

Assignment 02

Assignment Name: "Playing with Intensity Transformations"

Tasks you have to do to complete the assignment:

1. Take your RGB photo
2. Make it a grayscale image, say I
3. Calculate and plot histogram of image I
4. Apply Negation Transformation on I
5. Calculate and plot histogram of the negative image
6. Take a threshold value input from user, say $A = 127$
7. Increase brightness by 50% for pixels with intensity greater than A ; else decrease it by 25% of image I
8. Calculate and plot histogram of the thresholded image
9. Apply Log Transformation on image I with $c = 1.5$
10. Calculate and plot histogram of the log transformed image
11. Take gamma value input from user, say $\gamma = 0.6$
12. Apply Power Law Transformation on image I with $c = 1.5$
13. Calculate and plot histogram of the Power Law transformed image.
14. Understand the histograms, differences, their indications.