ABSTRACT

Low-light images are the result of taking pictures or shooting images in dark or low lighting conditions. Usually, low-light images cause noise to interfere with the quality of the image. Therefore, using various filtering methods and image enhancements will be able to reduce or eliminate unneeded noise.

In this final project, the writer will discuss about removing noise in low light images using the Multiscale Retinex with Color Restoration (MSRCR) and Histogram Equalization (HE) methods applied to the frequency domain. The results of this study get an image that has experienced a low image enhancement with a PSNR value exceeding 30 as a standard and an MSE ending with a value of 0 which means that the resulting image has good quality.

Keywords : Lowlight, noise removal, frequency domain, Histogram Equalization, MSRCR