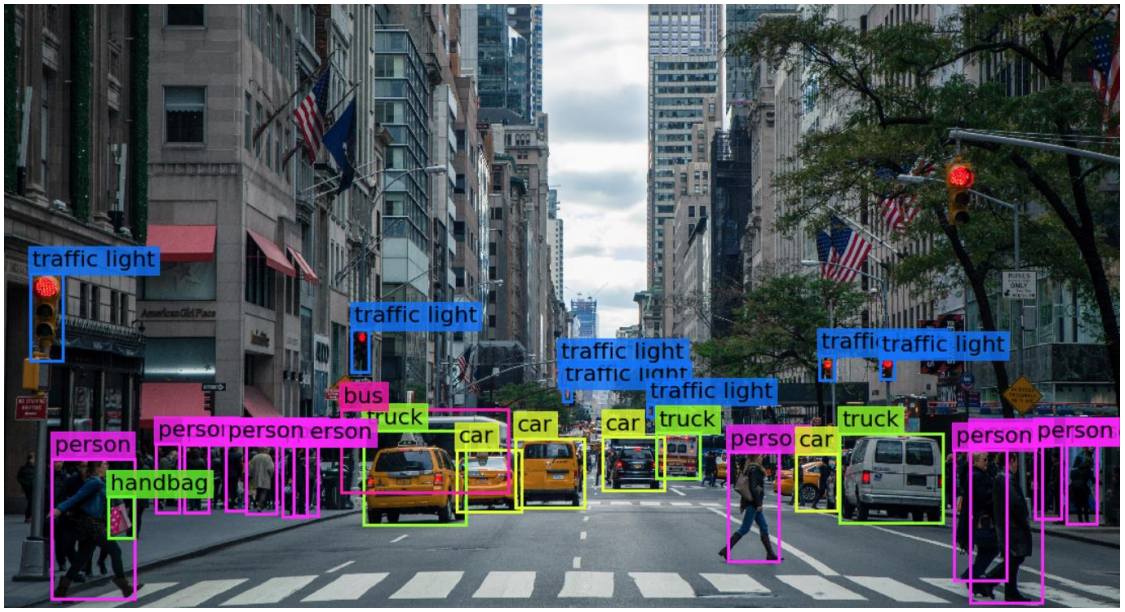

Computer vision in the new era of Artificial Intelligence and Deep Learning

Visión por computador en la nueva era de la Inteligencia Artificial y el Deep Learning

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https://github.com/albertofernandezvillan/computer-vision-and-deep-learning-course

Google Colab

Create and show multiple images in the same figure with matplotlib

- show_multiple_images_same_figure_plt.ipynb

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Coding the function show_img_plt()

```
from matplotlib import pyplot as plt
import cv2


def show_img_plt(img, is_color=True, title="", show_axis=True, n_rows=1, n_col
s=1, pos=1):
    """Shows an image using matplotlib capabilities"""

    if is_color:
      # Convert BGR image to RGB
      img_rgb = img[:, :, ::-1]
    else:
      # We convert the image from gray to BGR
      img_rgb = cv2.cvtColor(img, cv2.COLOR_GRAY2BGR)

    ax = plt.subplot(n_rows, n_cols, pos)
    plt.imshow(img_rgb)
    plt.title(title)
    if show_axis is False:
      plt.axis('off')
```

