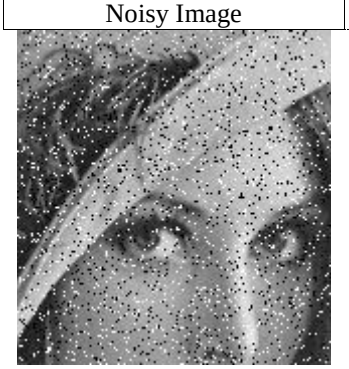
Image de-noising through symmetric, bell-shaped, and centered weighted median filters based subband decomposition

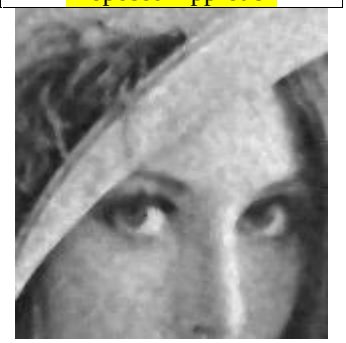
Gaussian and Salt and Pepper Noise

Noisy Image	Wavelet Method	Median Filter	Proposed Approach
			

Speckle and Salt and Pepper Noise

Noisy Image	Wavelet Method	Median Filter	Proposed Approach

Gaussian and Speckle Noise

Noisy Image	Wavelet Method	Median Filter	Proposed Approach
			

Gaussian Noise

Noisy Image	Wavelet Method	Median Filter	Proposed Approach

