






Computer Vision HW8

R10922A16 蔡家豪

Homework 8

Noise Removal

1. Gaussian noise, amplitude=10

	
Gaussian noise, amplitude=10, SNR = 13.596338458257506	
	
Box_3x3, SNR = 17.67604628872084	Box_5x5, SNR = 14.83759705253326
	
Median_3x3, SNR = 17.57254357730527	Median_5x5, SNR = 15.95829168203381



Opening-then-closing, SNR =
12.010084648774718



Closing-then-opening, SNR =
12.331544390552356

2. Gaussian noise, amplitude=30



Gaussian noise, amplitude=30, SNR = 4.16326255161992



Box_3x3, SNR = 12.584441793740421



Box_5x5, SNR = 13.307594389338886



Median_3x3, SNR = 10.94493339504921



Median_5x5, SNR = 12.84735073053816



Opening-then-closing, SNR =
10.36761113419014









Closing-then-opening, SNR =
10.350424487457587

3. Salt-and-pepper noise, probability=0.1



Salt-and-pepper noise, probability=0.1, SNR = -2.12303612788417

 <p>Box_3x3, SNR = 6.456501426102643</p>	 <p>Box_5x5, SNR = 8.557725969292122</p>
 <p>Median_3x3, SNR = 14.02989806169878</p>	 <p>Median_5x5, SNR = 15.24549394040424</p>
 <p>Opening-then-closing, SNR = -1.053498511297902</p>	 <p>Closing-then-opening, SNR = -1.4939129122100736</p>

4. Salt-and-pepper noise, probability=0.05



Salt-and-peppernoise, probability=0. 05, SNR = 0.9441073735716874



Box_3x3, SNR = 9.615778734274667



Box_5x5, SNR = 11.25197272524629



Median_3x3, SNR = 17.19169169837129



Median_5x5, SNR = 15.85023014049587



Opening-then-closing, SNR =



Closing-then-opening, SNR =

6.50584514012623	5.890371000954345
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