

Inpainting with SinGANs

Introduction

GANs have attracted a lot of attention thanks to their ability to generate realistic images.

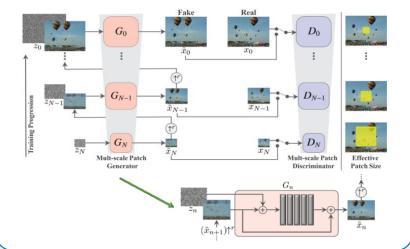
However, they are very hard to train and hence require a great amount of training images, to learn a good representation of features, especially when the images are complex.

SinGAN is a new approach which trains on a single image, using a pyramid of fully convolutional lightweight GANs each responsible for capturing the distribution of patches at different scales.

My project aims at studying the applications of SinGANs and extending them to inpainting ("fill in the box") techniques.

Applications Paint-to-image Rand. Sampling **Editing** Harmonization Style transfer **Animation**

Structure



Next

- Interpolation Bicubic / Bilinear
- User study

Inpainting

Train on cropped image: Fill the box with avg. neighb. color









Regular boxes



Irregular boxes

Harmonization

