# Universal Style Transfer via Feature Transforms

MID PROJECT EVALUATION

TEAM NAME : UDOLHTRAP

# Content

PROBLEM STATEMENT

PROPOSED METHOD

PROGRESS TILL NOW

RESULTS

FURTHER MILESTONES

# Universal Style Transfer via Feature Transforms

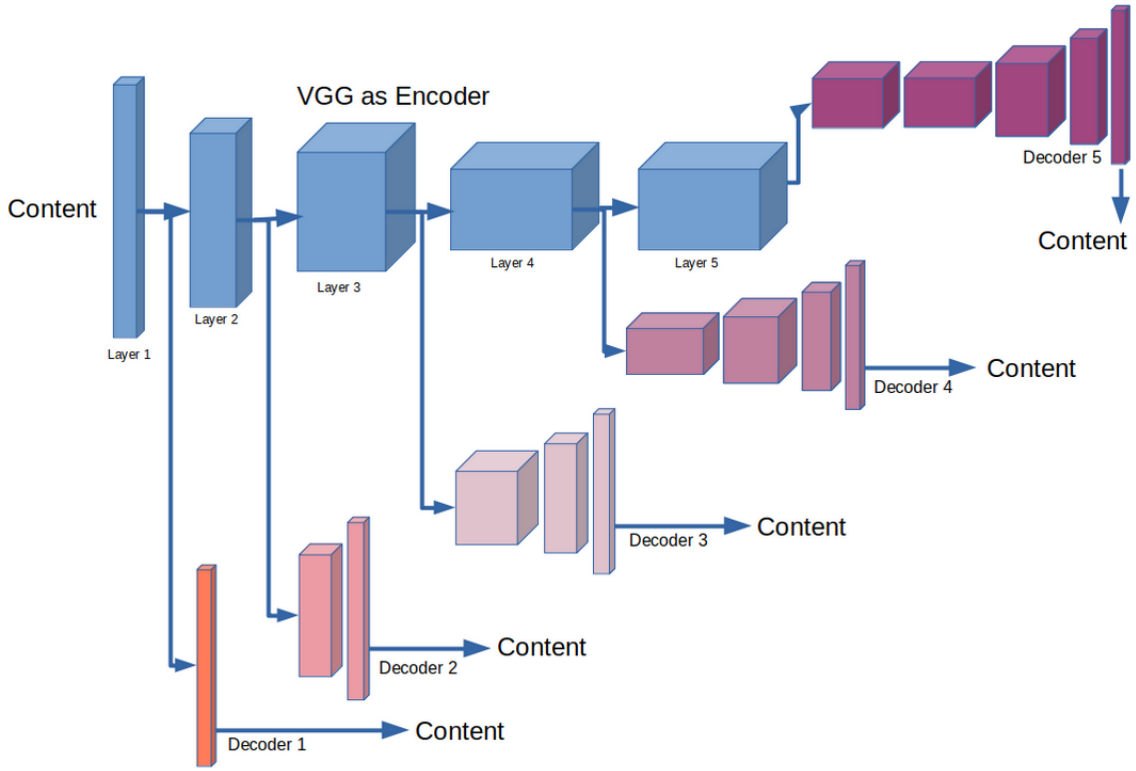
- Universal style transfer aims to transfer arbitrary visual styles to content images.
- We propose a feed forward method to realize the fast transferring for arbitrary styles.
- A pair of feature transformations, whitening and coloring is embedded in an image reconstruction network.
- We present a effective method that does not require training on any pre-defined styles.

# Method Overview

- We are using VGG-19 network as encoder to extract features. A decoder is then trained to reconstruct original image.
- Original Image and style are both input to the encoder. The combined output is fed to a Whitening and coloring(WCT) module which transform features to match the style.
- The output from WCT is sent to the trained decoder to get the final styled image.
- For higher visual quality multi-layer pipeline is used.

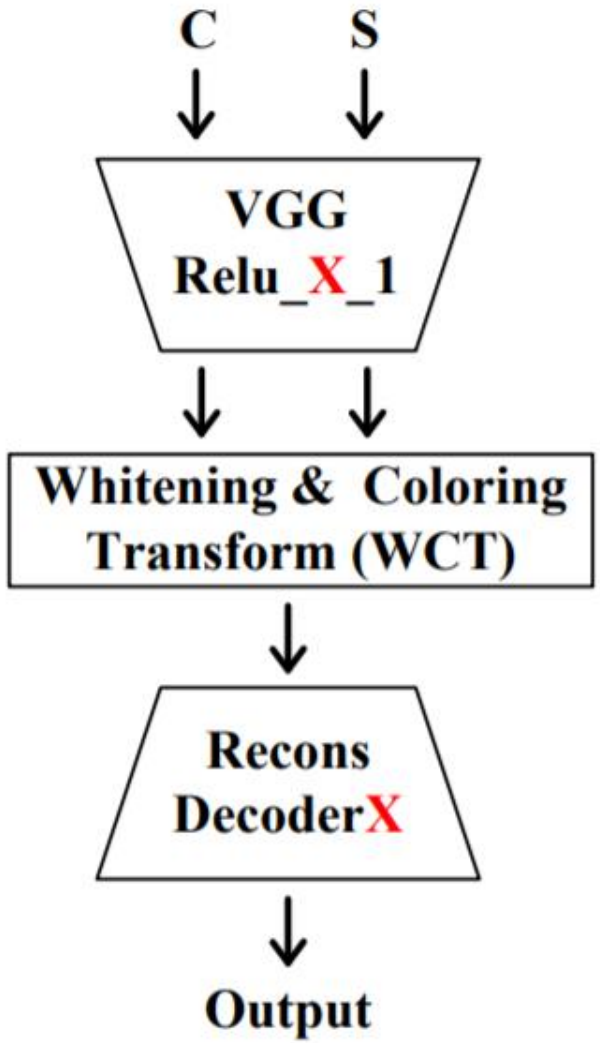
# Work till now

- Used pre trained VGG model for encoder as used in the paper to extract features from input and style image.
- Trained a decoder for VGG Relu_5_1 for the single stage pipeline.
- Implemented the WCT module to transfer features from the style to the input image.
- Implemented the single level architecture and tested in various content and styling images.




# VGG-19 Encoder-Decoder

# Single level stylization



# Results

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# Thank You