ABSTRACT

In today's digital world, there is a great wealth of information, which can be accessed in various forms : text, images, audio and video. Some of them maybe very important to us, so we must keep the security of the data for not be stolen, changed or demolished by another person. One of any methode in data security is steganography, which the important ones of file hide within other file. Generally, files in the computer, like MP3, WAV, BMP, JPEG, GIF, AVI and the other files can be hide or make them as cover carrier. Audio file(wav) and image are commonly used as cover carrier. Audio file which still seldom be used as media cover one of them is MP3.

This Final project implementing technique of steganography at MP3 file use spread spectrum method. Data in the form of any file will be inserted spread over in two domain, namely time domain and frequency domain. To know which method is better, hence to StegoMP3 file done by examination objectively with calculation of Signal to Noise Ratio (SNR) and subjectively by 20 respondent, while to data which be hidden done by examination to compute level validity of data resulted from extraction of steganography.

From conducted examination, conclude that concealment in time domain better than concealment in frequency domain. Size of hidden data influence the quality of yielded StegoMP3 with inversely proportional relation, but not influences the validity of hidden data. Quality of StegoMP3 will similar with the original if resulting SNR value grather than or equal to 28,28 dB. Maximum size of data that can be hide in MP3 file which have 60 second long to produce SNR value grather than or equal to 28,58 dB is 6500 bytes.

Key words : Steganography, MP3, Spread Spectrum