KSVD

# Comparison of Denoising Algorithms

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Abstract—Abstract		
Index Terms—Key words		
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#### 1 RESULTS

1.1.2 Mean filter

?ric: setting this section offline (due to Overleaf limitation). Available in GitHub

## 1.1 Synthetic images

#### 1.1.1 KSVD

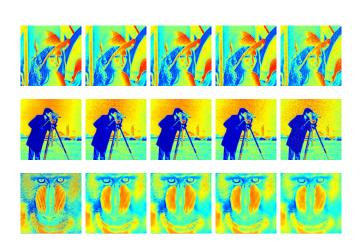


Fig. 2

KSVD 2

#### 1.1.3 Median filter

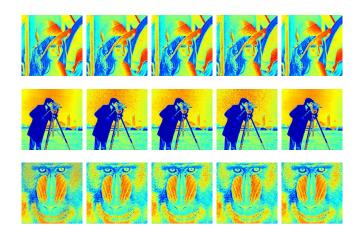


Fig. 3

compare with KSVD results

#### 1.1.4 Lee filter

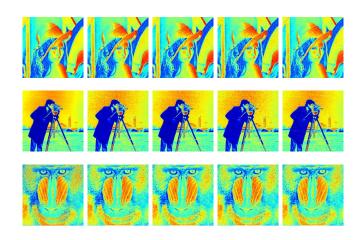


Fig. 4

Image	MSE	PSNR	
Baboon-Normalized	1.089873e+03	2.68301e+02	
Baboon-Rician	3.00040e+03	3.20402e+02	
Baboon-SP	1.9865e+03	2.86465e+02	
Baboon-Uniform Noise	1.098765e+03	2.65302e+02	
Cameraman-Normalized	1.067879e+03	2.35746e+02	
Cameraman-Rician	2.86530e+03	3.19283e+02	
Cameraman-SP	1.356780e+03	2.64614e+02	
Cameraman-Uniform Noise	1.23768e+03	2.69646e+02	
Lena-Normalized	195.4926	2.39623e+02	
Lena-Rician	3.09845e+03	3.16761e+02	
Lena-Sp	1.45120e+03	2.69657e+02	
Lena-Ūniform Noise	1.98742e+03	2.86436e+02	
Total	-	6	6
Accuracy	100%		

TABLE 1: Local Statistical Filter Results-MSE/PSNR

## compare with KSVD results

# 1.1.5 Hard and soft thresholding in wavelet domain

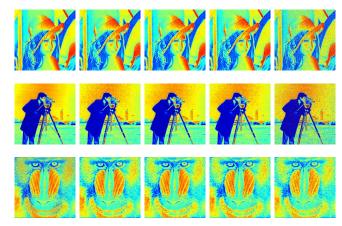


Fig. 5

compare with KSVD results

## 1.2 Retinopathy images

### 2 APPENDICES

## 2.1 Synthetic images

### 2.1.1 KSVD

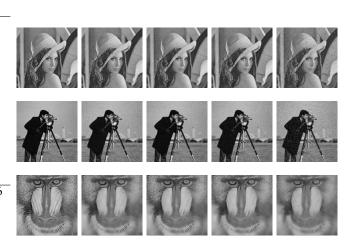


Fig. 6

KSVD 3

## 2.1.2 Mean filter

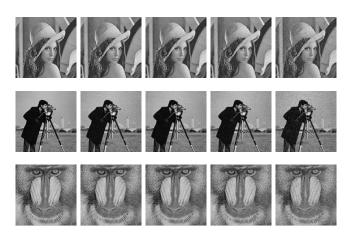


Fig. 7

# 2.1.3 Median filter

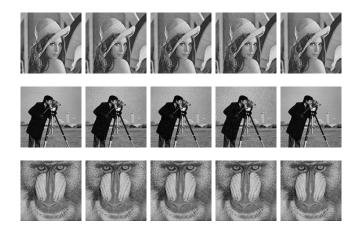


Fig. 8

## 2.1.4 Lee filter

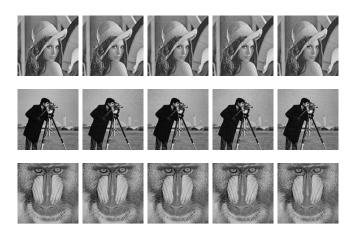


Fig. 9

# 2.1.5 Hard and soft thresholding in wavelet domain

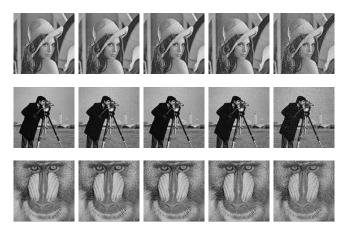


Fig. 10

## 2.2 Retinopathy images