

# YIFAN JIANG

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## EDUCATION

**The University of Texas at Austin**, Austin, USA 2020 – Present

*Ph. D.* in Electrical and Computer Engineering

Research Interests: Image Processing, Computational Photography, Efficiency, Neural Architecture Search

**Huazhong University of Science and Technology**, Wuhan, China 2015 – 2019

*B.E.* in Electronic Information Engineering, GPA: 3.59/4.0

## PUBLICATION

- [1] **Yifan Jiang**, Zhang He, Jianming Zhang, Yilin Wang, Zhe Lin, Kalyan Sunkavalli, Simon Chen, Sohrab Amirghodsi, Sarah Kong, and Zhangyang Wang. “SSH: A Self-supervised Framework for Image Harmonization”. In: *International Conference on Computer Vision (ICCV)* (2021).
- [2] **Yifan Jiang**, Shiyu Chang, and Zhangyang Wang. “TransGAN: Two Pure Transformers can Make One Strong GAN and That Can Scale Up”. In: *preprint arXiv:2102.07074* (2021).
- [3] Xinyu Gong, Shiyu Chang, **Yifan Jiang**, and Zhangyang Wang. “AutoGAN: Neural Architecture Search for Generative Adversarial Networks”. In: *International Conference on Computer Vision (ICCV)* (2019).
- [4] Yonggan Fu, Zhongzhi Yu, Yongan Zhang, **Yifan Jiang**, Chaojian Li, Yongyuan Liang, Mingchao Jiang, Zhangyang Wang, and Yingyan Lin. “InstantNet: Automated Generation and Deployment of Instantaneously Switchable-Precision Networks”. In: (*DAC*) (2021).
- [5] Tianjian Meng\*, Xiaohan Chen\*, **Yifan Jiang**, and Zhangyang Wang. “A Design Space Study for LISTA and Beyond”. In: *International Conference on Learning Representations (ICLR)* (2021).
- [6] **Yifan Jiang**, Xinyu Gong, Ding Liu, Yu Cheng, Chen Fang, Xiaohui Shen, Jianchao Yang, Pan Zhou, and Zhangyang Wang. “EnlightenGAN: Deep Light Enhancement without Paired Supervision”. In: *Transaction on Image Processing (TIP)* (2020).
- [7] Xi Ouyang\*, Yu Cheng\*, **Yifan Jiang**, Chun-Liang Li, and Pan Zhou. “Pedestrian-Synthesis-GAN: Generating Pedestrian Data in Real Scene and Beyond”. In: *preprint arXiv:1804.02047* (2018).

## RESEARCH EXPERIENCE

**Google Research**, Mountain View, USA May. 2021 – present

Adviser: *Dr. Tianfan Xue*.

- Working on fast image processing tool.

**Adobe**, San Jose, USA May. 2020 – Nov. 2020

Adviser: *Dr. He Zhang and Dr. Jianming Zhang*.

- Designed a self-supervised method for image harmonization that does not require human annotation labels.
- Collected a new dataset for real-world image harmonization benchmark and wrote the paper [1].

**Bytedance AI Lab**, Beijing, China Jan. 2019 – Aug. 2019

Adviser: *Dr. Jianchao Yang and Dr. Xiaohui Shen and Dr. Ding Liu*.

- Designed a jointly image denoising and low-light enhancement algorithm, which will appear in beauty selfie camera app [FaceU](#)

**The University of Texas at Austin**, Austin, TX July. 2020 – Present

Working with *Prof. Zhangyang (Atlas) Wang*

*Research Interests:*

- Generative Models[2, 3].
- Neural Architecture Search [4, 5, 3].
- Computational Photography and Image Processing [6, 1].

**Huazhong University of Science and Technology**, Wuhan, China

May. 2017 – June. 2018

*Research Assistant with Prof. Pan Zhou, Collaborated with Dr. Yu Cheng (Microsoft AI Research)*

*Generating Pedestrian Data in Real Scene*

*July. 2017 – Nov. 2017*

- Designed Pedestrian-Synthesis GAN [7] with a group member, which can generate labeled pedestrian data to support the training of pedestrian detectors such as FastRCNN, SSD, YOLO.
- Conducted experiment to study the effort of data augmentation by adding synthetic pedestrian data to real dataset and testing mAP results.
- Wrote the paper with two group members.

## SKILLS

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- **Programming Languages:** Python, C/C++, Javascript, Java,  $\text{\LaTeX}$  Matlab, Shell
- **Deep Learning & Computer Vision:** Pytorch, Tensorflow, openCV
- **Web Design:** HTML, CSS, Flask, Tornado ,Django
- **Operating Systems:** Linux, Windows, macOS
- **FPGA:** VerilogHDL