#!/usr/bin/python

import cv2.cv as cv

import time

capture = cv.CaptureFromCAM(0)

cv.SetCaptureProperty(capture, 3, 360)

cv.SetCaptureProperty(capture, 4, 240)

while True:

img = cv.QueryFrame(capture)

cv.Smooth(img, img, cv.CV\_BLUR, 3)

hue\_img = cv.CreateImage(cv.GetSize(img), 8, 3)

cv.CvtColor(img, hue\_img, cv.CV\_BGR2HSV)

threshold\_img = cv.CreateImage(cv.GetSize(hue\_img), 8, 1)

cv.InRangeS(hue\_img, (10, 120, 100), (70, 255, 255), threshold\_img)

storage = cv.CreateMemStorage(0)

contour = cv.FindContours(threshold\_img, storage, cv.CV\_RETR\_CCOMP, cv.CV\_CHA\

IN\_APPROX\_SIMPLE)

points = []

while contour:

rect = cv.BoundingRect(list(contour))

contour = contour.h\_next()

size = (rect[2] \* rect[3])

if (size > 100):

pt1 = (rect[0], rect[1])

pt2 = (rect[0] + rect[2], rect[1] + rect[3])

cv.Rectangle(img, pt1, pt2, (0, 255, 0))

x, y = pt1

if x < 10:

os.system('/root/rc\_wheeled\_auto/rc\_wheeled\_auto ' + str(20) + ' ' + str(0))

if x > 320:

os.system('/root/rc\_wheeled\_auto/rc\_wheeled\_auto ' + str(-20) + ' ' + str(0))

cv.ShowImage("Color Tracking", img)

if cv.WaitKey(10) == 27:

break

cv.DestroyAllWindows()