

sergiuoprea / hgan

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sergiuoprea Update README.md ...

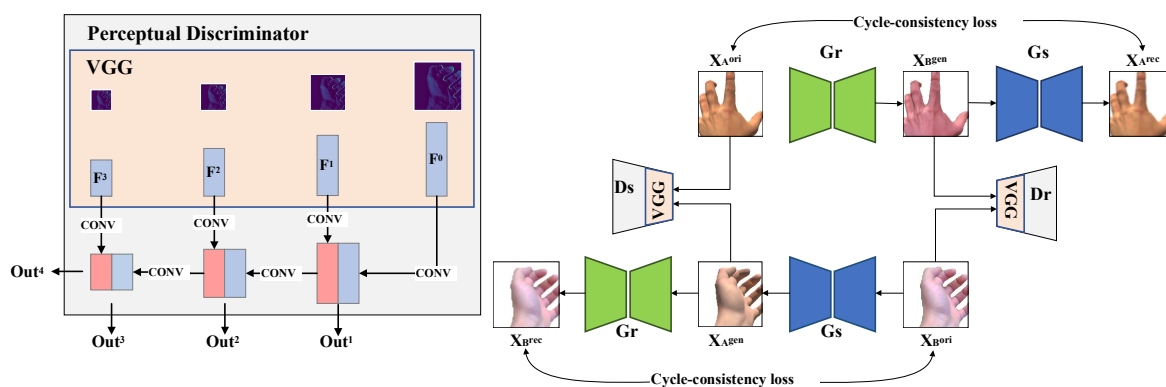
yesterday 74

View code

README.md

HandGAN - The power of GANs in your Hands!

preprint arxiv.2103.15017 IJCNN 2021



Description

HandGAN (H-GAN) is a cycle-consistent adversarial approach designed to translate synthetic images of hands to the real domain. Synthetic hands provide complete ground-truth annotations, yet they do not approximate the underlying distribution of real images of hands. The goal is to bridge the gap between the synthetic and real domain at a distribution level. We strive to provide the perfect blend of a realistic hand appearance with precise synthetic annotations. H-GAN is able to translate synthetic hands so as they appearance shares similarities with images of hands from the real domain. It maintains the hand shape during the translation to ensure the correspondance with the ground-truth annotations.

Feel free to use our HandGAN to level up your synthetic images of hands. Your deep learning-based models are data hungry, so you just need to feed them properly!

How to run

First, install dependencies

```
# clone project
git clone https://github.com/sergiuoprea/hgan.git

# install project
cd hgan
pip install -e .
pip install -r requirements.txt
```

Next, navigate to the code folder.

```
# code folder
cd code

# run main.py
python main.py
```

Publication

[H-GAN: The power of GANs in your Hands](#)

International Joint Conference on Neural Networks (IJCNN) - 2021

Sergiu Oprea, Giorgos Karvounas, Pablo Martínez-González, Nikolaos Kyriazis, Sergio Orts-Escolano, Iason Oikonomidis, Alberto García-García, Aggeliki Tsoli, José García-Rodríguez, and Antonis Argyros

How to cite this work?

If you use HandGAN, please cite:

```
@article{Oprea2021,  
  author = {Sergiu Oprea and Giorgos Karvounas and Pablo  
Martinez{-}Gonzalez and Nikolaos Kyriazis and Sergio Orts{-}Escolano and  
Jason Oikonomidis and Alberto Garcia{-}Garcia and Aggeliki Tsoli and  
Jos{\'}{e} Garc{\'}{\i}a Rodr{\'}{\i}guez and Antonis A. Argyros},  
  title = {{H-GAN:} the power of GANs in your Hands},  
  journal = {CoRR},  
  volume = {abs/2103.15017},  
  year = {2021}  
}
```

Releases

For any inquiries, feel free to create an issue or contact Sergiu Oprea
(soprea@dtic.ua.es).

No releases published

Packages

No packages published

Contributors 2



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Languages

● Python 99.8% ● Dockerfile 0.2%