ABSTRACT

Confidentiality of information is an important concern on the development of technology in this era. Steganography is an influential element in maintaining the confidentiality of the information. With steganography then we can hide information on a medium that is difficult to be detected by human senses. On the other hand, perkembagan steganographic techniques can also trigger the development of a technique for detecting data that has been pasted information. Steganalisis is a technique to detect the hidden information in the data. Development steganalisis technique can be a solution in dealing with criminal cases as a result of steganography. In addition, steganalisis also expected to fix the weaknesses of steganography and improve information security.

This final project discusses steganalysis based on an image by using the Discrete Wavelet Transform (DWT) with analysis method Principal Component Analysis (PCA). Support Vector Machine (SVM) is used to classify whether or not the information is pasted on an image. It is also important original image and stego image to be able to analyze and detect the presence of confidential information.

From the test results obtained total the highest average accuracy rate detection of secret message steganalysis system is about 90%. The system is capable of detecting secret messages on an image that has been tersisipi secret message. Therefore, the system steganalisis the digital image that is shown to be relied upon in analyzing digital data accurately.

Keywords: Steganalysis, Discrete Wavelet Transform (DWT), Principal Component Analysis (PCA), Image.