




# Computer Vision Homework 8

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1. gaussian noise (amplitude = 10), SNR = 13.60264



	
3x3 box filter, SNR = 17.760831538293285	5x5 box filter, SNR =14.868753667252186
	
3x3 median filter, SNR =17.65	5x5 median filter, SNR =15.99
	
Opening then closing, SNR =13.2366	Closing then opening, SNR =13.57988

2. gaussian noise (amplitude = 30), SNR = 4.192209704065997



3x3 box filter, SNR = 12.625380397407307



5x5 box filter, SNR = 13.333337431692193



3x3 median filter, SNR = 11.096



5x5 median filter, SNR = 12.91



Opening then closing, SNR = 11.1949



Closing then opening, SNR = 11.215797

3. salt and pepper (threshold = 0.1), SNR = -1.8586218753812984



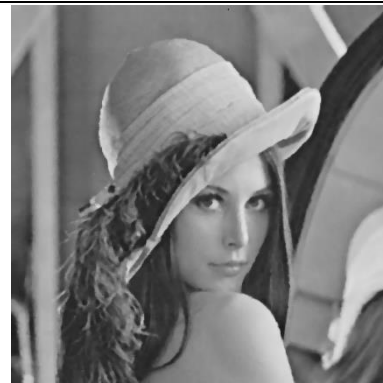
3x3 box filter, SNR = 6.637403825387397



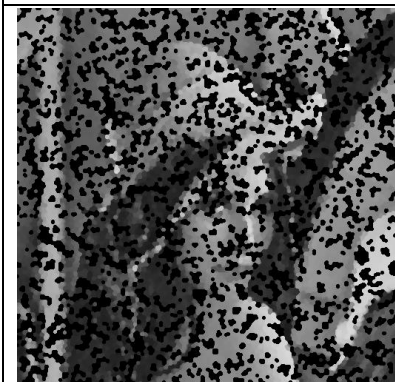
5x5 box filter, SNR = 8.811223153311404



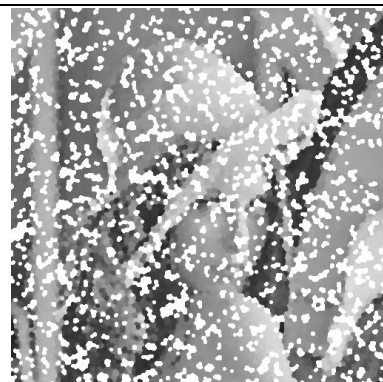
3x3 median filter, SNR = 15.61



5x5 median filter, SNR = 15.78



Opening then closing, SNR = -2.135329



Closing then opening, SNR = -1.83237

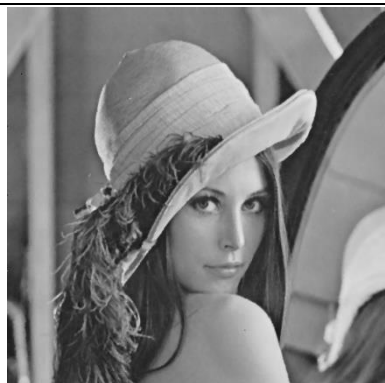
4. salt and pepper (threshold = 0.05), SNR = 1.04132386403326



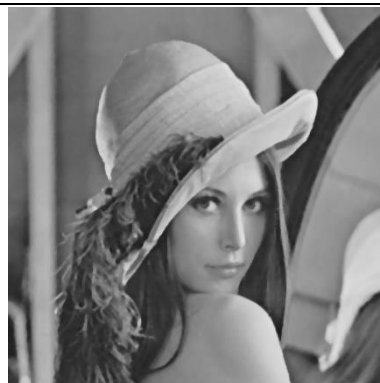
3x3 box filter, SNR = 9.625627981424241



5x5 box filter, SNR = 11.274493647011665



3x3 median filter, SNR = 19.44



5x5 median filter, SNR = 16.36



Opening then closing, SNR = 5.6556



Closing then opening, SNR = 6.034335