Self-Attention GAN

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I. DATASET

II. MODEL STRUCTURE

A. CIFAR10



Fig. 1. CIFAR10 dataset.

A. Generator

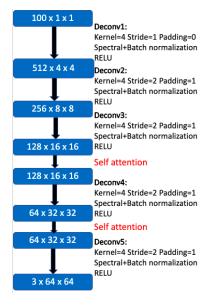


Fig. 3. Generator Structure.

B. CELEBA

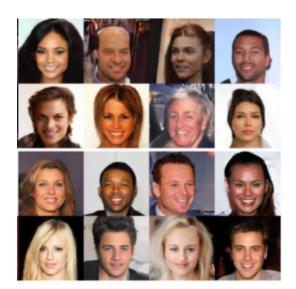


Fig. 2. CELEBA dataset.

B. Discrimnator

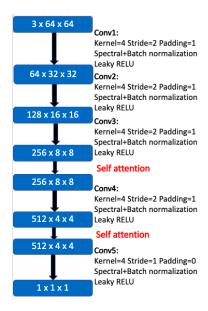


Fig. 4. Discrimnator Structure.

III. EXPERIMENTAL RESULTS

A. CIFAR10

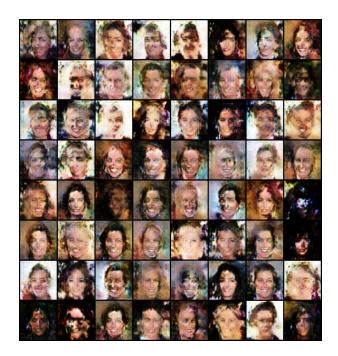


Fig. 5. last step of CIFAR10(total step:50000).



Fig. 7. last step of CELEBA(Sample:400/total step:20000).

B. CELEBA



 $Fig.\ 6.\ last\ step\ of\ CELEBA (Sample: 400/total\ step: 2000).$



 $Fig.\ 8.\ last\ step\ of\ CELEBA (Sample: 4000/total\ step: 2000).$



 $Fig.\ 9.\ last\ step\ of\ CELEBA (Sample: 4000/total\ step: 20000).$

IV. CONCLUSION

In Figure 5, I found that the performance of CIFAR10 is not as well as I predict.In Figure 6-9, I choose different total step and training sample size, the result tells that more sample size get better performance.I also found that the quality of pictures of 4000 samples with 20000 steps is higher than same sample size with 2000 steps.