Abstract

Estimating the images using decimated wavelet transform is very popular technique in different applications. In this paper a new thresholding function with combination of Smoothly Clipped Absolute Deviation (SCAD), Hard thresholding and soft thresholding functions are introduced for wavelet based denoising of images. The proposed technique is applied for denoising of noisy images contaminated with additive white Gaussian noise using Top rule and Visu rule. The results are compared with that of existing SCAD, hard and soft functions denoising method. Root Mean Square Error (RMSE) and Peak Signal to Noise Ratio (PSNR) are used as parameters for testing the quality of denoising.

References


Index Terms

Computer Science
Image Processing

Keywords

Wavelet transform, decimated wavelet transform, image denoising, new thresholding function,
top rule, Visu rule.