

Neural Style Transfer TensorFlow

Name of Project: Art Transfer

List of Team Members:

1. Priyanka Popeta
2. Tapish Chavan
3. Vanshika Nair

Abstract:

Initially introduced in Leon A. Gatys' paper, "A Neural Algorithm of Artistic Style," neural style transfer has taken the world by storm and has caught the attention of many.

To acquire a picture made in the style of the style image, we will use a reference style image, such as an artwork by a well-known artist or just some random graffiti or pattern, and an input image that includes the material you wish to style. Using technologies like TensorFlow, this project will be a simple interactive GUI that allows users to experience a unique mix of photographs to construct a neural style transfer. This technique is used by many popular android iOS apps such as Prisma, Dream Scope, PicsArt.

The output image of the neural style transfer paper is generated using feature maps generated by intermediary layers of the VGG-19 network. The features retrieved by the VGG network's convolution layers are stored in this architecture, which takes style and content images as input.

Users would be invited to enter two images, with the outcome on the screen being a spectacular art piece made from the two photos.