ABSTRACT

Attention for information security becomes vital importance, triggered progressively of popularity of digital media. One matter is in information delivery, which can be conducted by using encryption or steganography. Steganography is concealment technique of data, which is secret at embedded data, and the secret of data existence will not expected to invite the suspicion and perception of senses of human being. In this final project, steganography is implemented at video with full frames AVI (uncompressed) type by using DWT. This tools is chosen because wavelet owns the ability to analyze data in domain of time and domain of frequency concurrently. Furthermore, its ability to analyze signal with different scale and to represent it into a time scale by using filter technique. Secret data is used in the form of file of image of chromatic of bitmap format, and medium data used is video with the type of AVI full frames. Insertion process conducted by inserting bit of pixel of image into bit of pixel of medium video by altering coefficient of wavelet discrete in each frame image of medium video. A scrambler key is used to random of frame of medium video which can be inserted by bit of pixel of messages. An extraction process which aims to get back the image (secret data) which is embedded in medium video and it starts with extracting video of stego by using the scrambler key. Next, is to evaluate result of video stego conducted by measuring PSNR and MOS. Experiment result that bigger capacity can't influence of quality stego video. MOS test result stego sistem have good quality, proved by MOS score is 4.067 (good) and PSNR value above 50 dB.

Keyword : Steganography, Image, DWT, DCT, AVI, Key Scrambler