Homework 01: Working with Images

Exercise 1 (5pts). Because I used the notebook, so my screenshot includes all answers:

hw1.ipynb

hw1.ipynb > top_left_3x5 = image_gray_float32[:5, :3]

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```
from skimage import io
from matplotlib import pyplot as plt
from skimage.color import rgb2gray
from skimage import util
```

[20] ✓ 0.0s

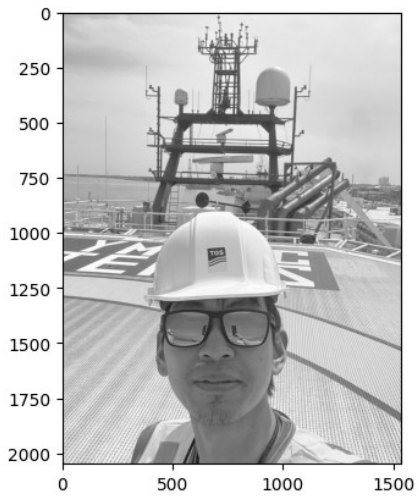
```
image_rgb = io.imread('99046aab-a2ae-420f-b837-dec74c8c0636.jpeg')
image_gray = rgb2gray(image_rgb)
image_gray_float32 = util.img_as_float32(image_gray)
```

[17] ✓ 0.0s

```
plt.imshow(image_gray_float32,cmap=plt.cm.gray)
```

[22] ✓ 0.7s

```
<matplotlib.image.AxesImage at 0x7fb950c6f610>
```




```
top_left_3x5 = image_gray_float32[:5, :3]
print("Top-left 3x5 (x by y) block:\n", top_left_3x5)

x, y = 1, 2
pixel_val = image_gray_float32[y-1, x-1]
print(f"Pixel value at (x={x}, y={y}): {pixel_val}")
```

[26] ✓ 0.0s

```
Top-left 3x5 (x by y) block:
 [[0.6982565 0.6982565 0.6982565]
 [0.6982565 0.6982565 0.6982565]
 [0.6982565 0.6982565 0.6982565]
 [0.6982565 0.6982565 0.6982565]
 [0.6982565 0.6982565 0.6982565]]
Pixel value at (x=1, y=2): 0.6982564926147461
```