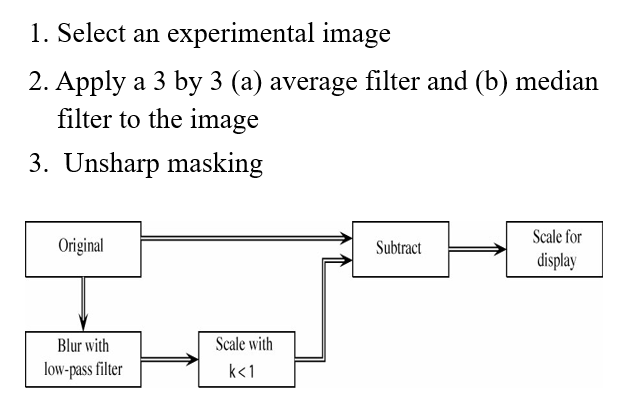
影像處理 Homework 4

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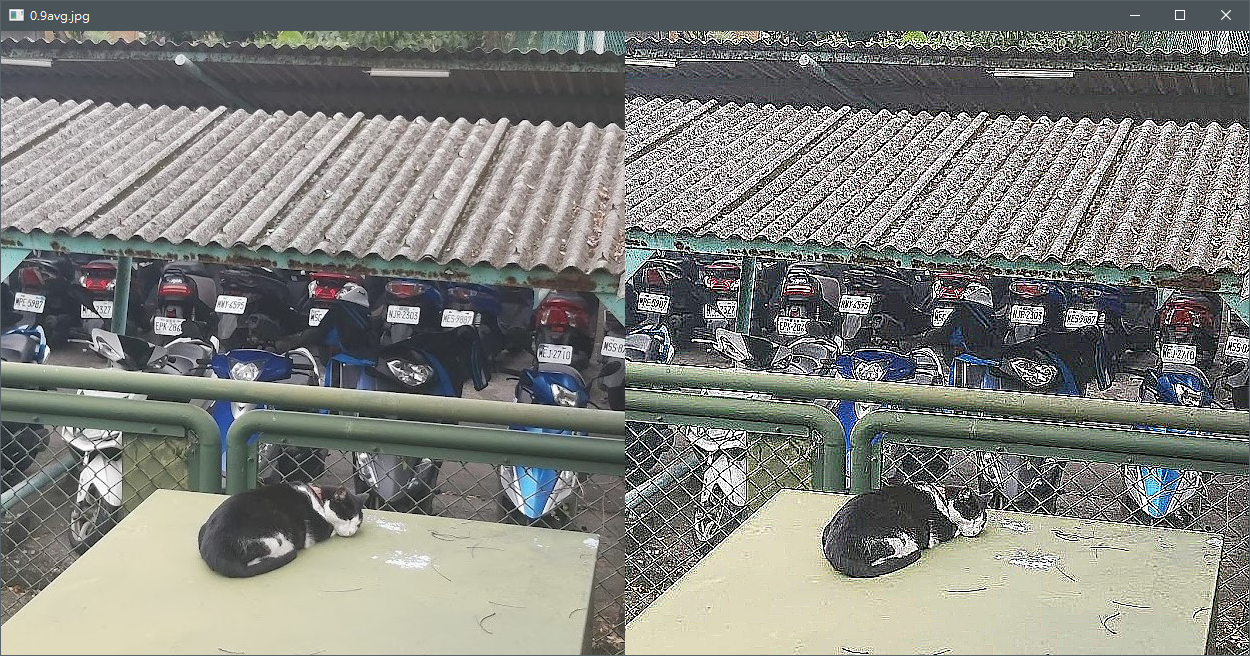
* Statement



* Code
* import cv2
* import numpy as np
* img = cv2.imread("cat.jpg")
* kernel\_size = 3
* k = 0.9
* img\_avg = cv2.blur(img, (kernel\_size, kernel\_size))
* img\_avg = img-img\_avg\*k
* img\_avg = np.clip((img\_avg /(1-k)), 0, 255).astype('uint8')
* showdata = np.hstack([img, img\_avg])
* cv2.imshow(str(k)+"avg.jpg", showdata)
* cv2.waitKey(0)
* img\_med = cv2.medianBlur(img, kernel\_size)
* img\_med = img - img\_med\*k
* img\_med = np.clip((img\_med /(1-k)), 0, 255).astype('uint8')
* showdata = np.hstack([img, img\_med])
* cv2.imshow(str(k)+"med.jpg", showdata)
* cv2.waitKey(0)
* 輸入/輸出圖片

k=0.9

average filter



median filter



k=0.5

average filter



median filter



* 心得

從這些實驗結果可以看出 k 的值就是其Unsharp masking 的程度係數，filter部分，比較average filter（左）與median filter（右）的比較起來 average filter的邊有較多鋸齒狀的現象