#!/usr/bin/env python

# -\*- coding: utf-8 -\*-

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# 프로그램명 : cam\_tune.py

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# 본 프로그램은 상업 라이센스에 의해 제공되므로 무단 배포 및 상업적 이용을 금합니다.

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import cv2

import rospy

import numpy as np

from sensor\_msgs.msg import Image

from cv\_bridge import CvBridge, CvBridgeError

import sys

import os

import signal

def signal\_handler(sig, frame):

os.system('killall -9 python rosout')

sys.exit(0)

signal.signal(signal.SIGINT, signal\_handler)

bridge = CvBridge()

cv\_image = np.empty(shape=[0])

ack\_publisher = None

def img\_callback(data):

global cv\_image

try:

cv\_image = bridge.imgmsg\_to\_cv2(data, "bgr8")

except CvBridgeError as e:

print(e)

rospy.sleep(3)

bridge = CvBridge()

image\_sub = rospy.Subscriber("/usb\_cam/image\_raw/",Image,img\_callback)

rospy.init\_node('cam\_tune', anonymous=True)

garo = 7

sero = 15

color = (255, 255, 255)

while cv\_image.size == (640\*480\*3):

if cv2.waitKey(1) & 0xFF == ord('q'):

break

constant = cv\_image.copy()

for g in range(1, garo+1):

x = g\*int(640/(garo+1))

constant = cv2.line(constant, (x, 0), (x, 479), color, 1)

for s in range(1, sero+1):

y = s\*int(480/(sero+1))

constant = cv2.line(constant, (0, y), (639, y), color, 1)

cv2.imshow("cam\_tune", constant)

cv2.destroyAllWindows()