Abstract

Growth of technology allowed informations serviced not only by text, but also by picture, audio, even video, that is multimedia. Audio is a multimedia which is presented in analog and digital. Digital audio is easier to use, but also easier to be distorted by noise. That is why system that can restore digital audio is needed.

In this final assessment developed system which can restore audio signal using dual tree complex wavelet transform.

Data test that used is audio .wav with sampling rate 11.025Hz, 16 bit, with noise as a model is AWGN (Additive White Gaussian Noise). The analysis conclude that dual tree complex method is suitable to restore audio signal that being distorted by noise. This system also use descrete wavelet transform method to restore audio signal as a comparisson.

Keywords *: Audio, Wavelet Transform, Dual Tree complex, AWGN, Discrete Wavelet Transform.*