

Homework 12 (Due: 5.23)

Perform contrast enhancements for a color image.

- (1) Input a RGB color image;
- (2) Scale its RGB pixel values to rgb values,
where $0 \leq r, g, b \leq 1$;
- (3) Transfer rgb pixel values into hsi values;
- (4) Apply the histogram equalization algorithm to
the i component to obtain the i' component;
- (5) Transfer the hsi' values into $r'g'b'$ values;
- (6) Scale $r'g'b'$ values to $R'G'B'$ values,
where $0 \leq R', G', B' \leq 255$;
- (7) Output the RGB and $R'G'B'$ color images.