Landon Byrd 11/26/2018 CPSC 4040

Project Summary

For the final project, I implemented the Reinhard color mapping scheme. This involves taking the look and feel of one image and mapping it on to another. The first step in this process is to transfer each image into the LAB colorspace. This colorspace more accurately represents how the human eye perceives color information and allows us obtain the "look" and "feel" of an image. This is done by finding the mean and standard deviation of L, A, and B of each image. The mean is then subtracted from each value in the image that is to be transformed and multiplied by the ratio of current standard deviation to the image to be mapped's deviation. The mean of the other image is then added back in for L, A, and B. The image is converted back to R,G, and B and displayed with the look and feel of the other image.

More detailed information about the method implemented can be found at this link:https://www.cs.tau.ac.il/~turkel/imagepapers/ColorTransfer.pdf

This specific project focused on painting "Saturn Eating His Son" by Spanish master Francisco de Goya. This painting while featuring striking subject matter has a very subdued color scheme. Many different paintings with many different color palettes were used to transfer a more saturated and colorful look on to the painting. The results are represented in the appendix on the following pages below.

Appendix

Original





















