

OpenCV Python – Get Image Size

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In Image Processing applications, it is often necessary to know the size of an image that is loaded or transformed through various stages.

In this OpenCV Tutorial, we will learn how to get image size in OpenCV Python with an example.

When working with OpenCV Python, images are stored in numpy ndarray. To get the image shape or size, use ndarray.shape to get the dimensions of the image. Then, you can use index on the dimensions variable to get width, height and number of channels for each pixel.

In the following code snippet, we have read an image to `img` ndarray. And then we used ndarray.shape to get the dimensions of the image.

```
img = cv2.imread('/path/to/image.png')
dimensions = img.shape
```

Example 1 – OpenCV Get Image Size

In this example, we have read an image and used ndarray.shape to get the dimension.



We can access height, width and number of channels from img.shape: Height is at index 0, Width is at index 1; and number of channels at index 2.

image-size.py

```
import cv2

# read image
img = cv2.imread('/home/img/python.png', cv2.IMREAD_UNCHANGED)

# get dimensions of image
dimensions = img.shape

# height, width, number of channels in image
height = img.shape[0]
width = img.shape[1]
channels = img.shape[2]

print('Image Dimension    : ',dimensions)
print('Image Height      : ',height)
print('Image Width       : ',width)
print('Number of Channels  : ',channels)
```

Output

```
Image Dimension    : (149, 200, 4)
Image Height      : 149
Image Width       : 200
Number of Channels : 4
```

`img.shape` returns (Height, Width, Number of Channels)

where

1. **Height** represents the number of pixel rows in the image or the number of pixels in each column of the image array.
2. **Width** represents the number of pixel columns in the image or the number of pixels in each row of the image array.
3. **Number of Channels** represents the number of components used to represent each pixel.

In the above example, **Number of Channels** = 4 represent Alpha, Red, Green and Blue channels.

Conclusion

Concluding this [OpenCV Python Tutorial](#) we have learnt how to get the image shape using OpenCV `ndarray.shape`.

OpenCV Python Tutorial

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