

Animated Face Creation using GAN

Group 24

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Goal

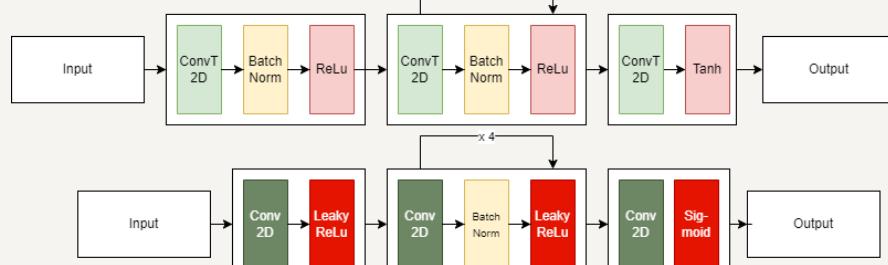
Create a GAN capable of generating animated faces based on the data supplied during training.

Experiments & Architectures

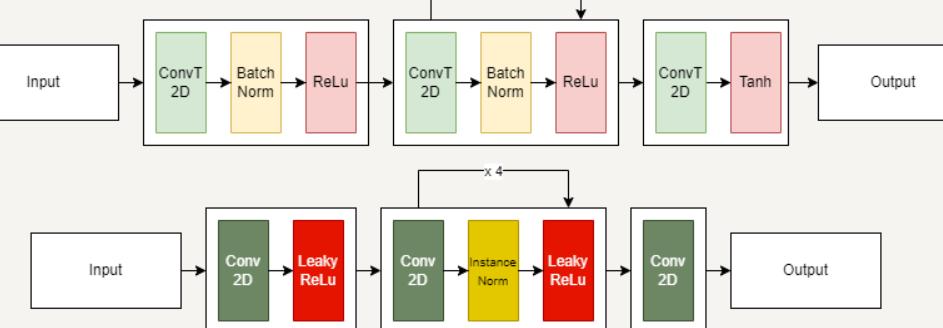
- DCGAN
- DCGAN with Data Augmentation
- WGAN with Gradient Penalty (GP)
- WGAN-GP with Data Augmentation



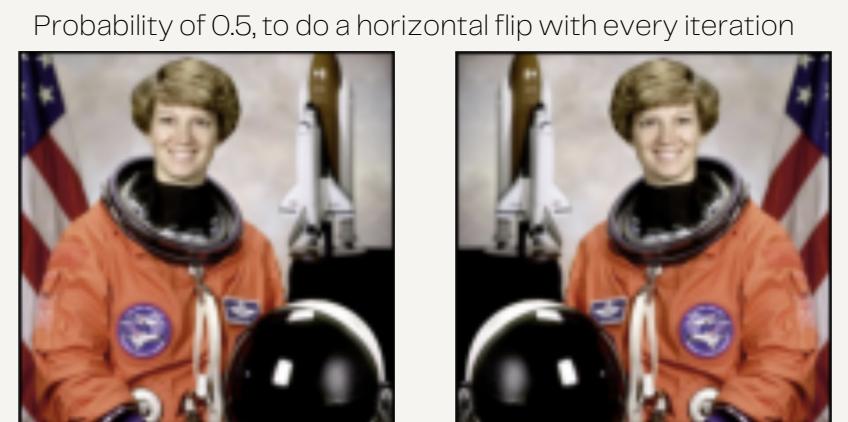
DCGAN Architecture



WGAN Architecture

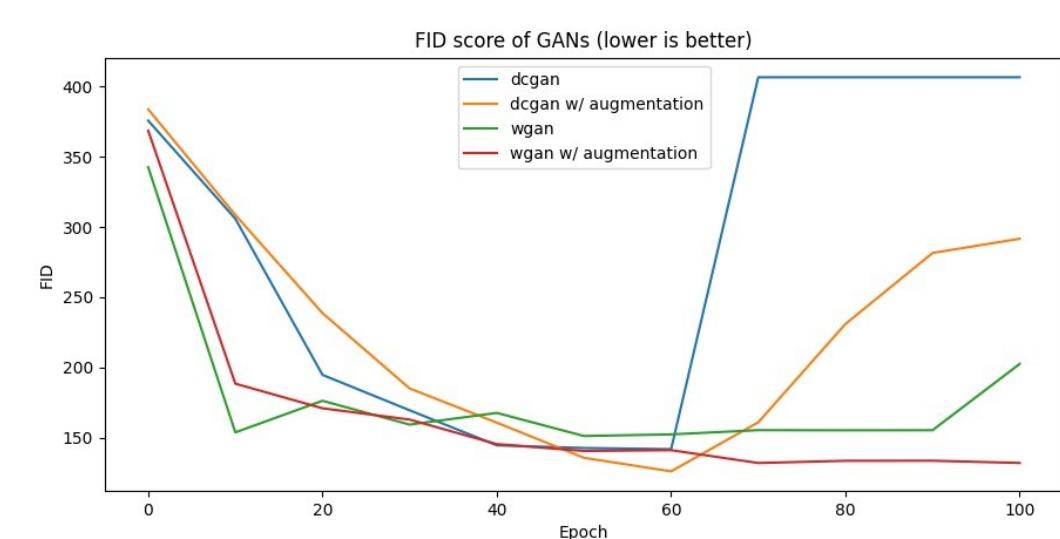


Data Augmentation



Evaluation & Results

The evaluation procedure when comparing all models was conducted by comparing the Fréchet inception distance (**FID**), a standard GAN evaluation metric.



DCGAN Results

Using the DCGAN Architecture, in the images below we can see some differences between minor augmentations in the data



DCGAN



DCGAN with Data Augmentation



WGAN-GP



WGAN-GP with Data Augmentation

