

Python Conference ID

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Who am i?

Mochamad Rishaldy Prisliyanto

Students, Hardware Enthusiast

<https://github.com/rishaldypriisly>

Lets get started

Build an Artificial Intelligence System in IOT With Python

Background

Python has changed my life

That's why I loved Python so much

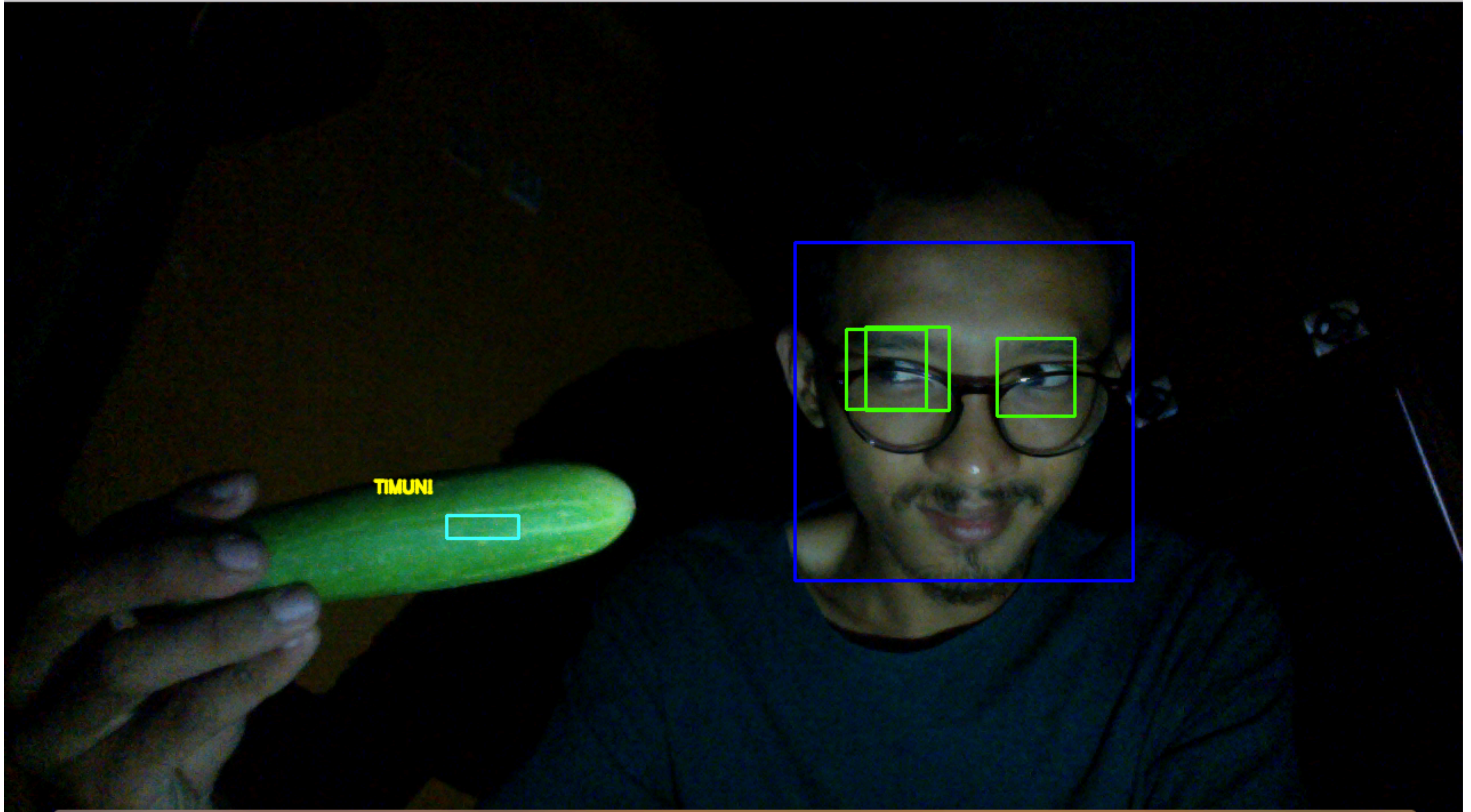
About my project

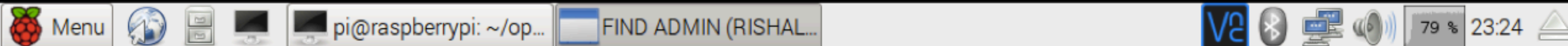
What's the purpose?

Does it really have artificial intelligence?

