTRACT

Steganography is a technique to hide messages in other media so that the existence of the message is not known by others. Messages which are inserted can be a text, image, audio, and video. Cover media also can be a text, image, audio, and video.

In this final assignment, has been simulated steganography using digital image as a cover and a secret message. In the research that has been done before^[8], steganography technique still has shortcomings, such as the damaged/loss of secret message because of disturbance during the process of sending / transmitting data. Therefore, in this final assignment, had been done research which merge the encryption method and error correction method to improve the quality and performance of steganography. The encryption method used is the Advanced Encryption Standard (AES). Meanwhile, to minimize the error of the received data, is used error detection and correction technique, BCH Code.

The results that have been obtained are the secret image sent by the sender has minimal BER to 0 and maximum PSNR to infinity after tested by Gaussian noise, Salt & Pepper noise, rescaling and cropping. While the PSNR value for steganography image is above 287 dB with MOS value 4.6 - 4.7 which is the average of the results from a survey to 30 observers.

Keywords: steganography, digital image, Advanced Encryption Standard (AES), BCH Code