**Image De-Blurring and De-Noising using Weiner Filter and Anisotropic Diffusion for Natural Images**

**Abstract**

The proposed method basically represents how to de-blur and de-noise images using a wiener filter and Anisotropic Diffusion Filter. Basically wiener filter is used to produce an estimate of a desired image or target a random process by linear time-invariant filtering of an observed noisy process, assuming known stationary signal and noise spectra, and additive noise. The Wiener filter minimizes the mean square error between the estimated random process and the desired process to reduce the speckle/Gaussian noise from the medical images based on components separation and wavelet shrinkage model with non-local means for preserving the image quality without any information loss. The Anisotropic Diffusion Filter is to convert the blurred images to normal image, while preserving meaningful detail such as blurred images.

 **Keywords:** de-blur, de-noise images, stationary signal, and estimated random process.