

ABSTRACT

Like we have known, in each communications system noise always emerge in course of information delivery. This matter result the information accepted experience of the trouble so that its result disagree with expected. To increase quality of this delivery signal information, needed process of denoising. Denoising its Important in communications system specially information in the form of image, aim so that image result yielded more accurate and come near its genuiness.

A lot of method which can be used for the restoration of image. In this final assignment will be used comparison between Discrete Wavelet Transform (DWT) with a new transformation wavelet method which called Dual-Tree Complex Wavelet Transform (DTCWT) because this method is an evolution from DWT, which they used dual-tree to generated a real and imaginer part from coefficient complex. Both method is used for denoising, and the gaussian noise will we used to distorted an image. While level dekomposisi weared is level 1, 2, 3, and 4, which each the parameter input by turns to see its performance in reducing noise.

In this project, DTCWT will give better result than DWT while the noise input more than 18 dB and DTCWT will given accurate in edge of image. In a bad condition (SNR input = 0 dB), both of that method will give the negative result, because additional with parameter *log*. For subjectivity, DTCWT have result 3, about that result DTCWT give a better quality than DWT.