ABSTRACT

Audio Watermarking is a technique of inserting information into an audio signal without altering the significant origin of the audio host. Audio Watermarking is usually used to protect the copyright of a work in the form of songs, recording of state and other secrets to avoid irresponsible persons. Audio watermarking technique is passed through two stages including embedding, and extracting. The extracted audio signal must be resistant to several attacks such as noise, cropping, jittering, resampling and requantization.

In this research will use a scheme with Discrete Wavelet Transform-Singular Value Decomposition (DWT-SVD) method to obtain robustness with respect to PSNR, BER, ODG, CC and MOS parameters. In this research will be performed performance improvement to main method that is by addition of arnold transform algorithm. It is expected that in this research the quality of the audio host is resistant to various attacks with great robustness.

The result of this research is a program audio watermarking system with DWT-SVD and arnold transform method with output value BER = 0, PSNR = ∞ and CC = 1 without attack. This method is resistant to LPF attacks, MP3 Compression, Cropping and noise.

Keywords: *audio watermarking, arnold transform, Discrete Wavelet Transform, Singular Value Decomposition*