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IMAGE DENOISING USING MODIFIED SINGULAR VALUE DECOMPOSITION METHOD

Jamsheena.P.K[1], Arun Prasath.N[2], N. Kaleeswari[3] & M.Sivakumar[4]

[1]Research Scholar, EASA College of Engineering and Technology, Coimbatore, Tamil Nadu, India

[2]Senior Assistant Professor, Department of ECE, EASA College of Engineering and Technology, Coimbatore, Tamil Nadu, India

[3]Professor, Department of ECE, EASA College of Engineering and Technology, Coimbatore, Tamil Nadu, India

[4]Assistant Professor, Department of ECE, EASA College of Engineering and Technology, Coimbatore, Tamil Nadu, India

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ABSTRACT

Noises in the image leads to pixels degradation and the quality of the image will be reduced. Removal of noises (Gaussian, Poisson and Speckle) from the image leads to develop the better image. Lowering of radiation dose leads to deterioration of quality of the image. Hence, we proposed the new modified Singular Value Decomposition Method for image denoising.In addition to that Inverse Discrete Wavelet Transform and Singular Value Decomposition is applied at the post processing step to remove the noise in the filtered image. Parameters are carefully formulated and evaluated. Experimental results show the better improvement in image demising.

KEYWORDS: *Modified Singular Value Decomposition, Peak Signal to Noise Ratio (PSNR), Root Means Square Error (RMSE), Structural Similarity Index (SSIM).*