

Image to pencil sketch with python

```
In [8]: # import the Library
import cv2
import matplotlib.pyplot as plt
```

```
In [9]: # get the image file name and location here
img_file = 'bird.jpg'
original_image = cv2.imread(img_file)
```

```
In [10]: # # Convert BGR image to RGB
original_img_rgb = cv2.cvtColor(original_image, cv2.COLOR_BGR2RGB)
```

```
In [11]: # Display the original image
plt.imshow(original_img_rgb)
plt.axis('off')
plt.title('Original Image')
plt.show()
```

Original Image



```
In [12]: # Convert the image to grayscale
gray_image = cv2.cvtColor(original_image, cv2.COLOR_BGR2GRAY)
```

```
In [13]: plt.imshow(gray_image)
plt.axis('off')
plt.title('Grayscale Image')
plt.show()
```

Grayscale Image



```
In [14]: # Invert the grayscale image
inverted_gray_image = cv2.bitwise_not(gray_image)
```

```
In [16]: plt.imshow(inverted_gray_image)
plt.axis('off')
plt.title('Inverted Gray Image')
plt.show()
```

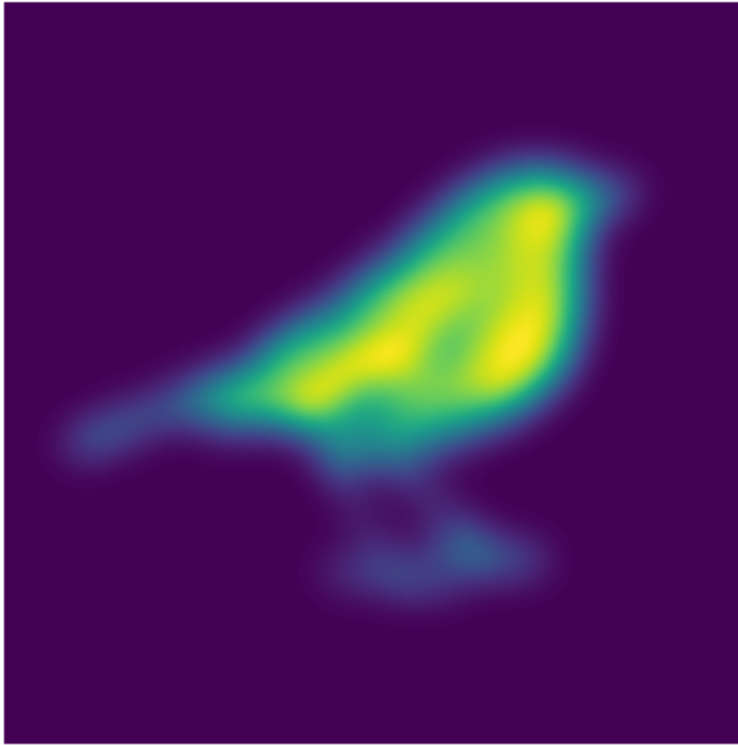
Inverted Gray Image



```
In [17]: # Blur the inverted image using the GaussianBlur function
blurred_image = cv2.GaussianBlur(inverted_gray_image, (111, 111), 0)
```

```
In [18]: plt.imshow(blurred_image)
plt.axis('off')
plt.title('Blurred Image')
plt.show()
```

