

ABSTRACT

The development of science has brought us to the current digital era, one of which is steganography. Steganography is the process of inserting a message into a medium. Early in its emergence, steganography used the slave's head as the medium, but currently the media used are text, images, audio and video. This sophistication must not be separated from crimes, one of which is terrorism. In this case, the terrorist able to camouflage their communication. Based on the problem, then we need a method that can detect the embed messages, this method called steganalysis.

The science of steganalysis has been discussed in previous studies. It's just that this research discusses the extent of detecting the existence of the message. In this study, a steganalysis system was designed to not only detect the existence of messages but also a system capable of detecting the position of the message inserted from a suspected audio file. This system steganalysis used Difference Ratio Steganalysis and K-Nearest Neighbor classification.

Based on the tests that have been done, this system steganalysis able to detect message from audio which embed by Modified Discrete Cosine Transform. In detecting the existence of messages the system has 77,5% for the accuracy rate, while the accuracy rate of detecting position is 100%. These results are obtained by using the following parameters: 128 to 128 as frame size, K=9 as K value, Cityblock distance, and 32x32 pixel as message size.

Keyword : *Steganography, Steganalysis, Modified Discrete Cosine Transform, Diffrence Ratio Steganalysis, K-Nearest Neighbour*