CS597 REPORT 6
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1] Implementing TransGAN: Two Pure Transformers Can Make One Strong GAN, and That Can Scale Up by ViTA group

Repository link: https://github.com/VITA-Group/TransGAN

This repository provides a trained model checkpoint for Cifar10 dataset only. I am currently implementing this repository on my personal machine.

The evaluation results according to the paper are:
↑ - Higher the better
↓ - Lower the better

Datasets	**Inception Score↑**	**FID score↓**
CIFAR-10 (32*32)	9.02 ± 0.12	9.26
STL-10 (48*48)	10.43 ± 0.16	18.28
CelebA (128*128)	--	5.28

I am currently trying to execute this repository. As this implementation is completely based on CUDA architecture. I am replacing all the CUDA dependencies, so that it runs on my machine. Once I get an error free code, I will summarize my Train and Test results in the upcoming reports.

TransGAN's Generator Architecture uses StageBlocks (Blocks) which replace conventional deconvolutional networks. Thus, generating images completely Convolutional layers free. This can be achieved by

We intend to replace Deconvolutional Blocks (Generator_transformer.py) of our implementation and replace that with these Stage blocks. To achieve this, I have added functionalities of TranGAN code to our implementation and tweaking the input and output of all these layers so that consistency has been perceived. I have uploaded the progress of my implementation on Bitbucket repository and continue with the next part of implementation.