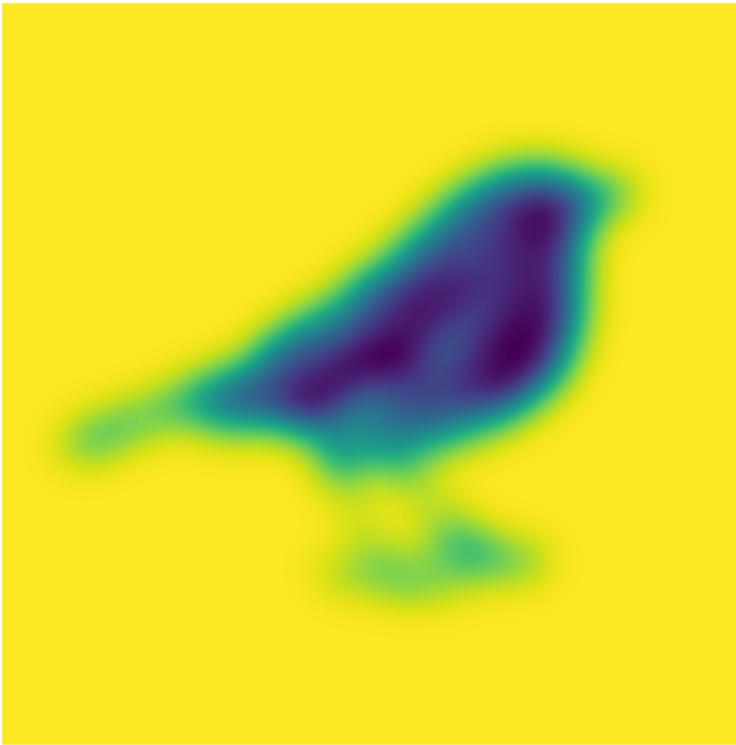
Blurred Image



```
In [19]: # Invert the blurred image
inverted_blurred_image = cv2.bitwise_not(blurred_image)
```

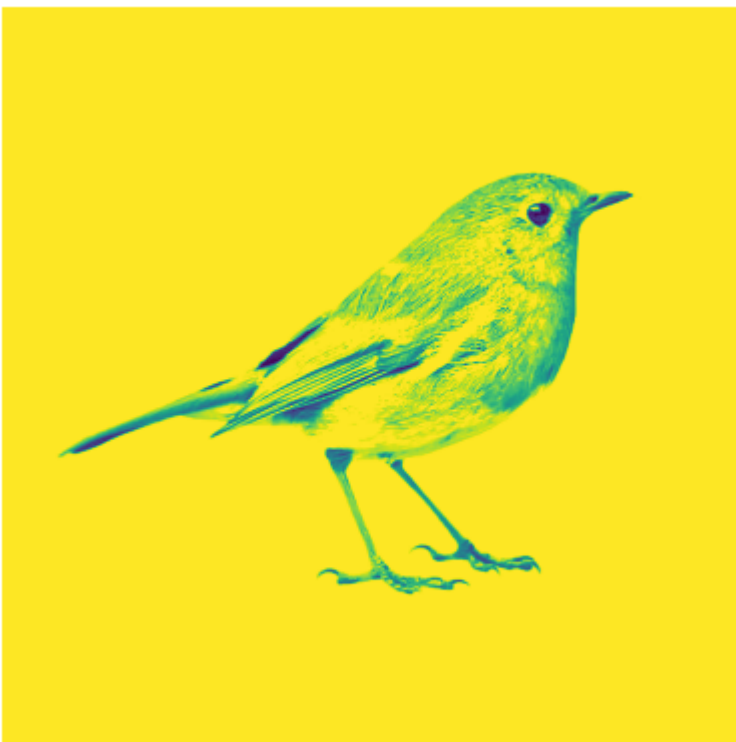
```
In [20]: plt.imshow(inverted_blurred_image)
plt.axis('off')
plt.title('Blurred Image')
plt.show()
```

Blurred Image



```
In [21]: # Create the pencil sketch image by dividing the grayscale image by the inverted bl
pencil_sketch = cv2.divide(gray_image, inverted_blurred_image, scale=256.0)
```

```
In [24]: plt.imshow(pencil_sketch)
plt.axis('off')
plt.show()
```



```
In [25]: # Convert pencil sketch to RGB
pencil_sketch_rgb = cv2.cvtColor(pencil_sketch, cv2.COLOR_GRAY2RGB)
```

```
In [26]: # Display the pencil sketch
plt.imshow(pencil_sketch_rgb)
```

```
plt.axis('off')  
plt.title('Pencil Sketch')  
plt.show()
```

Pencil Sketch



You can find this project on [GitHub](#).