

## ABSTRACT

*Along with the development of information exchange that increasingly requires privacy, the security and confidentiality of an information message is very important. Therefore it is needed a way to insert messages that carry information into certain media coverings, for example audio and video, one of which is using steganography. The development of steganography is very rapid causing the need for a way to oversee an exchange of data. We can manipulate audio data files so that the possibility of spreading secret messages both positive and negative, such as nuclear codes or terrorist messages is very possible. To anticipate this can be done using the steganalysis method. Steganalysis is one solution that can be used to monitor the distribution of information that has hidden messages and also functions as identifying messages suspected of carrying the secret message.*

*In this final project research an analysis of the statistical values possessed by an audio file that has the .wav format which includes message and message location. This value is used to view the distribution of values. in audio files that have the original and inserted .wav format messages (stego files) with the psychoacoustics insertion process. The steganalysis process uses Discrete Fourier Transform (DFT) by classification using K-Nearest Neighbour (K-NN).*

*This research can detect psychoacoustic hidden messages in audio files that are inserted with the best level of accuracy of the DFT method system and K-NN classification by 100 % for message detection, and 75.56 % for position detection. This research is expected to be utilized by interested parties to detect hidden messages so that there is no misuse of information exchange.*

**Key Word:** *Steganography, Steganalysis, Discrete Fourier Transform (DFT), K-Nearest Neighbour (K-NN)*