More qualitative results of Data-Efficient Instance Generation from Instance Discrimination

We present more synthesized images of FFHQ with less training images in Fig. A3 and AFHQ in Fig. A1. Moreover, we qualitatively compare against ADA [1] in Fig. A2. Even if the number of training image becomes 2000, our approach remains to produce the photo-realistic images while the artifacts appear on ADA [1].

Cat (5153), FID 2.60 Dog (4739), FID 5.44 Wild life (4738), FID 1.77

Figure A1: Synthesized samples on AFHQ. All images are generated without truncation.

References

[1] T. Karras, M. Aittala, J. Hellsten, S. Laine, J. Lehtinen, and T. Aila. Training generative adversarial networks with limited data. In *Adv. Neural Inform. Process. Syst.*, 2020. 1, 2



Figure A2: Qualitative comparison with ADA [1]. All images are generated with truncation.



Figure A3: Synthesized samples on FFHQ with limited training data. All images are generated with truncation.

Checklist

- 1. For all authors...
 - (a) Do the main claims made in the abstract and introduction accurately reflect the paper's contributions and scope? [Yes]
 - (b) Did you describe the limitations of your work? [Yes]
 - (c) Did you discuss any potential negative societal impacts of your work? [N/A]
 - (d) Have you read the ethics review guidelines and ensured that your paper conforms to them? [Yes]
- 2. If you are including theoretical results...
 - (a) Did you state the full set of assumptions of all theoretical results? [N/A]
 - (b) Did you include complete proofs of all theoretical results? [N/A]
- 3. If you ran experiments...
 - (a) Did you include the code, data, and instructions needed to reproduce the main experimental results (either in the supplemental material or as a URL)? [No] The code will be publicly available once the paper gets accepted.
 - (b) Did you specify all the training details (e.g., data splits, hyperparameters, how they were chosen)? [Yes]
 - (c) Did you report error bars (e.g., with respect to the random seed after running experiments multiple times)? [Yes] All numbers are averaged of three trails.
 - (d) Did you include the total amount of compute and the type of resources used (e.g., type of GPUs, internal cluster, or cloud provider)? [Yes]
- 4. If you are using existing assets (e.g., code, data, models) or curating/releasing new assets...
 - (a) If your work uses existing assets, did you cite the creators? [Yes]
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- 5. If you used crowdsourcing or conducted research with human subjects...
 - (a) Did you include the full text of instructions given to participants and screenshots, if applicable? [N/A]
 - (b) Did you describe any potential participant risks, with links to Institutional Review Board (IRB) approvals, if applicable? [N/A]
 - (c) Did you include the estimated hourly wage paid to participants and the total amount spent on participant compensation? [N/A]