CSCI 3290 Assignment 2 (Raymond Lo, 1155009121)

Directory: /color\_transfer

Matlab Executable:

* run\_color\_transfer.m  
  This file reads the specified source and target images, compute color transfer and writes the output image

Matlab Function:

* color\_rgb2lab.m  
  This function converts the given rgb image into Lab color space
* color\_lab2rgb.m  
  This function converts the given Lab color space image into rgb image
* color\_transfer.m  
  This function transfers colors from one input Lab color space image onto another image

Directory: /color2gray

Matlab Executable:

* run\_cprgb2gray.m  
  This file reads the specified image and perform decolorization, then computes the CCPR of the decolorized image

Matlab Function:

* CCPR.m  
  This function computes the CCPR between the given original image and the decolorized image
* cprgb2gray.m  
  This function computes the grayscale of the input rgb image based on the basic implementation described by the spec
* custom\_rgb2lab.m  
  This function converts the given rgb image into Lab color space, using algorithms specified in Wikipedia
* neighborColorOrder.m  
  This function determines for all neighbor pairs in the given image whether strong color order exists
* neighborDistance.m  
  This function computes the Euclidean color distance for all neighbor pairs in the given image, sign of the distance determined by the L channel
* wco\_color2gray.m  
  This function implements the Weak Color Order Contrast Preserving Decolorization algorithm as described in the Extra Credit part of the spec