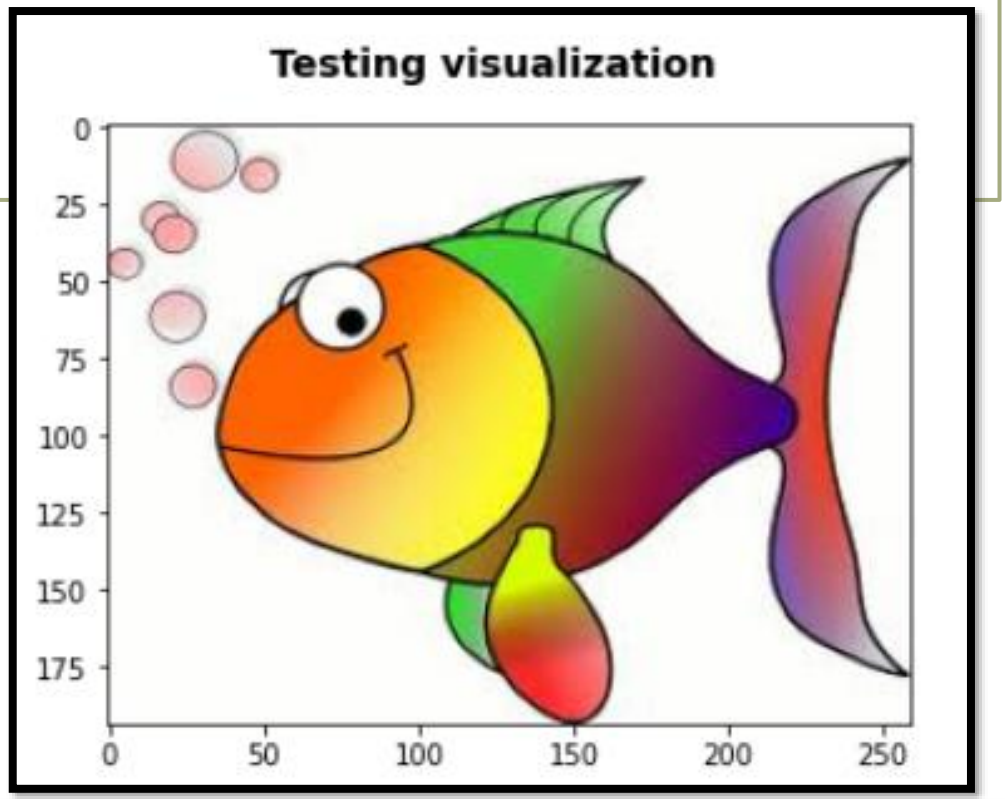
Testing the function show_img_plt()

```
img_bgr = cv2.imread("/content/HappyFish.jpg")
print("Loaded image with shape: '{}'".format(img_bgr.shape))
```

```
# Create the dimensions of the figure and set title:
plt.figure(figsize=(6, 4))
plt.suptitle("Testing visualization", fontsize=14, fontweight='bold')

show_img_plt(img_bgr)

# Show the created image:
plt.show()
```



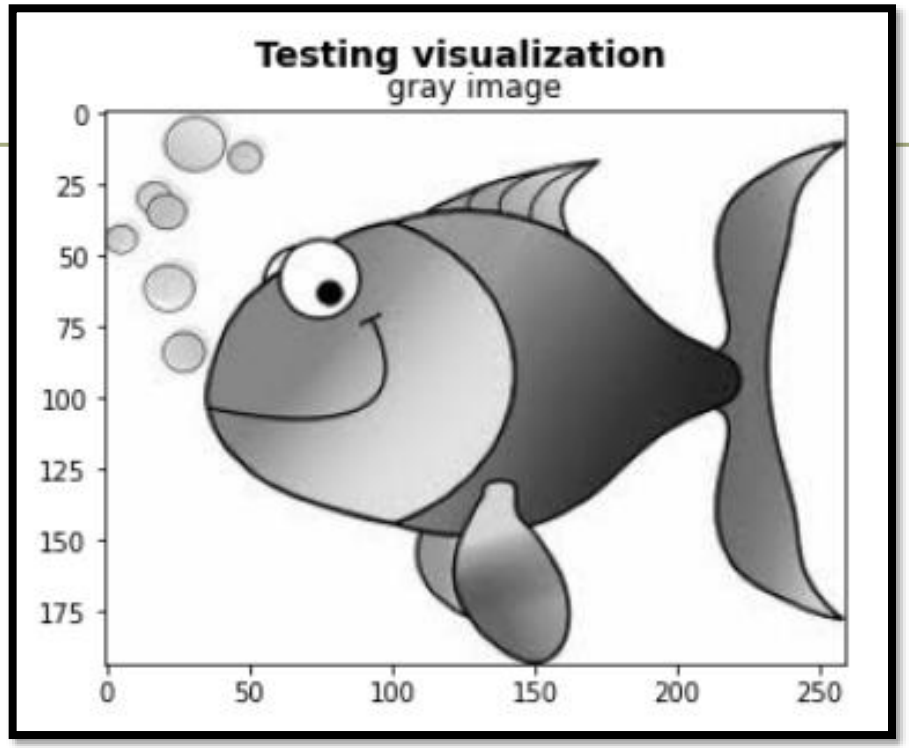
Testing the function show_img_plt()

```
img_gray = cv2.imread("/content/HappyFish.jpg", cv2.IMREAD_GRAYSCALE)
print("Loaded image with shape: '{}'".format(img_gray.shape))
```

```
# Create the dimensions of the figure and set title:
plt.figure(figsize=(6, 4))
plt.suptitle("Testing visualization", fontsize=14, fontweight='bold')

show_img_plt(img_gray, is_color=False, title='gray image')

# Show the created image:
plt.show()
```

