Neural Style Transfer

NeuralArt - Stylize your Image

Avishi Gupta, Vaseem Naazleen, Shivangi Tomar

30 June 2020

Team - 38 NST 30 June 2020 1/10

Overview

Our project aims to stylize image by implenting A Neural Algorithm of Artistic Style paper by Leon A.Gatys, Alexander S.Ecker and Mathias Bethge. https://arxiv.org/pdf/1508.06576.pdf

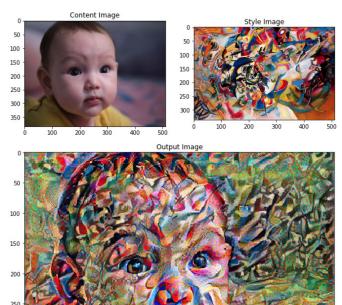
Team - 38 NST 30 June 2020 2 / 10

What is Neural Style Transfer?

- Neural Style Transfer is a technique used to generate image in the style of another image.
- It uses the stylistic components of one image to draw the content of another



Example



Key Finding

The representation of content and style in the Convolutional Neral Network are seperable.

Team - 38 NST 30 June 2020 5 / 10

Modules

- Keras (TensorFlow backend)
- NumPy
- SciPy
- Flutter

Team - 38 NST 30 June 2020 6 / 10

Status

- Read the research paper.
- Working on the code implementations.



Learnings and Difficulties

- Learned to work with github conveniently.
- Learned to make presentation using Beamer.
- Studied about CNN.

Team - 38 NST 30 June 2020 8 / 10

Difficulties

 The program is taking lot of time to output stylized image. (Working on it) Thank You :)

Team - 38 NST 30 June 2020 10 / 10