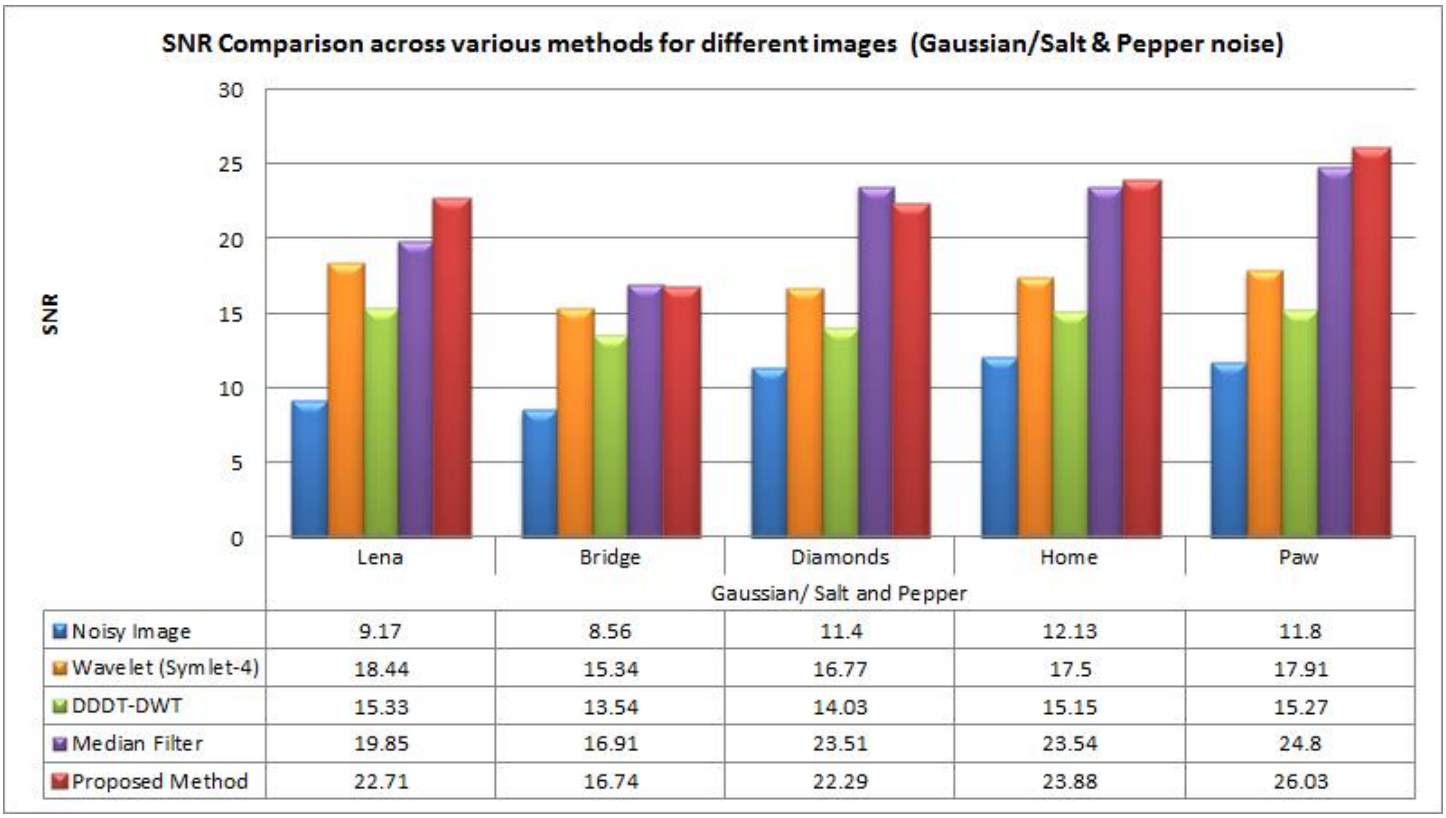
Speckle Noise

Noisy Image	Wavelet Method	Median Filter	Proposed Approach

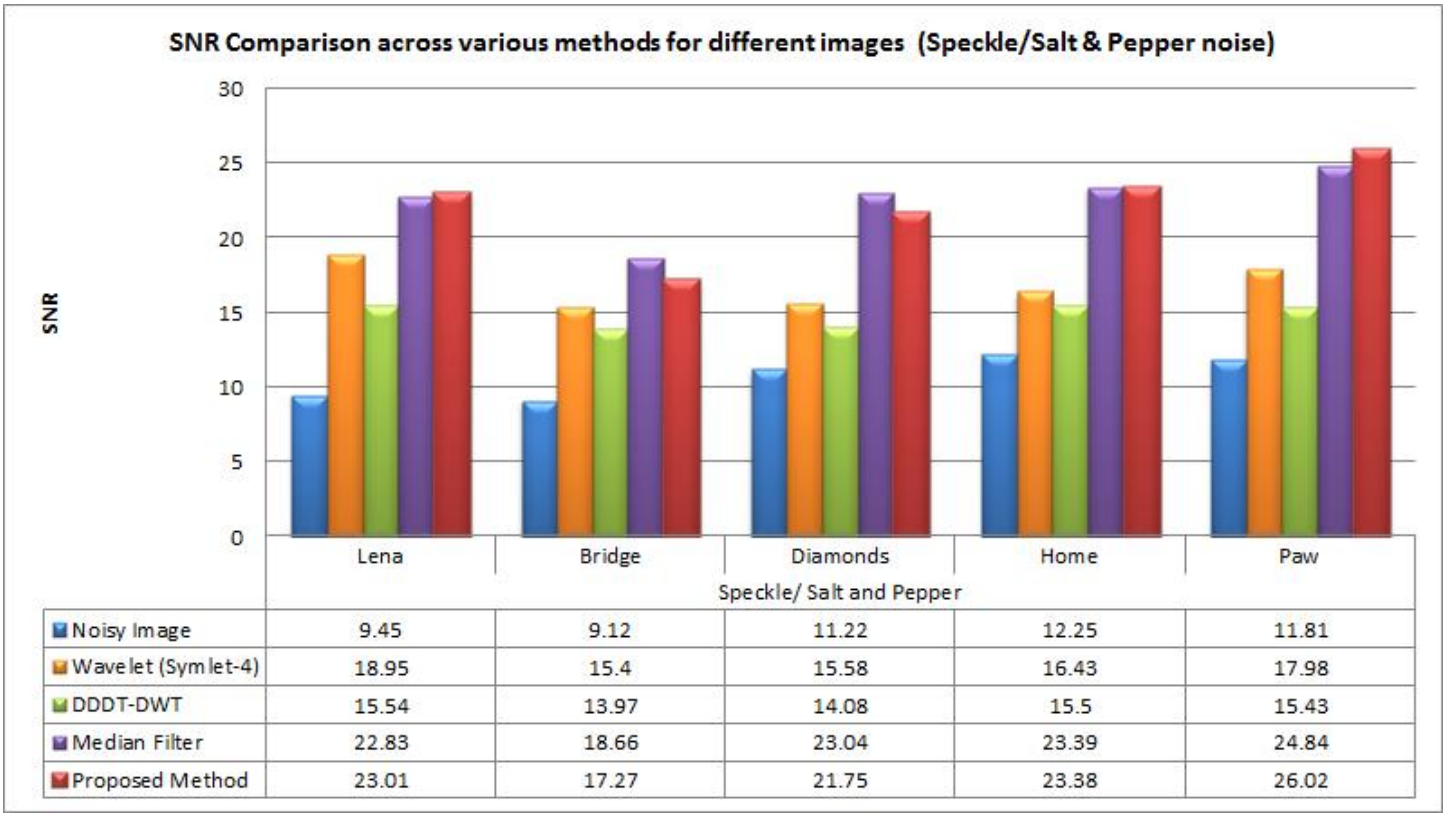
Salt and Pepper Noise

Noisy Image	Wavelet Method	Median Filter	Proposed Approach

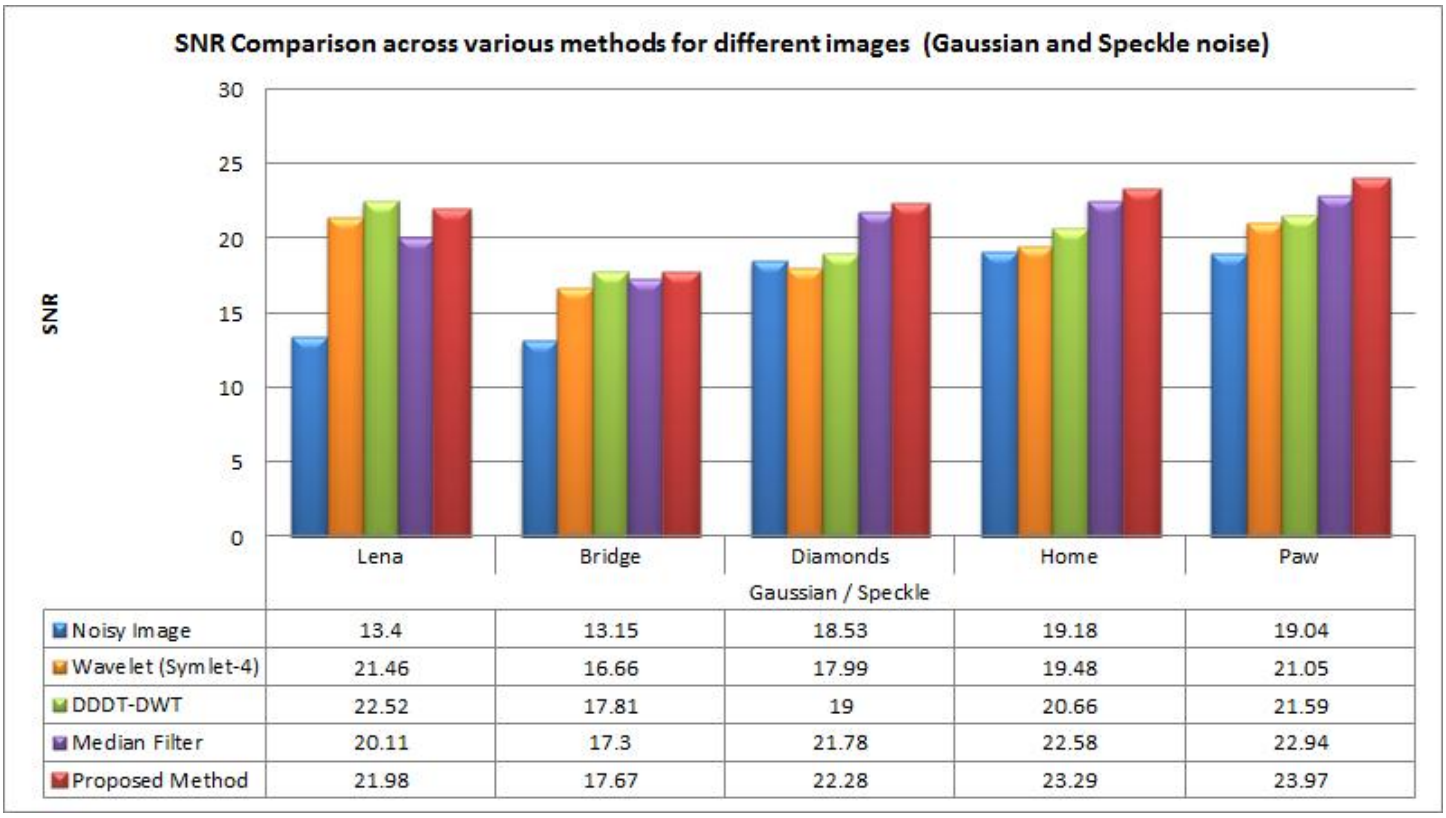
SNR Comparison across various methods for different images



	Lena	Bridge	Diamonds	Home	Paw
Noisy Image	9.17	8.56	11.4	12.13	11.8
Wavelet (Symlet-4)	18.44	15.34	16.77	17.5	17.91
DDDT-DWT	15.33	13.54	14.03	15.15	15.27
Median Filter	19.85	16.91	23.51	23.54	24.8
Proposed Method	22.71	16.74	22.29	23.88	26.03



	Lena	Bridge	Diamonds	Home	Paw
Noisy Image	9.45	9.12	11.22	12.25	11.81
Wavelet (Symlet-4)	18.95	15.4	15.58	16.43	17.98
DDDT-DWT	15.54	13.97	14.08	15.5	15.43
Median Filter	22.83	18.66	23.04	23.39	24.84
Proposed Method	23.01	17.27	21.75	23.38	26.02



	Lena	Bridge	Diamonds	Home	Paw
Noisy Image	13.4	13.15	18.53	19.18	19.04
Wavelet (Symlet-4)	21.46	16.66	17.99	19.48	21.05
DDDT-DWT	22.52	17.81	19	20.66	21.59
Median Filter	20.11	17.3	21.78	22.58	22.94
Proposed Method	21.98	17.67	22.28	23.29	23.97