Abstract

In this work, there is a comparison related to image denoising techniques between center pixel weights (CPW) in Non-Local Means (NLM) and smart patch-based, modern technique using the higher order singular value decomposition (HOSVD). The HOSVD technique simply compose in a cluster, alike Patches of noisy image in 3D heap, work out HOSVD factors of this heap, handles these factors by stiff thresholding, and turn upside down the HOSVD transmute to yield the final resultant image. Whereas (NLM) and its variants have proven to be effective and robust in many image denoising tasks. It is experimentally demonstrating approximately 12 percent improved PSNR characteristics of HOSVD technique on gray scale images. The HOSVD process yields state-of-the-art outcomes on gray images, than the center pixel weights (CPW) in NLM image data denoising process at moderately great noise stages.

References


Index Terms

Computer Science

Image Processing
Keywords

Image data denoising  singular value decomposition (SVD)  HOSVD  patch Basis similarity