ABSTRACT

Information is a message in the form of a utterance or phrase that can consist of symbols, or meanings that can be interpreted from a message or a collection of messages. In its use sometimes there is special information that can only be submitted to others and do not want to be known by people who are not allowed by the owner of the information.

The development of Information Technology has grown rapidly in helping human activities. In its dissemination, the information has a variety of media forms, such as text messages, images, audio and video. Currently, these media can be easily shared mainly through the internet. But not always the use of internet for the media can be said to be safe, because there are many parties who do not have authority over a message can intentionally steal, damage or disrupt the existence of such information on the internet.

Steganography is a technique to hide information through a media cover. Common uses and small file sizes make it a reason for this research to use JPEG image media. In the final project, the implementation of steganography using Least Significant Bit (LSB) and Spread Spectrum method and see the change of original image quality and steganographic image determined through MSE and PSNR values. Result of research with mean value of MSE equal to 0,070835089 and value of PSNR equal to 62,07931333 dB for LSB usage. Result of research with mean value of MSE equal to 0,076000524 and value of PSNR equal to 62.16258 dB for Spread Spectrum usage. Thus it can be concluded that the use of LSB and Spread Spectrum has been successful by having a good image change value with MSE value close to zero and PSNR value above 50 dB on original image and steganography image.

Keywords : *Steganography,* JPEG *Image, Least significant bit, Spread Spectrum*