## **Computer-vision-Homework 8**

Noise Removal

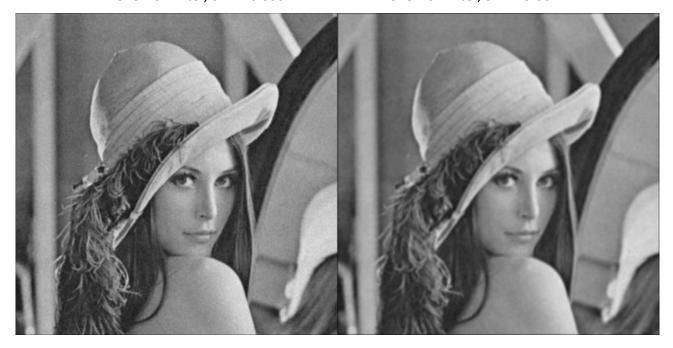
Due date: 07 Dec 2021

Gaussian Noise with amplitude = 10, SNR = 13.589



3\*3 Box Filter, SNR 16.399

5\*5 Box Filter, SNR 13.602



3\*3 Median Filter, SNR 16.399

5\*5 Median Filter, SNR 13.602



Opening-then-closing, SNR 13.244

Closing-then-Opening, SNR 13.548



Gaussian Noise with amplitude = 30, SNR = 2.873



3\*3 Box Filter, SNR 10.561

5\*5 Box Filter, SNR 11.138





Opening-then-closing, SNR 11.081

Closing-then-Opening, SNR 7.991



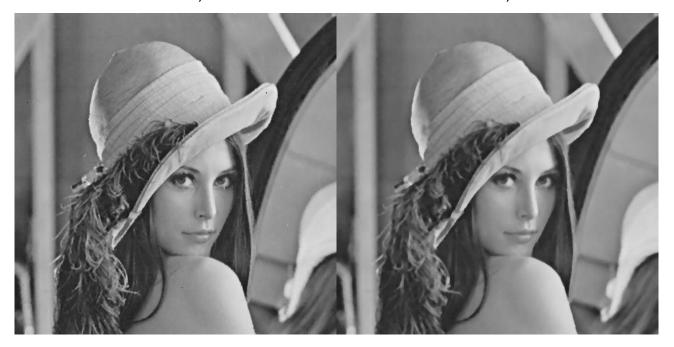
Salt and Pepper Noise with threshold = 0.05, SNR = 0.968



3\*3 Box Filter, SNR 9.328

5\*5 Box Filter, SNR 10.645





Opening-then-closing, SNR 6.100

Closing-then-Opening, SNR 5.456



Salt and Pepper Noise with threshold = 0.1, SNR = -2.090



3\*3 Box Filter, SNR 6.258

5\*5 Box Filter, SNR 8.203



5\*5 Median Filter, SNR 15.775



Opening-then-closing, SNR -2.049

Closing-then-Opening, SNR-2.650

