Scribbler: Controlling Deep Image Synthesis with Sketch and Color

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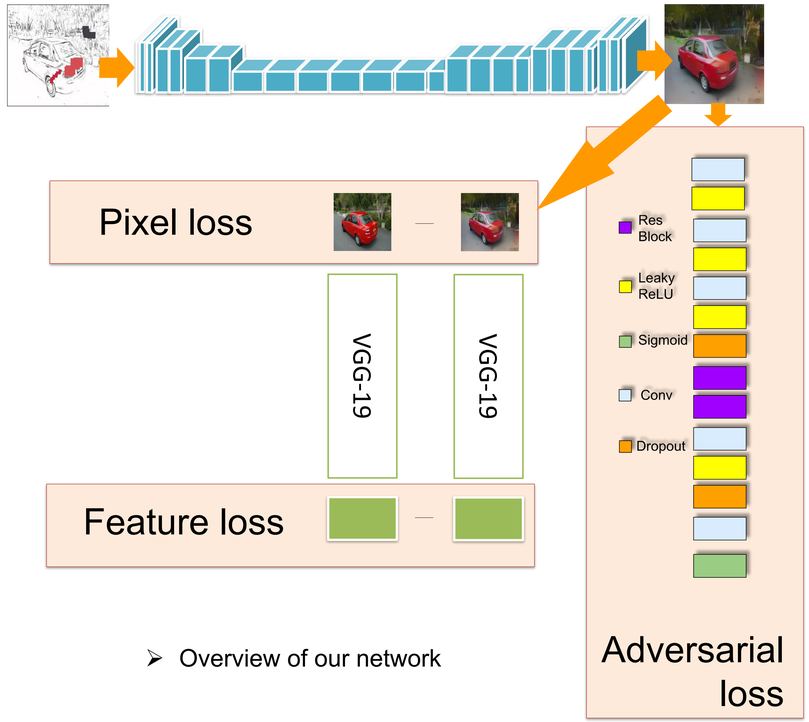
Overview:

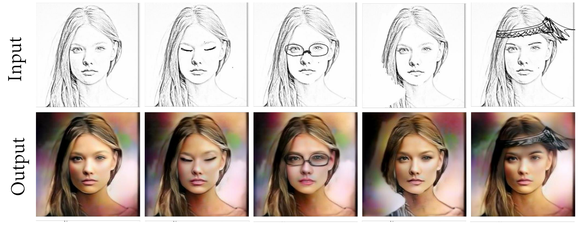
- We propose a deep adversarial image synthesis architecture that is conditioned on sketched boundaries and sparse color strokes to generate realistic cars, bedrooms, or faces. We demonstrate a sketch based image synthesis system which allows users to 'scribble' over the sketch to indicate preferred color for objects. Our network can then generate convincing images that satisfy both the color and the sketch constraints of user.



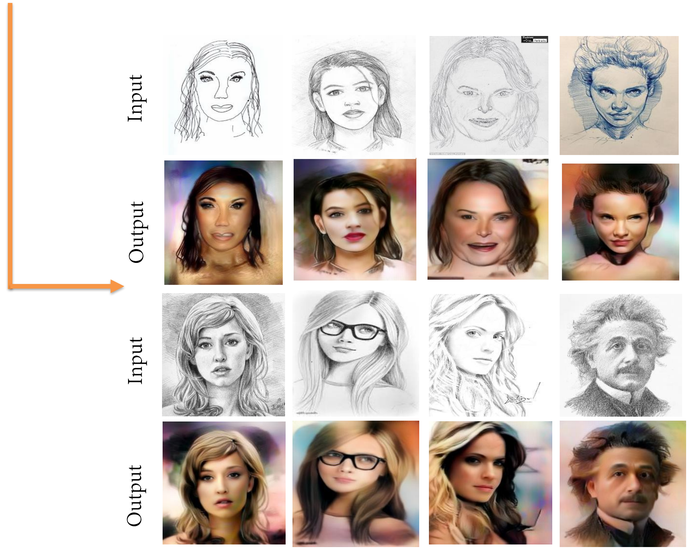
- Overview of our network

Controlling with sketch:

- Sketch based Image editing

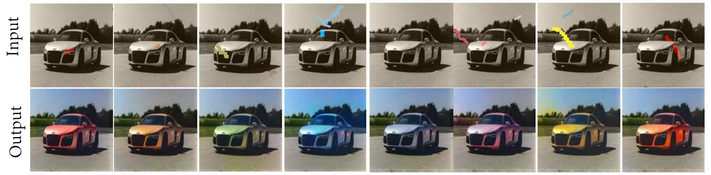


- Data Augmentation
  - Random cropping
  - More sketch styles

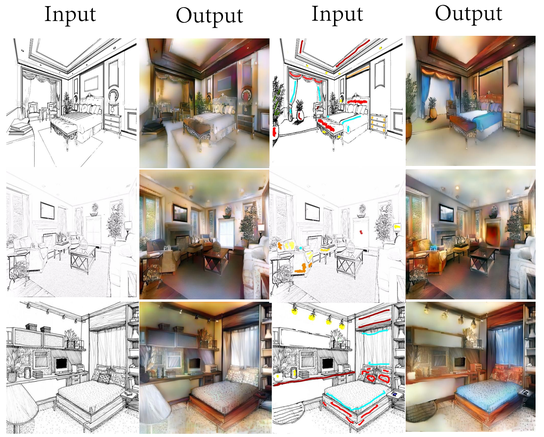


Controlling with color stroke:

- Guided Image Colorization



Controlling with sketch and color stroke:



scribbler.eye.gatech.edu