Prerequisites

- Linux
- Python 3
- CPU or NVIDIA GPU + CUDA CuDNN

Installation

To install pytorch and torchvision

- For pip users, please type the command pip install -r requirements.txt.
- For Conda users, you can create a new Conda environment using conda env create -f environment.yml

Train Model

- First, collect the data set S using the AVIH encryption method. Here is the link of the code https://github.com/suzhigangssz/AVIH
- For dataset formate please follow the link https://github.com/phillipi/pix2pix
- Download the ResNet pre-trained model publicly available link http://ml.cs.tsinghua.edu.cn/~xiaoyang/face_models/ArcFace/model_ir_se50.pth put it inside the ckpts folder.
- To Train master key model G_a , open the terminal and type the following command

  python3 train.py --dataroot ./datasets/train_data --name facades_pix2pix --init_gain 0.01 --model pix2pix --netG resnet_9blocks --batch_size 32 --direction BtoA

To Test Model

- To test the trained model, open the terminal and type the following command:

  python3 test.py --dataroot ./datasets/test_data --name facades_pix2pix --model pix2pix --init_gain 0.01 --netG resnet_9blocks --direction BtoA