

Adjusting a Dark and Rotated Image

Gamma Correction is a common image adjustment technique. Each pixel in an image is raised to a power, gamma, such that

$$I_{out} = I_{in}^{\gamma}$$

In this problem you will adjust the brightness using gamma correction and correct the rotation of the Boston Night image.

Write a script that converts the "boston night.JPG" image to grayscale and performs the following two adjustments:

- adjust the intensity using $\gamma = 1/2$ in the above equation
- rotate the image 1 degree clockwise while maintaining the same image dimensions

Store your final image as uint8 in a variable named **imgAdjusted**

You're encouraged to work in MATLAB to develop your solution before testing it here.

```
img = imread("boston night.JPG");  
% Enter your code below  
gs_img = rgb2gray(img);  
gs_gamma_img = imadjust(gs_img,[],[],0.5);  
gs_gamma_rotate_img = imrotate(gs_gamma_img,-1,"crop");  
imgAdjusted = im2uint8(gs_gamma_rotate_img);  
imshow(imgAdjusted);
```

