ABSTRACT

Fog is a collection of water droplets or ice crystals that are draped in the air at or near the surface of the earth. Fog often appears thicker than clouds, because the water droplets that make up the fog are smaller. A large number of small droplets absorb more light, so they appear thicker. Fog also affect the distribution of light distribution, thereby affecting image features and image contrast. To improve image quality various Enhancement methods are used.

In this final project, the writer will discuss about eliminating noise in foggy images using the Ideal Low Pass Filter (ILPF) and Gaussian Low Pass Filter (GLPF) methods. The use of filters is done in the frequency domain. The results of this study get a clear image for foggy images, with the PSNR results are below 30dB.

Keywords: Fog, noise removal, frequency domain, Ideal Low Pass Filter (ILPF) and Gaussian Low Pass Filter (GLPF).