watermark-using-cv

January 21, 2024

[73]:
```
# Important library imports
import cv2
import numpy as np
import requests
from PIL import Image as im
```

[74]:
```
from PIL import Image
image_path = '/kaggle/input/spcialmedia/social-media-image.png'

# Open the image using PIL
image = Image.open(image_path)
```

[75]:
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# Resize the image
image_logow = image.resize((500, 300))
image_textw = image.resize((500, 300))
```

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```
from IPython.display import display

# Display the resized images
display(image_logow)
```

[77]:
```python
from PIL import Image
from IPython.display import display

logo_path = '/kaggle/input/spcialmedia/bird_2.jpg'

# Open the image using PIL
logo = Image.open(logo_path)

# Resize the image
logo_resized = logo.resize((400, 400))

# Display the resized logo
display(logo_resized)
```

[78]:
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# Convert the PIL Image to a NumPy array
image_np = np.array(image)
```

[79]:
```
# Resize the watermark image to a specific size (e.g., 100x100)
logo_resized = logo.resize((200, 200))

# Convert the PIL Image to a NumPy array
logo_np = np.array(logo_resized)
```

[80]:
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# Get the dimensions of the watermark image
logo_height, logo_width, _ = logo_np.shape
position_x = 370
position_y = 100
```

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# Calculate the position to place the watermark
start_y = position_y
start_x = image_width - logo_width - position_x
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[81]:
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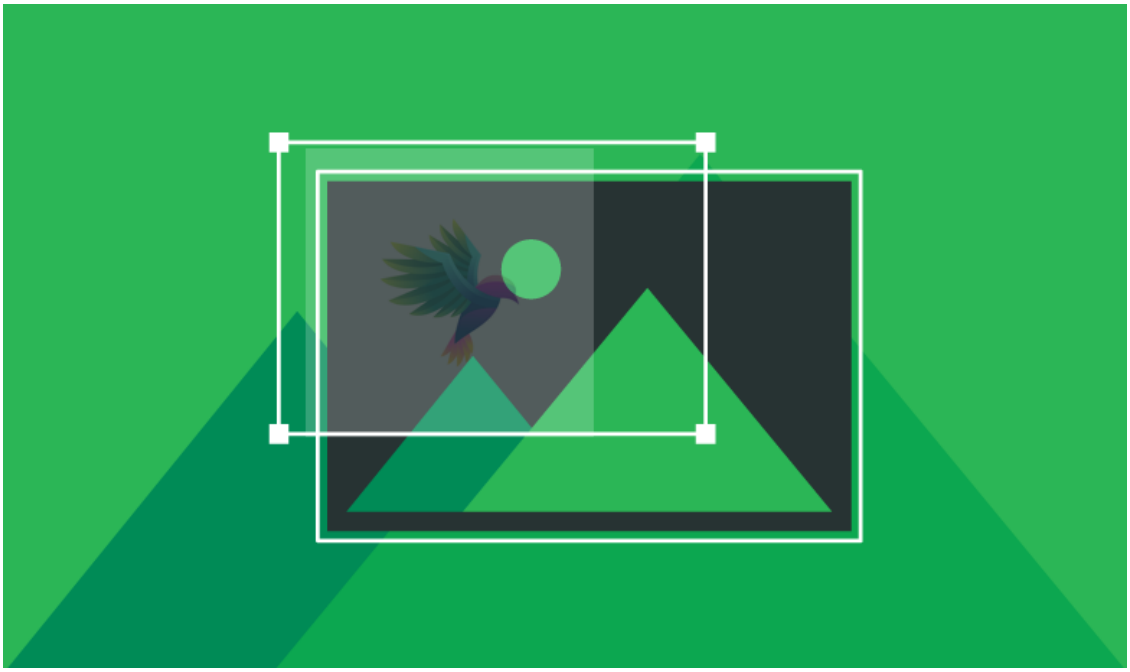
# Create a region of interest (ROI) for the watermark
roi = image_np[start_y:start_y + logo_height, start_x:start_x + logo_width]

# Add the watermark to the original image
watermarked_image = cv2.addWeighted(roi, 0.8, logo_np, 0.2, 0)

# Update the original image with the watermarked region
image_np[start_y:start_y + logo_height, start_x:start_x + logo_width] =␣
 ↪watermarked_image

# Convert the NumPy array back to a PIL Image
watermarked_image_pil = Image.fromarray(image_np)

# Display the watermarked image
display(watermarked_image_pil)
```



[82]:
```
from PIL import Image, ImageDraw, ImageFont
# Create a drawing object
draw = ImageDraw.Draw(image)

# Specify text and font properties
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text = 'Abdullah Khan'
font_path = '/usr/share/fonts/truetype/dejavu/DejaVuSans-Bold.ttf'  # Adjust␣
 ↪the font path
font_size = 30
font = ImageFont.truetype(font_path, font_size)

# Specify text position
text_position = (20, 20)

# Add text to the image
draw.text(text_position, text, font=font, fill=(255, 255, 255, 128))

# Display the watermarked image
display(image)
```