ABSTRACT

Digital image is a kind of image that is very often and easy to used, like for image transmission as data, enhancement and processing. When image is implemented in our life, example in sending process through satelite or near cable, it often happened interference that causing noise into the images.

In this final project, it has been implemented and analysed the used of Ant Shrink method based on wavelet using ACO(Ant Colony Optimization) technique to classify the wavelet coefficients which is used for denoising process. The noise which is used in this final project is additive gaussian noise which is generated by noise generator.

From the experimental results obtained, bayes shrink method was considered good in removing noise, as well as the conclusion of the better denoising using Daubechies db8 and 5-level decomposition. Average improvement of PSNR obtained is 5.208db.

***Keywords**: Wavelet, denoising, AntShrink, ACO, Ant Colony Optimization, Additive Gaussian Noise.*