|  |  |
| --- | --- |
| 교육 제목 | Opencv |
| 교육 일시 | 2021. 11. 3 |
| 교육 장소 | 영우글로벌러닝 |
| **교육 내용** | |
|  |  |
| 오후 | import numpy as np  import sys  import cv2  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()    cv2.namedWindow('puppy')  cv2.namedWindow('cat')  cv2.imshow('puppy', img)  cv2.imshow('cat', img2)  cv2.waitKey()  # 창 닫는 명령어  cv2.destroyAllWindows()  img=cv2.imread('fig/puppy.bmp', cv2.IMREAD\_GRAYSCALE)  # img2=cv2.imread('fig/cat.bmp', cv2.IMREAD\_COLOR)  print(type(img))  print(img.shape)  cv2.namedWindow('puppy')  # cv2.namedWindow('cat')  cv2.imshow('puppy', img)  # cv2.imshow('cat', img2)  cv2.waitKey()  cv2.destroyAllWindows()  img=cv2.imread('fig/puppy.bmp', cv2.IMREAD\_COLOR)  print(type(img))  print(img.shape)  # cv2.namedWindow('puppy')  # cv2.imshow('puppy', img)  # cv2.waitKey()  # 영상저장  # cv2.imwrite(filename, img, prarams=None) -> retval  img=cv2.resize(img, (1200, 600), cv2.INTER\_AREA)  cv2.imwrite('fig/puppy\_1200\_600.png', img)  cv2.destroyAllWindows()  img=cv2.imread('fig/puppy.bmp')  cv2.namedWindow('puppy', cv2.WINDOW\_NORMAL)  # 'unint8'  cv2.imshow('puppy', img)  while True:  if cv2.waitKey() == 27: # ESC  break  # while True:  # key=cv2.waitKey()  # if key== ord('a') or key == 27: # ESC  # break  cv2.destroyAllWindows()  import matplotlib.pyplot as plt  img=cv2.imread('fig/puppy.bmp', cv2.IMREAD\_COLOR)  if img is None:  print('image read failed')  sys.exit()  cv2.namedWindow('puppy', cv2.WINDOW\_AUTOSIZE)  cv2.imshow('puppy', img)  while True:  if cv2.waitKey()== 27:  break    cv2.destroyAllWindows()  imgBGR = cv2.imread('fig/puppy.bmp', cv2.IMREAD\_COLOR)  if imgBGR is None:  print('Image read failed')  sys.exit()  # BGR to RGB  imgRGB = cv2.cvtColor(imgBGR, cv2.COLOR\_BGR2RGB)  ## plt를 이용한 영상출력  # plt.imshow(imgBGR)  plt.imshow(imgRGB)  plt.axis('off')  plt.show()  imgGray=cv2.imread('fig/puppy.bmp', cv2.IMREAD\_GRAYSCALE)    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)  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  # for i in img\_list:  # img= cv2.imread(i, cv2.IMREAD\_COLOR)  # cv2.imshow('sence', img)    # if cv2.waitKey(1000)==27:  # break    cv2.destroyAllWindows() |