

ABSTRACT

Tapping of information is one of the negative impact of the easily exchanging data process over internet. The discovery of a secret or even loss of a number of materials is the result of important information that is not well protected. Therefore, it takes a technique to protect data from hackers and crackers. Steganography is one technique of securing data by inserting data into a multimedia file.

At this research, made a steganographic system to insert text messages on Java script image (.bmp) using DCT (Discrete Cosine Transform). Practically, a Java script image file (.bmp) is segmented to take part special character of Java script, the character of which is located above the main script and it's called *Aksara Nglegena*. Each of special characters will be calculated on average its DCT coefficients, then the average value obtained will be multiplied by a certain coefficient to be used as a threshold. The coordinates of pixels that have a value of DCT coefficients below the threshold, is stored as the site coordinates of insertion Then a text message that has been converted to binary following the ASCII standard, is inserted into some pixel coordinates corresponding to the coordinates that have been saved. To determine the success of the insertion process, the extraction process is carried out to obtain the contents of the message.

The result of research is a system that can insert a text message into a special character image Java script. For stego image quality analysis, analysis is used subjectively and objectively. Subjective analysis performed using MOS parameter while for objective analysis is done by using the parameter MSE and PSNR. As for the secret message quality analysis is performed by calculating the BER and CER.

Keywords : *Steganography, Javanese Script, DCT, Bitmap, MOS, MSE, PSNR, BER, CER*