

ABSTRACT

Along with the development of information exchange that is getting increasingly need privacy in digital media, then the security and confidentiality of information becomes an aspect that deserves to be noticed. Using radio waves, then the exchange of information is becoming increasingly easy to do. Therefore needed a technique to ensure the confidentiality and security of data but does not affect the reliability of data delivery, one of them is to use steganography. Steganography is a technique used to insert or hide confidential messages into the media cover specific e.g. video, pictures, or audio. With the expected information steganography secret message can be carried safely to the recipient of the message sign is known by those who are not entitled to the information of the message.

In the final assignment is made to insert a steganography system messages on the video with the Least Significant Bit Enhanced methods (ELSB). The selection of the place of insertion frames based on energy of the MFCC in audio signals that are active on the image frame.

By using the method of insertion ELSB, author of the test message and image of some measure of the size of the video cover, as well as conducting the election at some threshold value, the obtained values of the Peak Signal to Noise Ratio (PSNR) is good, that is still above the 40dB. The value of the Mean Square Error (MSE) of the largest obtained by the time the size of the message 200x200 minds, size 320 x 240 video cover with threshold 0.2 i.e. worth 3,8. The results Mean Opinion Score (MOS) obtained in the good range. At the time of the system given Gaussian noise on either the image or the audio system is quite capable to stick around.

Key words: steganography, ELSB, MFCC, video, audio