

Lab 3. Histogram processing

1. Design function to improve brightness of the 8-bits images by using histogram equalization. Input data of the function are “pout.tif”. The function consists of the following steps:
 - 1.1 Create the image histogram,
 - 1.2 Define PDF and CDF from the image histogram,
 - 1.3 Use CDF to create the transfer function,
 - 1.4 Use the transfer function to operate the input image.
 - 1.5 From the image result, describe the following questions:
 - What is the effect of histogram equalization on images with low contrast?
 - How did histogram equalization affect the overall image brightness in this case?
 - Based on the tire image’s original histogram, what can be said about its overall brightness?

Note: use word processor to design report and send to: sathit_i@yahoo.com