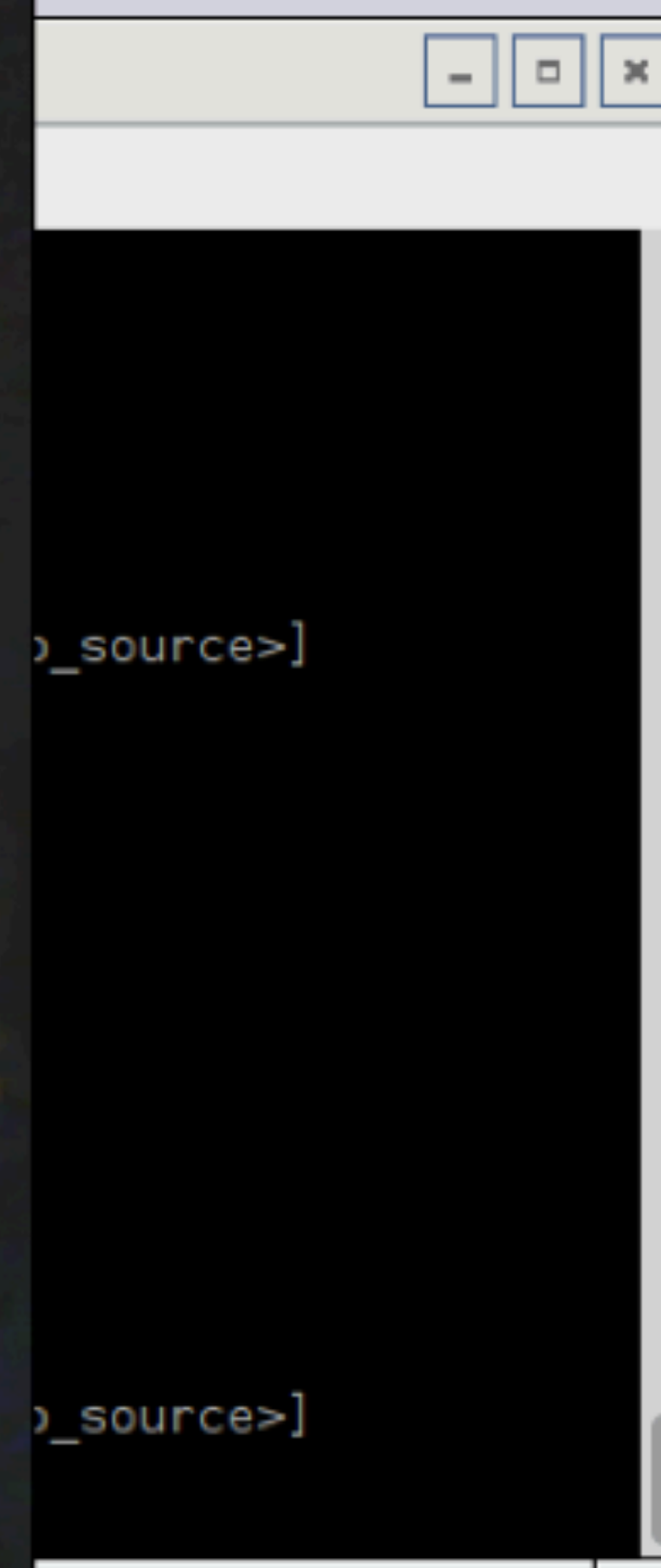
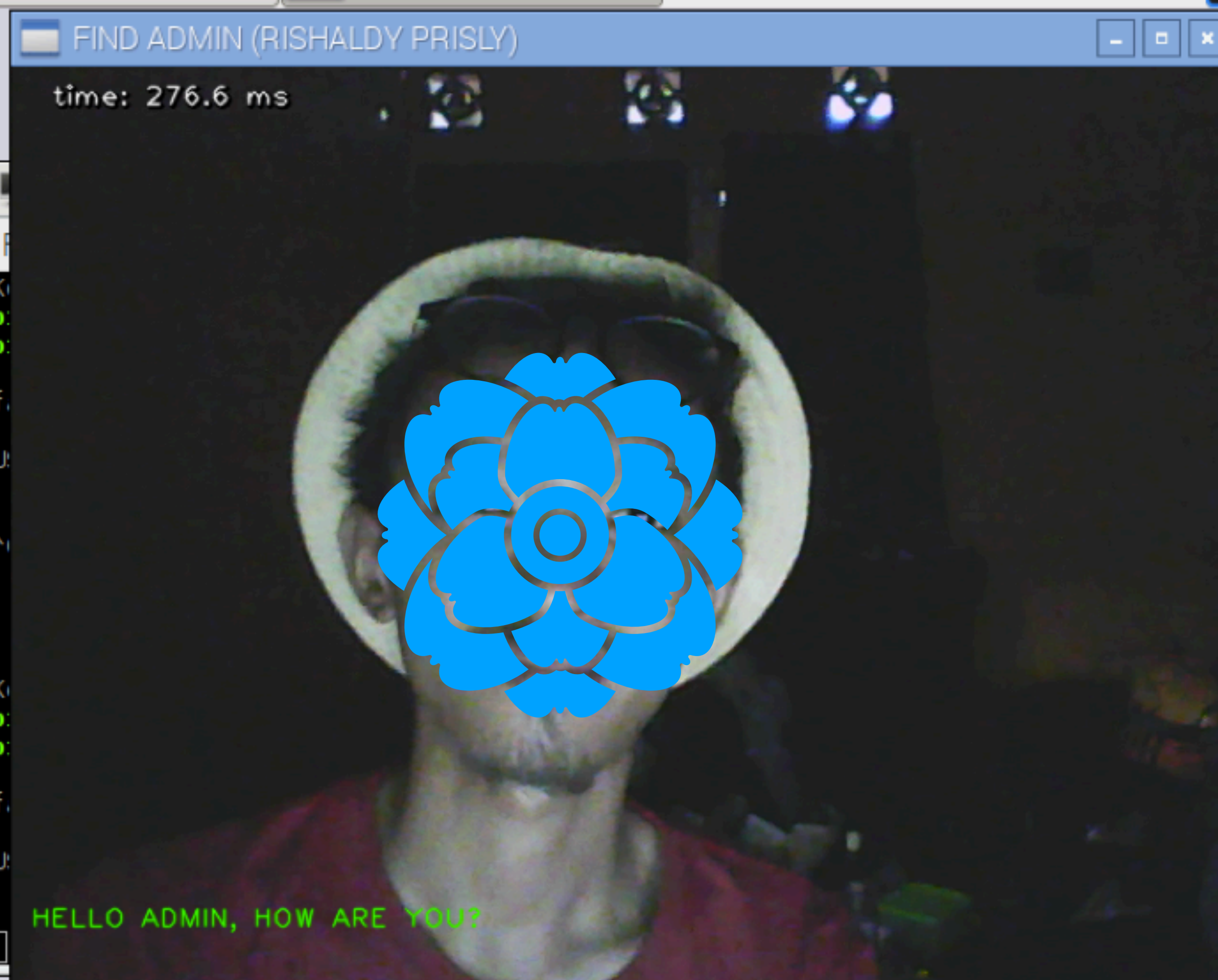
Feature

