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()