

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>

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.
- Read the research paper.

Learnings

- Learned to work with Version Control System conveniently.
- Learned to make presentation using Beamer.
- Studied about CNN.
- Learned HTML, CSS and JavaScript.

Difficulties

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

Thank You!