

# 2015



## Face Recognition using Open CV and Raspberry Pi



Author: Palani K

## Introduction:

The main aim of face recognition is giving security for concern person. When the particular person face is recognized he/she got access. Here we are going to use Raspberry Pi and Open CV python binding for doing face recognition. Raspberry Pi is a credit card sized computer that plugs into a computer monitor or TV, and uses standard keyboard and mouse. It's capable of doing everything you'd expect a desktop computer to do, from browsing the internet and playing high-definition video, to making spreadsheets, word-processing, and playing games. In this article I describe how to enable the Raspberry Pi's serial port to talk to other devices over Bluetooth using this module.

## Hardware Requirements:

1. [Raspberry Pi board](#).
2. Webcam

## Software Requirements:

1. Raspian "wheezy OS "
2. Open CV 2.4.9
3. Python

## Procedure:

Step 1:

Open LX terminal on your Raspberry pi.

Step 2:

Change your directory to Downloads by using below command:

**cd Downloads**

Step 3:

Again Change your directory to pi-facerec-box-master by using below command.

**cd pi-facerec-box-master**

Step 4:

Run the below script to capture the images of person whose face to be recognized .

Take 200 images (For better image recognition) and click CTRL C to exit from the program.

**sudo python capture-positives.py**

Step 5:

Once finished the above steps, you have to train your images by running below script.

It will take around 15-20 mins

**sudo python train.py**

Step 6:

When the training is finished the next step is run the final program by entering the below command:

**sudo python box.py**



TENET  
TECHNETRONICS