

# 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.

# 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!