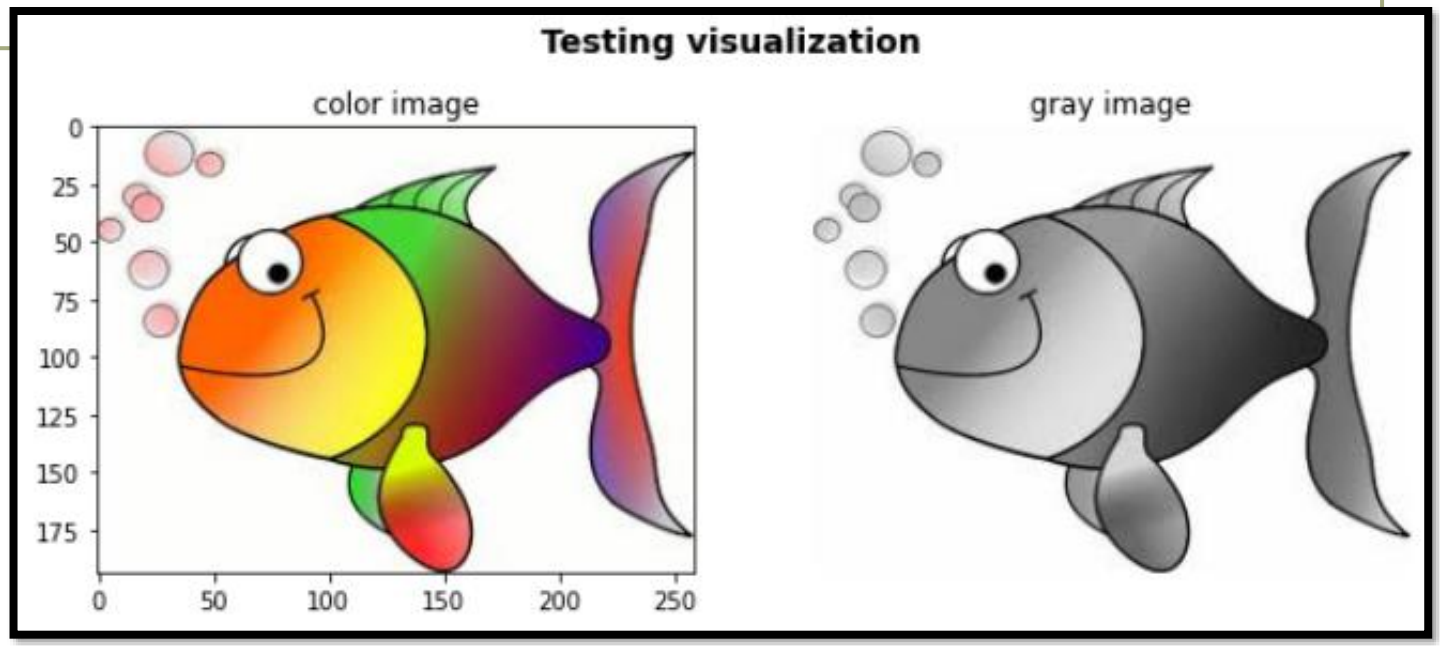


Testing the function show_img_plt()

```
# Create the dimensions of the figure and set title:
plt.figure(figsize=(10, 4))
plt.suptitle("Testing visualization", fontsize=14, fontweight='bold')

show_img_plt(img_bgr, is_color=True, title='color image', show_axis=True, n_row
s=1, n_cols=2, pos=1)
show_img_plt(img_gray, is_color=False, title='gray image', show_axis=False, n_r
ows=1, n_cols=2, pos=2)

# Show the created image:
plt.show()
```



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