Remotely login:

open FortiClient and connect with Liu account

open Thinlinc, and connect. server:thinlinc.edu.liu.se, user name:yanwa579, Liu password

open terminal in Liu desktop

connect computer assigned by Anders, write: ssh -X -J yanwa579@ssh.edu.liu.se yanwa579@lnx00335.ad.liu.se

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open VS code or terminal and then coding and using the images in data1 folder

activate the environment in vs code: conda activate stylegan3

run a line of code: select the code and then press shift+enter

create a new python file:touch gen\_images.py

delete a python file:rm gen\_images.py

While installing conda stylegan3 env, use

conda config --append envs\_dirs /local/data2/yanwa579/software/stylegan3

Then conda activate stylegan3. Without above commands, one has to type

conda activate /local/data2/yanwa579/software/stylegan3

close assigned computer, write: exit

paste in terminal: Ctrl shift + V

fracture data: in Liu computer/local/data1 folder

go to a file:cd file or cd/file

move up from the current directory:cd ..

count files in a directory: ls -1 | wc -l

To count files in each subfolder: for d in \*/; do echo "$d: $(find "$d" -maxdepth 1 -type f | wc -l)"; done

no model in python: pip install...., even no model:python,view,command palette,select interpreter,python stylegan3

/local/data1/yanwa579/Data/imageswithextraAFF\_anonymized\_8bit

1: go the Scripts stylegan3

2: conda activate stylegan3, if not activate then in home directory write:source .bashrc

3: conda install psutil, only do once

4:python dataset\_tool.py --help

Process the data,train and evaluate:

python dataset\_tool.py --source /local/data1/yanwa579/Data/NFF\_train --dest ~/Work/Scripts/stylegan3/NFFtrain

python train.py --outdir=/local/data2/yanwa579/Results/stylegan3/training-runs/ --cfg=stylegan3-t --data=/home/yanwa579/Work/Scripts/stylegan3/AFFtrain \

--gpus=1 --batch=32 --gamma=2 --batch-gpu=16 --snap=10

python calc\_metrics.py --metrics=kid50k\_full,pr50k3\_full,ppl2\_wend --data=/home/yanwa579/Work/Scripts/stylegan3/AFFtrain --network=/home/yanwa579/Work/tmp/network-snapshot-004000.pkl

Fine-tune the model on my dataset:

python train.py --outdir=local/data1/yanwa579/Results/stylegan3/pretrain\_model/AFF --cfg=stylegan3-r --data=/home/yanwa579/Work/Scripts/stylegan3/AFFtrain\_color --gpus=1 --batch=32 --gamma=2 --snap=5 --resume=https://api.ngc.nvidia.com/v2/models/nvidia/research/stylegan3/versions/1/files/stylegan3-t-ffhqu-256x256.pkl

Generate an image

python gen\_images.py --outdir=/local/data1/yanwa579/Results/stylegan3/pretrain\_model/AFF --trunc=1 --seeds=2 \--network=https://api.ngc.nvidia.com/v2/models/nvidia/research/stylegan3/versions/1/files/stylegan3-t-ffhqu-256x256.pkl

Generate multiple images

python gen\_images.py --outdir=/local/data1/yanwa579/Results/stylegan3/pretrain\_model/AFF --trunc=1 --seeds=0-10 \--network=https://api.ngc.nvidia.com/v2/models/nvidia/research/stylegan3/versions/1/files/stylegan3-t-ffhqu-256x256.pkl

run the model:./run\_nohup.sh

ctrl C to force stop the running code

GitHub push: git status, git add ., git commit -m "your own message about the changes", git push

check the progress of a file: ls -lrt

check the GPU usage: nvidia-smi

check the running the current progress :top

check the run time: ls -lrt

force to delete a file with many folder:rm -r filename -f

delete a file:rm file

kill a process: kill -9 PID

if conda activate XXX does not work, run this command from terminal: source /home/yanwa579/.bashrc

edit a file, three progress in terminal: vi filename, I ,esc:wq, if no change, directly: wq

/local/data1/yanwa579/Results/stylegan3/training-runs

/local/data2/yanwa579/Results/stylegan3/training-runs

/home/yanwa579/Work/Scripts/stylegan3/run.sh

sh run.sh can terminate the running process using Ctrl C

evaluation:

fid50k\_full: Fréchet inception distance, kid50k\_full: Kernel inception distance,

pr50k3\_full: Precision and recall, ppl2\_wend: Perceptual path length

check the image: display filename.png

check the file: vi filename.txt