Image Processing
Home work 04
Blure Image

Aqeel Labash
Lecturer: Gholamreza Anbarjafari

11 April 2016

The code used for this task :

```
import cv2
import numpy as np
from math import pow


def showimg(img):
cv2.namedWindow("test", cv2.WINDOW_NORMAL)
img = np.array(img,dtype=float)/float(255)
cv2.imshow('test',img)
cv2.resizeWindow('test',600,600)
cv2.waitKey(0)

def readimg(name):
return cv2.imread(name,0)
#Read The image
mypic = readimg('mypicture.jpg')
resized = cv2.resize(mypic,(512,512),interpolation=cv2.INTER_LANCZOS4)
cv2.imwrite('mypicture_resized.jpg',resized )
for i in range(4,10):
limit =  int(pow(2,i))
resized[0:limit,0:limit] = cv2.GaussianBlur(resized[0:limit,0:limit],(5,5),20)
#print limit
cv2.imwrite('blurred_piece_by_piece.jpg',resized)

```

The original picture :

Figure 1: Original picture (429X592)

Figure 2: Image after resizing (512X512) using lanczos 4

Figure 3: Image after blurring (512X512) patch size (16)

Note: The home work files,images,python code etc.. exist at github