

Convert Images to Numpy Arrays

```
In [11]: # install open cv by running (pip install opencv-python)
# import opencv using 'import cv2'

import cv2
```

```
In [14]: # load the image
# you pass one more argument , "0" if you want to read the image in grey
# or "1" if you want to read the image in BGR.
im_g = cv2.imread("Z:\others\smallgray.png",0)
```

```
In [15]: im_g
```

```
Out[15]: array([[187, 158, 104, 121, 143],
               [198, 125, 255, 255, 147],
               [209, 134, 255, 97, 182]], dtype=uint8)
```

```
In [26]: im = cv2.imread("Z:\others\photo35.jpg",1)
```

```
In [27]: im
```

```
Out[27]: array([[[ 2,  2,  2],
                  [ 2,  2,  2],
                  [ 2,  2,  2],
                  ...,
                  [ 2,  2,  2],
                  [ 2,  2,  2],
                  [ 3,  3,  3]],

                [[ 2,  2,  2],
                  [ 2,  2,  2],
                  [ 2,  2,  2],
                  ...,
                  [ 2,  2,  2],
                  [ 2,  2,  2],
                  [ 3,  3,  3]],

                [[ 2,  2,  2],
                  [ 2,  2,  2],
                  [ 2,  2,  2],
                  ...,
                  [ 2,  2,  2],
                  [ 2,  2,  2],
                  [ 3,  3,  3]],

                ...,

                [[82, 82, 82],
                  [82, 82, 82],
                  [82, 82, 82],
                  ...,
                  [ 1,  1,  1],
                  [ 1,  1,  1],
                  [ 1,  1,  1]],

                [[82, 82, 82],
                  [82, 82, 82],
                  [82, 82, 82],
                  ...,
                  [ 1,  1,  1],
                  [ 1,  1,  1],
                  [ 1,  1,  1]],

                [[78, 78, 78],
                  [78, 78, 78],
                  [79, 79, 79],
                  ...,
                  [ 1,  1,  1],
                  [ 1,  1,  1],
                  [ 1,  1,  1]]], dtype=uint8)
```

```
In [28]: # converting a numpy array to image
# true, means your file has been created
cv2.imwrite('newphoto.png',im)
```

```
Out[28]: True
```

```
In [ ]:
```