

My Name is Syed Muhammad Raqim Ali Shah

▼ THE SPARKS FOUNDATION INTERNSHIP

(IoT and Computer Vision)

▼ OBJECT DETECTION USING OPEN CV

First import all libraries

```
import cv2
from matplotlib import pyplot as plt

# Opening image
img = cv2.imread("/content/image.jpg")
# OpenCV opens images as BRG
# but we want it as RGB and
# we also need a grayscale
# version
img_gray = cv2.cvtColor(img, cv2.COLOR_BGR2GRAY)
img_rgb = cv2.cvtColor(img, cv2.COLOR_BGR2RGB)

# Creates the environment
# of the picture and shows it
plt.subplot(1, 1, 1)
plt.imshow(img_rgb)
plt.show()
```



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# but we want it as RGB We'll
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img_rgb = cv2.cvtColor(img, cv2.COLOR_BGR2RGB)

# Use minSize because for not
# bothering with extra-small
# dots that would look like STOP signs
stop_data = cv2.CascadeClassifier('/content/stop_data.xml')

found = stop_data.detectMultiScale(img_gray,
                                    minSize =(20, 20))

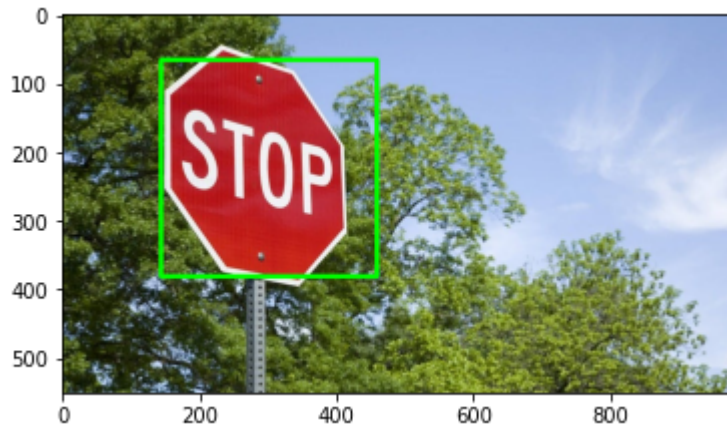
# Don't do anything if there's
# no sign
amount_found = len(found)

if amount_found != 0:
```

```
# There may be more than one
# sign in the image
for (x, y, width, height) in found:

    # We draw a green rectangle around
    # every recognized sign
    cv2.rectangle(img_rgb, (x, y),
                  (x + height, y + width),
                  (0, 255, 0), 5)

# Creates the environment of
# the picture and shows it
plt.subplot(1, 1, 1)
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```



Thanks For Watching

