

Neural Style Transfer

NeuralArt - Stylize your Image

Avishi Gupta, Vaseem Naazleen, Shivangi Tomar

18 July 2020

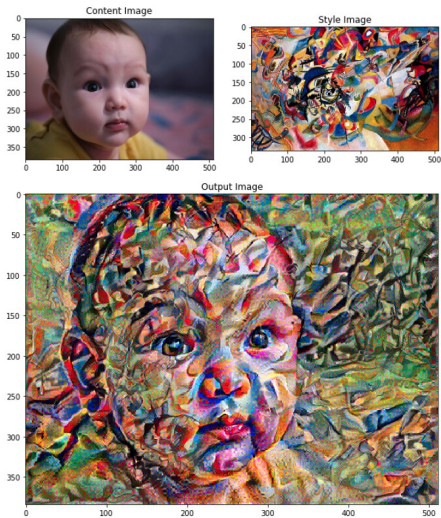
Overview

Our project aims to recast the content of one image in the style of another image by implementing a neural algorithm by Leon A. Gatys, Alexander S. Ecker and Matthias Bethge.

What is Neural Style Transfer?

- Neural Style Transfer is an optimization technique.
- Input:
 - Content image
 - Style reference image
- Output:
 - Stylized image: looks like the content image, but painted in the style of the style reference image

Example



Key Finding

The representations of content and style in the Convolutional Neural Network are seperable.

Technical Stack

- Keras
- Tensorflow
- NumPy
- SciPy
- Matplotlib
- Flask

Status

- Read the research paper
- Completed the implementation of model
- Working on website

Learnings

- Version Control System
- Making presentation using Beamer
- Convolutional Neural Networks
- HTML, CSS and JavaScript

Difficulties

- The program took lot of time to output stylized image.

Thank You!