

## ABSTRACT

The security of secret data in many media of information like computer, hand phone, and others is important. Nowadays, there are many techniques that can be used for securing the data, like encoding data file, making format random file. However people will know that data are secret data and will try to break the code. There is a technique to secure the secret data, that is called steganography, which we do not need to encode file of secret data or change file format, but we only need to hide them in other file. We can hide data in image, video and or the other format

This final project implements steganography in avi video (full frame) with DCT transform. DCT will change byte of data from spatial domain into frequency domain. There are two kind of frequency, first is the essential frequency (DC coefficient) , and the other is not essential frequency (AC coefficient). The secret data will be inserted into DCT block which have the not essential frequency (AC coefficient). The examination includes frame analysis quality based on MSE and PSNR, the validity of secret data , and the robustness of secret data.

From conducted examination, we get that steganography with DCT transform can result the secret data with the validates value up to 100%,. Insertion of data will give better quality of frame if the frame has PSNR value greater or equal to 30dB.

Keywords : *steganography, video, Frame, PSNR, MSE, DCT*