ABSTRACT

Nowadays, communication era is limitless. It's easy to send and receive file, so it gives opportunity in illegal activity as piracy of file. So it's need mechanism to protecting file. Watermarking can be applied to embed ownership information in some creation. Watermarking is commonly used by digital file, such as image, music or audio also video.

This final project will create a technique to embed watermark in file digital 3D. Using Lazy Wavelet transform that decompose the object 3D then we will get wavelet coefficient that will modified in insertion process. The process is doing by MATLAB R2011b.

The result is watermarked 3D object with small value of MSE and information can be extract even the 3D object is given geometrical attack such as translation, rotation and scaling. The watermarked information can be get by comparing ratio of wavelet coefficient between watermarked object and original object. Length of watermarked information doesn't affect nothing to size file of 3D object.

Keyword: ***watermarking, lazy wavelet, subdivision¸surface object***