

## ECE 5470 Digital Image Processing Homework # 9

*Due Date: April 13, 2020 4:00 pm*

### 1. Tone and Color Correction

Download the image "Fig9-1a.tif" and "Fig9-1b.tif".

- Adjusting the RGB components equally to make tone and color correction.
- Display the results.

### 2. Smoothing

Download the image "Fig9-2.tif".

- Apply 5x5 averaging mask to each RGB component of the image to make image smoothing and display the result
- Apply 5x5 averaging mask to each HSI component of the image to make image smoothing and display the result
- Find and display the difference between the two results

### 3. Image Segmentation

Download the image "Fig9-3.tif".

- Apply Image segmentation in RGB colors using the Euclidean distance measurement.
- Obtain an estimate of the "average" color of the marked segment in the following image. (Segment image is given as "Fig9-3b.tif").
- You select your threshold  $D_0$
- Display the result.

