**교육일지**

**교육 제목 : 비전**

**교육 장소 : YGL C6 강의실**

**교육 일시 : 2021/11/03**

**import numpy as np**

**import sys**

**import cv2**

**print(cv2.\_\_version\_\_)**

**img = cv2.imread('fig/puppy.bmp')**

**img2 = cv2.imread('fig/cat.bmp')**

**if img is None or img2 is None:**

**print('image read failed')**

**sys.exit()**

**# 이미지창 띄우기**

**cv2.namedWindow('puppy')**

**cv2.namedWindow('cat')**

**cv2.imshow('puppy' , img)**

**cv2.imshow('cat' , img2)**

**cv2.waitKey()**

**## 창 닫는 명령**

**cv2.destroyAllWindows()**

**!explorer.exe**

**img = cv2.imread('fig/puppy\_1280\_853.jpg' , cv2.IMREAD\_COLOR)**

**#print(type(img))**

**#print(np.shape(img))**

**if img is None:**

**print('image read failed')**

**sys.exit()**

**#Window**

**cv2.namedWindow('puppy', cv2.WINDOW\_NORMAL)**

**# 'uint8'**

**cv2.imshow('puppy' , img)**

**#ESC = 13**

**while True:**

**if cv2.waitKey() == ord('a') or cv2.waitKey() ==27: # ESC**

**break**

**## 영상 저장**

**#cv2.imwrite(filenname, img, params = None -> retval)**

**#img =cv2.resize(img, (1200, 600), cv2.INTER\_AREA)**

**#cv2.imwrite('fig/puppy\_1200\_600.jpg', img)**

**cv2.destroyAllWindows()**

**import matplotlib.pyplot as plt**

**imgBGR = cv2.imread('fig/puppy.bmp', cv2.IMREAD\_COLOR)**

**if imgBGR is None:**

**print('image read failed')**

**sys.exit()**

**imgRGB = cv2.cvtColor(imgBGR, cv2.COLOR\_BGR2RGB)**

**plt.imshow(imgRGB)**

**plt.axis('off')**

**plt.show()**

**#cv2.namedWindow('puppy', cv2.WINDOW\_AUTOSIZE)**

**#cv2.imshow('puppy', img)**

**#while True:**

**# if cv2.waitKey() == 27:**

**# break**

**#cv2.destroyAllWindows()**

**imgGray = cv2.imread('fig/puppy.bmp', cv2.IMREAD\_GRAYSCALE)**

**if imgGray is None:**

**print('imgGray read failed')**

**sys.exit()**

**plt.subplot(121), plt.imshow(imgRGB), plt.axis('off')**

**plt.subplot(122), plt.imshow(imgGray, cmap = 'gray'), plt.axis('off')**

**plt.show()**

**## 이미지 슬라이드 쇼**

**import glob**

**img\_list = glob.glob('fig/images/\*.jpg')**

**#print(img\_list[1])**

**cv2.namedWindow('scene', cv2.WINDOW\_NORMAL)**

**cv2.setWindowProperty('scene', cv2.WND\_PROP\_FULLSCREEN,**

**cv2.WINDOW\_FULLSCREEN)**

**indx = 0**

**while True:**

**img = cv2.imread(img\_list[indx])**

**cv2.imshow('scene', img)**

**if cv2.waitKey(1000) == 27:**

**break**

**indx += 1**

**if indx >= 5:**

**indx = 0**

**cv2.destroyAllWindow()**