

ABSTRACT

In this era, the growth of information in the field of technology very rapidly. One of the ease of dissemination of digital media (pictures, sounds, video) over the internet make the community with easy access to all digital media. The positive side of ease of deployment is fast, the owner of digital media with the spread of digital image files to various sites on the internet and the address of the owner of the copyright of digital media gets income from the site.

But the ease it has negative side i.e. If there is no copyright which serves as protector of the image that is deployed, then data capture can happen illegally. To overcome it, we can use the techniques of the watermark. Watermarking is a way of concealing information or data on a particular media and must be resistant to attack.

In this final project use watermarking with the use of Compressive sampling to minimize watermark size. Synchronization to know where the watermark is located. Stationary Wavelet Transform (SWT) method prevents the watermark shift to overcome the weaknesses of the Discrete Wavelet Transform (DWT) and generate multiple signals of high, middle and high frequencies. Audio centroid is to determine the center of gravity in the audio signal in a frame to be more resistant to attack.

In this final project we get the best parameters before being attacked with $BER = 0$, $SNR = 22.7915$, $ODG = -3.8906$ and capacity of 30.7617 . For best optimization chosen after attack is located in drums.wav with result $BER = 0$, $SNR = 23.3138$, $ODG = -3.3625$ and capacity 205.0781 . After that, the average BER that has been attacked to all hosts is 0.28

Key Words: Watermarking, Stationary Wavelet Transform (SWT), Compressive Sampling (CS), Audio Centroid.