Neural Style Transfer NeuralArt - Stylize your Image

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Overview

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

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



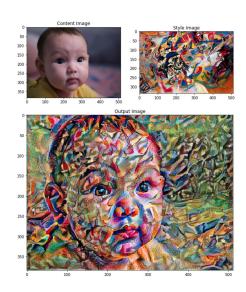
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What is Neural Style Transfer?

- 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

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Example



Key Finding

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

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Technical Stack

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

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Status

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

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Learnings

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

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Difficulties

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



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Thank You!

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