

2. Read and display Open Source CV images

1. Reading of images:

`img = cv2.imread('yahboom.jpg', 0)` The first parameter is the path of the image, and the second parameter is how to read the image.

`cv2.IMREAD_UNCHANGED`: Keep the original format unchanged, -1;

`cv2.IMREAD_COLOR`: Read the image in grayscale mode, which can be represented by 0;

`cv2.IMREAD_GRAYSCALE, 1`; read in a color picture, which can be represented by 1; default value;

`cv2.IMREAD_UNCHANGED`: Read in an image and include its alpha channel, which can be represented by 2.

2. Image display

The code was run on jupyterlab

Code path: /home/pi/Yahboom_Project/1.OpenCV course/01 Getting started/01_OpenCV image reading and display.ipynb

```
#bgr8 to jpeg format

import enum

import cv2

def bgr8_to_jpeg(value, quality=75):

    return bytes(cv2.imencode('.jpg', value)[1])
```

```
#The image component in jupyterLab displays the read image

import ipywidgets.widgets as widgets

image_widget = widgets.Image(format='jpg', width=800, height=800)

display(image_widget)

image_widget.value = bgr8_to_jpeg(img)
```

