Image Denoising using Wavelet Thresholding Techniques

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Introduction

- Image denoising: Removing unwanted noise in order to restore the original image.
- Wavelet transform provides us with one of the methods for image denoising.
- Wavelet transform, due to its excellent localization property, has rapidly become an indispensable signal and image processing tool for a variety of applications, including denoising and compression.
- Wavelet denoising attempts to remove the noise present in the signal while preserving the signal characteristics, regardless of its frequency content.

Introduction

- It involves three steps:
  - a linear forward wavelet transform
  - nonlinear thresholding step and
  - a linear inverse wavelet transform
- Methods Used
  - Universal Thresholding
  - Visu Shrink
  - Sure Shrink
  - Bayes Shrink