Homework 2 Gamma Correction Report

TJ Couch | Dr. Haeyong Chung | CS 443 | 15 February 2019

Gamma Correction

I implemented a gamma correction algorithm in MATLAB with a gamma value of 1.5.

Image 1

Input

Output

How It Changed

The image is overall brighter. There is slightly less saturation. The shadows in the tree branches look significantly lighter. The sign looks brighter but slightly washed out. The whites look crisper and brighter. The grass looks a bit strange and uniform as opposed to detailed in the original image.

Image 2

Input

Output

How It Changed

Because the image was already so bright, the new image looks too bright. It is quite washed out and dull comparatively. The sky goes from light blue to nearly white. The reflections of the trees on the water look brighter and clearer. The white building looks much less detailed and too bright.

Image 3

Input

Output

How It Changed

The image goes from being full of vibrant color to being washed out and too light. The sky looks so varied and interesting in the original image, but it looks uniform and dull in the new image. The building looks brighter and clearer in the new image. The shadows on the grass on the left of the image look strange and washed out in the new image.