電腦視覺 HW8

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

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| Salt-and-pepper noise, probability=0.1, SNR = -2.080381835291568 | |
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| Box\_3x3, SNR = 6.292178547242253 | Box\_5x5, SNR = 8.270325992980382 |
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| Median\_3x3, SNR = 14.241432321665803 | Median\_5x5, SNR =  14.36154259597881 |
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| Opening-then-closing, SNR =  -2.183867319563431 | Closing-then-opening, SNR =  -2.5037053888707965 |

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

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| Salt-and-pepper noise, probability=0.05, SNR = 0.9578462215853133 | |
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| Box\_3x3, SNR = 9.29483508739833 | Box\_5x5, SNR = 10.606164268099603 |
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| Median\_3x3, SNR = 18.873556070789903 | Median\_5x5, SNR =  15.9345619652435 |
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| Opening-then-closing, SNR = 5.03147121314999 | Closing-then-opening, SNR = 5.106336622929085 |

1. Gaussian noise, amplitude = 10

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| Gaussian noise, amplitude = 10, SNR = 13.593328047807036 | |
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| Box\_3x3, SNR = 16.37540820219063 | Box\_5x5, SNR = 13.592535503996881 |
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| Median\_3x3, SNR =  17.5363122938732 | Median\_5x5, SNR = 15.819934425538808 |
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| Opening-then-closing, SNR = 13.039510012950224 | Closing-then-opening, SNR = 13.396843853688729 |

1. Gaussian noise, amplitude = 30

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| Gaussian noise, amplitude = 30, SNR = 4.168289185910043 | |
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| Box\_3x3, SNR = 12.165793041112227 | Box\_5x5, SNR = 12.406518221124614 |
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| Median\_3x3, SNR = 11.006388553099667 | Median\_5x5, SNR = 12.613262879520427 |
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| Opening-then-closing, SNR = 10.345548278077263 | Closing-then-opening, SNR = 10.393163724376791 |