In this paper we propose computationally efficient denoising algorithm that thresholds the wavelet coefficient considering its neighbors in deciding whether it is noisy or noise free. The proposed algorithm select a suboptimal threshold and neighboring window size for every subband that minimized Mean Square Error (MSE) in the denoised image using Stein’s Unbiased Risk Estimate (SURE). In this paper, we demonstrate the efficiency of the proposed denoising algorithm as compared with two other state-of-the art denoising algorithms.

References

An Efficient Implementation of Neighborhood based Wavelet Thresholding For Image Denoising


**Index Terms**

Computer Science | Signal Processing

**Keywords**

Image Denoising  Wavelet Transform  Neighborhood