Код программы для робота-конвейера на языке Python

try:

import gpiozero

from time import sleep

from datetime import datetime

from clarifai.rest import ClarifaiApp

from picamera import PiCamera

app = ClarifaiApp(api\_key = '1c8da0c61b664cab8bfa0f6c877d95df')

model = app.models.get('Распознавание')

camera = PiCamera()

mot = gpiozero.Motor(18, 15, pwm = True)

sens1 = gpiozero.DigitalInputDevice(14)

sens2 = gpiozero.DigitalInputDevice(23)

sens3 = gpiozero.DigitalInputDevice(21)

ser1 = gpiozero.Servo(25, min\_pulse\_width = 0.000554, max\_pulse\_width = 0.0024)

ser2 = gpiozero.Servo(12, min\_pulse\_width = 0.000554, max\_pulse\_width = 0.0024)

while True:

sens1.wait\_for\_inactive()

sens1.wait\_for\_active()

sleep(0.5)

mot.forward(speed = 0.2)

sens1.wait\_for\_inactive()

sens1.wait\_for\_active()

sleep(0.4)

mot.stop()

sleep(1)

camera.capture('image.jpg')

time = datetime.now()

response = model.predict\_by\_filename('image.jpg')

print(response)

name = response['outputs'][0]['data']['concepts'][0]['name']

'''if input('Это {name}.'.format(name=name)) == '':

app.inputs.create\_image\_from\_filename('image.jpg', concepts=[name])'''

print('Это {name}.'.format(name=name))

mot.forward(speed = 0.2)

if name == 'Пони':

ser1.max()

sens2.wait\_for\_inactive()

sens2.wait\_for\_active()

sleep(0.3)

ser1.min()

print('Пони сбита!')

if name == 'Кошка':

ser1.min()

sens2.wait\_for\_inactive()

sens2.wait\_for\_active()

sleep(0.3)

ser1.max()

print('Кошка сбита!')

if name == 'Машина':

ser1.min()

ser2.max()

sens3.wait\_for\_inactive()

sens3.wait\_for\_active()

sleep(0.6)

ser2.min()

print('Машина сбита!')

if name == 'Птица':

ser1.min()

ser2.min()

sens3.wait\_for\_inactive()

sens3.wait\_for\_active()

sleep(0.4)

ser2.max()

print('Птица сбита!')

if name == 'Остальное':

ser1.min()

ser2.min()

sens3.wait\_for\_inactive()

sens3.wait\_for\_active()

sleep(4)

sleep(0.5)

ser1.detach()

ser2.detach()

mot.stop()

finally:

mot.stop()

#model.train()