README

Assignment 6 Histogram Equalization

Requirements

You are required to apply Histogram Equalization (HE) algorithm to process the attached under-exposed image as input image data to make it visually easier for human recognition. In addition to the final processed image, histograms of both the original and output images should be included. You are also required to write a simple document to explain HE algorithm itself and your own implementation.

Suggested development language: Python and Java.

In this assignment, prior rules of assignments apply.

Files

he.py - algorithm implementation
underexposed.png - input image
exposed.png - output image
histogram_before_and_after.png - two histograms of above images

Algorithm

1.Calulate for histogram of grayscale image(Use plt.hist() function)
2.Find the position that is left-most or right-most with non-zero grayscale (Just iterate to find)
3.Mapping the three-interval grayscale value into different function values (Use a look-up table for implement)