Image_to_pencil_sketch_with_python

In [17]:
```
# import the library
import cv2
import matplotlib.pyplot as plt
```

In [18]:
```
# get the image file name and location here
img_file = 'bird.jpg'
original_image = cv2.imread(img_file)
```

In [19]:
```
# # Convert BGR image to RGB
original_img_rgb = cv2.cvtColor(original_image, cv2.COLOR_BGR2RGB)
```

In [20]:
```
# Display the original image
plt.imshow(original_img_rgb)
plt.axis('off')
plt.title('Original Image')
plt.show()
```

In [5]:
```
# Convert the image to grayscale
gray_image = cv2.cvtColor(original_image, cv2.COLOR_BGR2GRAY)
```

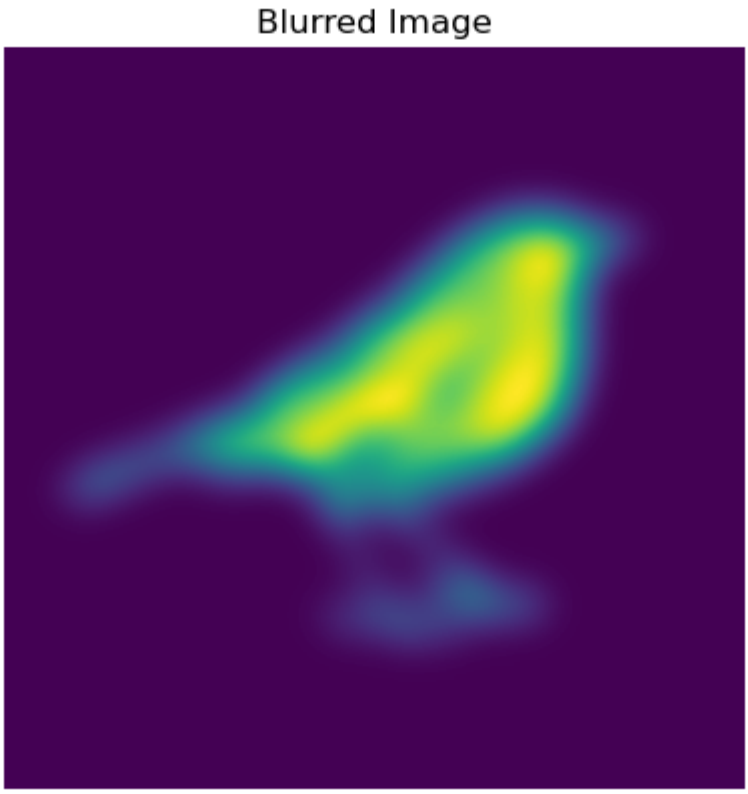
In [6]:
```
plt.imshow(gray_image)
plt.axis('off')
plt.title('Grayscale Image')
plt.show()
```

In [7]:
```
# Invert the grayscale image
inverted_gray_image = cv2.bitwise_not(gray_image)
```

In [8]:
```
plt.imshow(inverted_gray_image)
plt.axis('off')
plt.title('Inverted Gray Image')
plt.show()
```

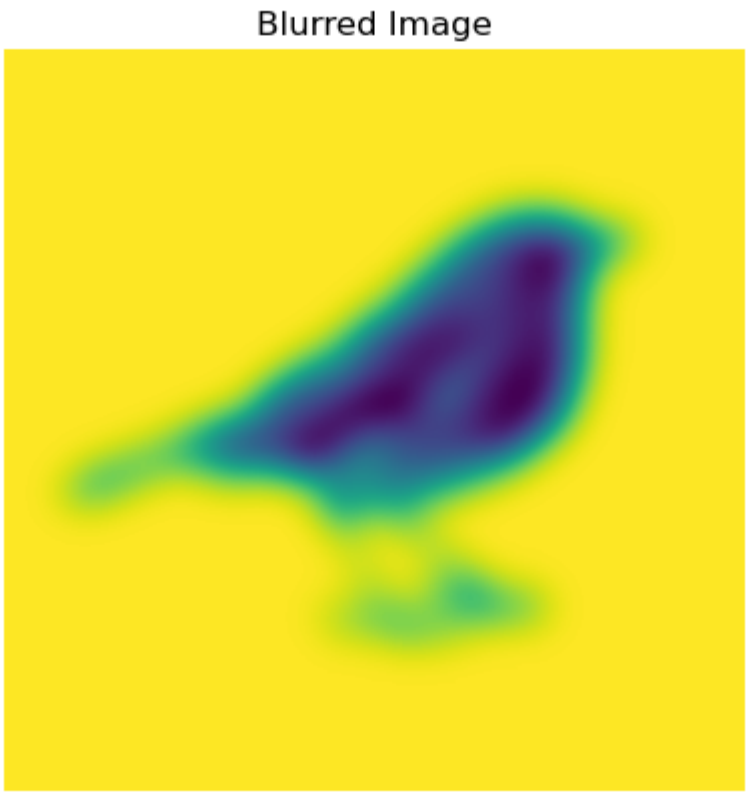
In [9]:
```
# Blur the inverted image using the GaussianBlur function
blurred_image = cv2.GaussianBlur(inverted_gray_image, (111, 111), 0)
```

In [10]:
```
plt.imshow(blurred_image)
plt.axis('off')
plt.title('Blurred Image')
plt.show()
```



In [11]:
```
# Invert the blurred image
inverted_blurred_image = cv2.bitwise_not(blurred_image)
```

In [12]:
```
plt.imshow(inverted_blurred_image)
plt.axis('off')
plt.title('Blurred Image')
plt.show()
```

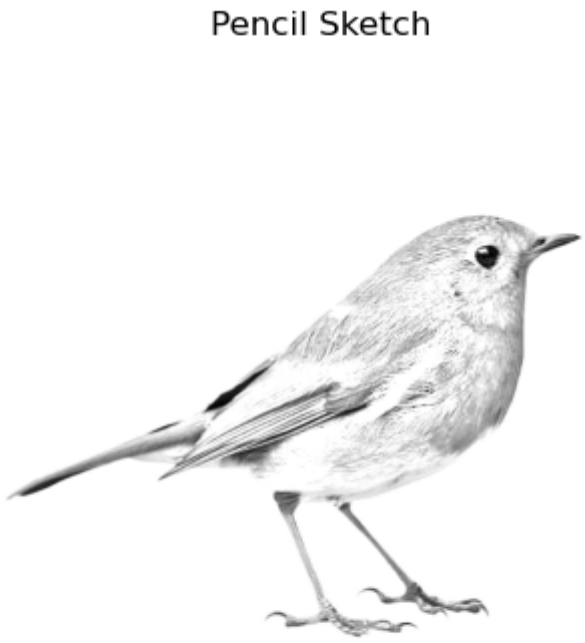


In [13]:
```
# Create the pencil sketch image by dividing the grayscale image by the inve
pencil_sketch = cv2.divide(gray_image, inverted_blurred_image, scale=256.0)
```

In [14]:
```
plt.imshow(pencil_sketch)
plt.axis('off')
plt.show()
```

In [15]:
```
# Convert pencil sketch to RGB
pencil_sketch_rgb = cv2.cvtColor(pencil_sketch, cv2.COLOR_GRAY2RGB)
```

In [16]:
```
# Display the pencil sketch
plt.imshow(pencil_sketch_rgb)
plt.axis('off')
plt.title('Pencil Sketch')
plt.show()
```



THANK YOU!

Github Link: https://github.com/anujtiwari21?tab=repositories (https://github.com/anujtiwari21?tab=repositories)