Recognition With Image Processing





Wastebasket



It can talk, of course, voice command

Just like a friend

Wait, where's Python?

stdlib, function, Python through processor

Python and General Purpose Input Output

```
#          MANUAL CONTROL          #
#  AUTHOR : MOCHAMAD RISHALDY PRISLIYANTO  #
#          2017                      #
#  LICENSE : PUBLIC DOMAIN            #
#  www.sparkintech.com                #
#  www.rishaldy.sparkintech.com       #
#  PLEASE READ THE README FOR FURTHER INFORMATION  #

from __future__ import division
import webiopi
import os
import sys
import time
import pigpio
import Adafruit_PCA9685
pi = pigpio.pi()
pwm = Adafruit_PCA9685.PCA9685()

L1=22 # H-Bridge Input Pin 1
L2=23 # H-Bridge Input Pin 2

R1=24 # H-Bridge Input Pin 3
R2=25 # H-Bridge Input Pin 4

pi.set_mode(L1, pigpio.OUTPUT)
pi.set_mode(L2, pigpio.OUTPUT)
pi.set_mode(R1, pigpio.OUTPUT)
pi.set_mode(R2, pigpio.OUTPUT)

# ----- #
#          PWM SETUP          #
# ----- #

servo_min = 150 # Min pulse length out of 4096
servo_max = 600 # Max pulse length out of 4096
servo_mid = 375
servo_take = 50
servo_max1 = 550
servo_min1 = 200
# Helper function to make setting a servo pulse width simpler.
def set_servo_pulse(channel, pulse):
    pulse_length = 1000000 # 1,000,000 us per second
    pulse_length //= 60 # 60 Hz
    print('{0}us per period'.format(pulse_length))
    pulse_length //= 4096 # 12 bits of resolution
    print('{0}us per bit'.format(pulse_length))
    pulse *= 1000
```

Single Board Computer

Micro Python For Micro Controllers

They communicate

Im talking about the implementation

I hope I have much time

And let me show you

Here's my friend, my robot

Question Time

I'm Rishaldy Prisy

Thank You