

CS597 REPORT 5
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1] Evaluation – StyleAttnGAN

Repository link - <https://github.com/sidward14/Style-AttnGAN>

Evaluation on CUB-200-2011 Birds dataset ->

↑ - Higher the better

↓ - Lower the better

Model	FID score ↓	IS score ↑	PPL ↓
StyleAttnGAN	25.60	4.33 ± 0.09	493.7656
AttnGAN	23.98	4.36 ± 0.03	(-)

Results of evaluation run on my machine ->

```
itr_cnt: 2928
ITR_NUM: 0
ITR_NUM: 1
ITR_NUM: 2
ITR_NUM: 3
ITR_NUM: 4
ITR_NUM: 5
ITR_NUM: 6
ITR_NUM: 7
Total time for validation: 6339.70539188385

+++++
Computing FID...
+++++
Resizing real images to that of generated images and then saving into ../data/birds/CUB_200_2011/images/256x256
100%| 1474/1474 [01:17<00:00, 19.13it/s]
Number of generated images to be used in FID calculation: 2928
Number of real images to be used in FID calculation: 11788
41%| 24/59 [09:06<09:34, 16.43s/it]
100%| 59/59 [18:45<00:00, 19.07s/it]
100%| 236/236 [2:51:43<00:00, 43.66s/it]
--> Frechet Inception Distance (FID): 48.595084
```

Examples of caption ->

this bird is red with white and has a very short beak

the bird has a yellow crown and a black eye ring that is round

this bird has a green crown black primaries and a white belly

Generated Images->



[1] Black_Footed_Albatross_0085_92_s-1.png - a gull with rich brown feathers flies over the sea.

[2] Yellow_Billed_Cuckoo_0012_26712_s-1.png - this bird has a white underbelly with brown wings and a grey head leading to an orange bill that curves slightly downward.

[3] Horned_Grebe_0014_34968_s-1.png - black bird with orange feathers around the eyes, grey wings with white stripes and white underneath.