# Computer Vision - Assignment 8

## R09922A04 資工所人工智慧組 黃品硯

### (1) Gaussian noise, Amplitude=10



Gaussian noise, Amplitude=10, SNR = 13.60416



Box\_3x3, SNR = 17.74683



Median\_3x3, SNR = 17.64887



Opening-then-closing, SNR = 13.23284



Box\_5x5, SNR = 14.86161



Median\_5x5, SNR = 15.96010



Closing-then-opening, SNR = 13.56273

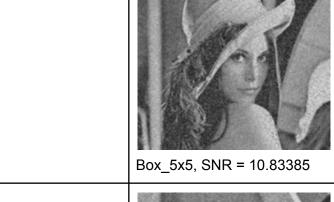
#### (2) Gaussian noise, Amplitude=30



Gaussian noise, Amplitude=30, SNR = 2.14252



Box\_3x3, SNR = 9.84207





Median\_3x3, SNR = 10.78714



Median\_5x5, SNR = 12.47573



Opening-then-closing, SNR = 7.83521



Closing-then-opening, SNR = 7.95617

## (3) Salt-and-Pepper noise, Probability=0.1



Salt-and-Pepper noise, Probability=0.1, SNR = -2.12595



Box\_3x3, SNR = 6.27409



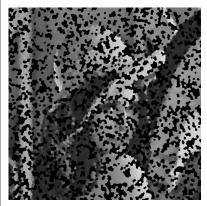
Box\_5x5, SNR = 8.43496



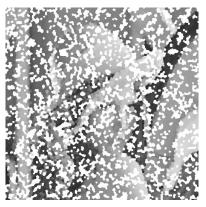
Median\_3x3, SNR = 14.88937



Median\_5x5, SNR = 15.69030



Opening-then-closing, SNR = -2.30252



Closing-then-opening, SNR = -2.49660

## (4) Salt-and-Pepper noise, Probability=0.05



Salt-and-Pepper noise, Probability=0.05, SNR = 0.87451



Box\_3x3, SNR = 9.41314



Box\_5x5, SNR = 11.13180



Median\_3x3, SNR = 18.99502



Median\_5x5, SNR = 16.36719



Opening-then-closing, SNR = 5.58323



Closing-then-opening, SNR = 5.20804