

CSCI 1430 Capstone Project

Daniel Ghebreyesus

Spring 2023

Abstract

For the Final Project, we examined various Neural Style Transfer techniques which are used to generate a new image by combining the content of one image with the style of another image. We used the original Gatys' *et al.* research article, "A Neural Algorithm of Artistic Style," to create our baseline model. Additionally, we added the ability for Multi-Style Transfer and Color/Luminance-Preserving Style Transfer using ideas from this source. We also made use of Sharp Edge Elimination and Region Brightness Optimizations to create more coherent images. These extensions to the original Neural Style Transfer model allowed us to create a wide variety of stylized images.