

ABSTRACT

Image files are one of the most common file types today. Especially in photography. Image files have many formats, and the most commonly used format today is JPEG image files because JPEG is one type of compressed image file and has a relatively small size compared to BMP files. Image files are now also used in the exchange of information. At this time image files can also be utilized in exchange of information unnoticed by other parties than the sender and receiver, the technique used is steganography.

Steganography is a technique used to hide information on a medium. media that can be used in the form of text, image files, audio and video files. In its use the insertion of messages / information is done by making small changes to the media. In this research we have done image steganography implementation using LSB and F5 method.. To strengthen information security, this research also used one of cryptography method that is AES-128.

In this final project, an implementation of image steganography has been done using LSB and F5 method. Steganography image results have been calculated the value of MSE and PSNR to determine the quality of the image and also the results of steganography images will be tested using salt and pepper noise to see the quality of the image after being given noise. The final result of this research is to know the quality of an steganography image and calculate the computation time in performing steganography process on an image.

Keywords : Steganografi, JPEG, *Least significant bit*, *Algoritma F5*, *MSE*, *PSNR*