COMPUTER VISION LAB-1

NAME: Khushi Agrawal

ROLL NO.: 191020429

BRANCH: DSAI

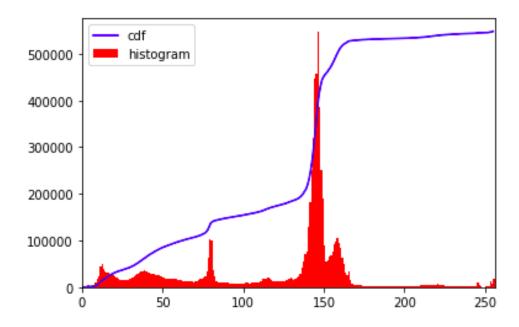
AIM

- To obtain the histogram equalization of colored and grayscale image. The objective is to understand the image histogram and understand how it can be useful.
- To Implement Program for Image Filtering using:
 - o Butterworth low pass filter, Gaussian Low Pass filter, Mean Filter, Median Filter, Sobel-Prewitt Filter
 - o Butterworth high pass filter, Gaussian High Pass filter
 - o Laplacian Filter

RESULTS

1. To obtain histogram equalization of color and grayscale image.

Histogram of Gray Scale Image



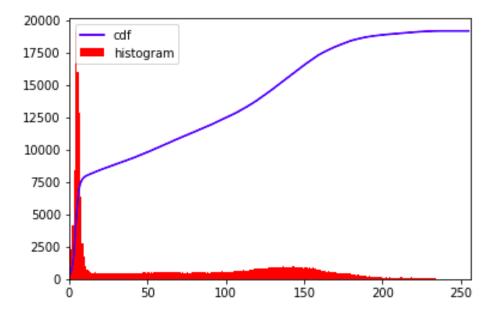
Grayscale Input Image



Equalized Image



Histogram of Colored Image



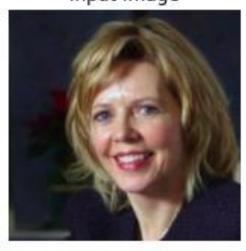
Colored Input Image

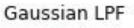


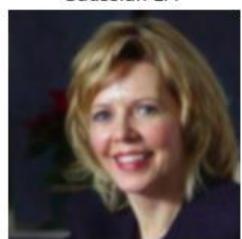
Equalized Image



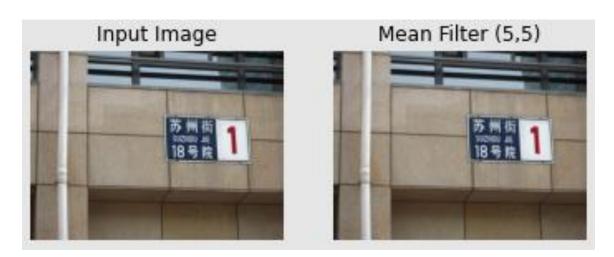
- 2. To Implement Program for Image Filtering using:
 - 2.1 Gaussian Low Pass filter Input Image







2.2 Mean Filter

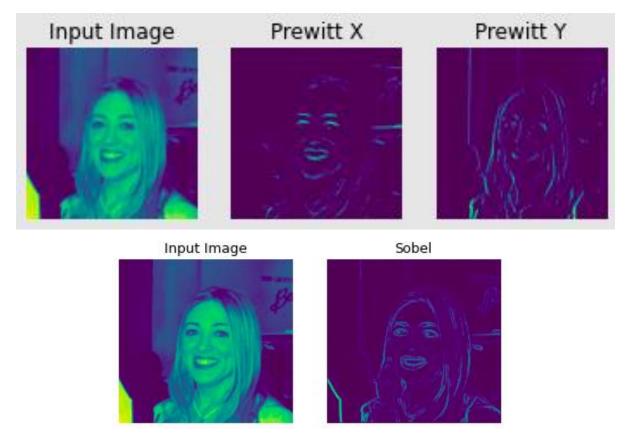


2.1 Median Filter

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2.1 Sobel-Prewitt Filter



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2.2 Gaussian High Pass filter

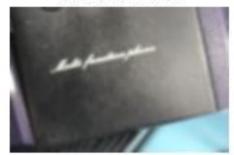


2.3 Laplacian Filter

Input Image



Gaussian Blur



Laplacian Image



Laplacian of Gaussian Blur



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