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COMPARASION OF SNR AND MSE FOR VARIOUS NOISES USING BAYESIAN FRAMEWORK

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Abstract

A noise is introduced in the transmission medium due to a noisy channel, errors during the measurement process and during quantization of the data. For digital storage each element in the imaging chain such as lenses, film, digitizer, etc. contributes to the degradation. Image noise removal is often used in the field of photography or publishing where an image was somehow degraded but needs to be improved before it can be printed. This paper reviews the Bayesian Estimation process for statistical signal processing. Different noise models including additive and multiplicative types are used. They include Gaussian noise, salt and pepper noise, speckle noise and Poisson noise. Selection of the denoising algorithm is application dependent

Author Keywords

Bayesian estimator, prior Distribution, Posterior Distribution, Likelihood, Gaussian, salt and pepper, speckle, Poisson Noise