Neural Style Transfer
NeuralArt - Stylize your Image

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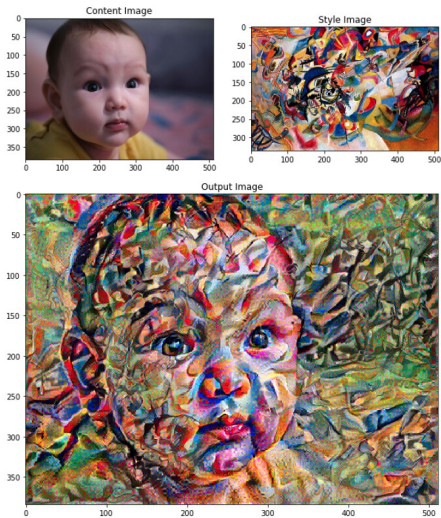
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Overview

Our project aims to stylize image by implenting A Neural Algorithm of Artistic Style paper by Leon A. Gatys, Alexander S. Ecker and Matthias Bethge.

https://arxiv.org/pdf/1508.06576.pdf

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.
- Presentation using Beamer.
- Convolutional Neural Networks.
- HTML, CSS and JavaScript.

Difficulties

- The program is taking lot of time to output stylized image.
- Allocating space for user's image.

Thank You!