import cv2

import numpy as np

import matplotlib.pyplot as plt

image = cv2.imread('1.png')

gray = cv2.cvtColor(image, cv2.COLOR\_BGR2GRAY)

blurred = cv2.GaussianBlur(gray, (5, 5), 0)

unsharp\_mask = cv2.addWeighted(gray, 1.5, blurred, -0.5, 0)

plt.figure(figsize=(10, 5))

plt.subplot(1, 2, 1)

plt.imshow(gray, cmap='gray')

plt.title("Original Grayscale")

plt.axis('off')

plt.subplot(1, 2, 2)

plt.imshow(unsharp\_mask, cmap='gray')

plt.title("Sharpened using Unsharp Masking")

plt.axis('off')

plt.tight\_layout()

plt.show()

