

Yangyang Xu

CONTACT INFORMATION

PostDoc of Department of Computer Science, The University of Hong Kong.
Ph.D. of School of Computer Science and Engineering, South China University of Technology.

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RESEARCH INTEREST

My research mainly focuses on **generative models and their applications**, including image&video generation, editing, translation, and super-resolution.
I am also interested in image&video matting, zero&few-shot learning, domain adaptation, and 2D&3D action recognition.

EXPERIENCE & EDUCATION

PostDoc	Dec/2021 - now
The University of Hong Kong, Department of Computer Science	
Supervisor: Prof. Ping Luo	
Researcher (Adjunct)	Jul/2022 - now
Shanghai AI Laboratory	
Leader: Prof. Yu Qiao	
Intern	Sep/2021 - Nov/2021
Tencent, Interactive Entertainment Group, Turing Lab	
Mentor: Dr. Junle Wang	
Ph.D.	Jul/2018 - Aug/2021
South China University of Technology, China	
Supervisor: Prof. Shengfeng He and Prof. Xuemiao Xu	

PUBLICATION

Summary: **CVPR & ICCV (3), IEEE & ACM Transactions (10)**

+ Equal Contribution

- [1] **RIGID: Recurrent GAN Inversion and Editing of Real Face Videos**
Yangyang Xu, Shengfeng He, Kwan-Yee K. Wong, and Ping Luo
IEEE/CVF International Conference on Computer Vision (**ICCV**), 2023.

- [2] **Parsing-Conditioned Anime Translation: A New Dataset and Method**
Zhansheng Li⁺, Yangyang Xu⁺, Nanxuan Zhao, Yang Zhou, Yongtuo Liu, Dahua Lin, and Shengfeng He
ACM Transactions on Graphics (TOG), 2023.
- [3] **High-resolution Face Swapping via Latent Semantics Disentanglement**
Yangyang Xu, Bailin Deng, Junle Wang, Yanqing Jing, Jia Pan, and Shengfeng He
IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2022.
- [4] **From Continuity to Editability: Inverting GANs with Consecutive Images**
Yangyang Xu, Yong Du, Wenpeng Xiao, Xuemiao Xu, and Shengfeng He
IEEE/CVF International Conference on Computer Vision (ICCV), 2021.
- [5] **Self-supervised Matting-specific Portrait Enhancement and Generation**
Yangyang Xu, Zeyang Zhou, and Shengfeng He
IEEE Transactions on Image Processing (TIP), 2022.
DOI: 10.1109/TIP.2022.3194711
- [6] **Pro-PULSE: Learning Progressive Encoders of Latent Semantics in GANs for Photo Upsampling**
Yang Zhou⁺, Yangyang Xu⁺, Yong Du, Qiang Wen, and Shengfeng He
IEEE Transactions on Image Processing (TIP), 2022.
DOI: 10.1109/TIP.2022.3140603
- [7] **Multi-view Face Synthesis via Progressive Face Flow**
Yangyang Xu, Xuemiao Xu, Jianbo Jiao, Keke Li, Cheng Xu, and Shengfeng He
IEEE Transactions on Image Processing (TIP), 2021.
DOI: 10.1109/TIP.2021.3090658
- [8] **Transductive Zero-shot Action Recognition via Visually-connected Graph Convolutional Networks**
Yangyang Xu, Chu Han, Jing Qin, Xuemiao Xu, Guoqiang Han, and Shengfeng He
IEEE Transactions on Neural Networks and Learning Systems (TNNLS), 2020.
DOI: 10.1109/TNNLS.2020.3015848
- [9] **Holistically-Associated Transductive Zero-Shot Learning**
Yangyang Xu, Xuemiao Xu, Guoqiang Han, and Shengfeng He
IEEE Transactions on Cognitive and Developmental Systems (TCDS), 2021.
DOI: 10.1109/TCDS.2021.3049274
- [10] **Invertible Grayscale with Sparsity Enforcing Priors**
Yong Du, Yangyang Xu, Taizhong Ye, Qiang Wen, Chufeng Xiao, Junyu Dong, Guoqiang Han, and Shengfeng He
ACM Transactions on Multimedia Computing Communications and Applications (TOMM), 2021.
DOI: 10.1145/3451993
- [11] **Background Matting via Recursive Excitation**
Junjie Deng⁺, Yangyang Xu⁺, Zeyang Zhou, and Shengfeng He
IEEE International Conference on Multimedia and Expo (ICME), 2022, (Oral).
- [12] **Unsupervised Domain Adaptation via Importance Sampling**
Xuemiao Xu, Hai He, Huaidong Zhang, Yangyang Xu, and Shengfeng He
IEEE Transactions on Circuits and Systems for Video Technology (TCSVT), 2019.
DOI: 10.1109/TCSVT.2019.2963318

- [13] **Deep Texture-Aware Features for Camouflaged Object Detection**
Jingjing Ren, Xiaowei Hu, Lei Zhu, Xuemiao Xu, Yangyang Xu, Weiming Wang, Zijun Deng, and Pheng-Ann Heng
 IEEE Transactions on Circuits and Systems for Video Technology (TCSVT), 2021.
 DOI: 10.1109/TCSVT.2021.3126591
- [14] **Representative Feature Alignment for Adaptive Object Detection**
Shan Xu, Huaidong Zhang, Xuemiao Xu, Xiaowei Hu, Yangyang Xu, Liangui Dai, Pheng-Ann Heng, and Kup-Sze Choi
 IEEE Transactions on Circuits and Systems for Video Technology (TCSVT), 2021.
 DOI: 10.1109/TCSVT.2022.3202094
- [15] **Ensemble One-Dimensional Convolution Neural Networks for Skeleton-Based Action Recognition**
Yangyang Xu, Jun Cheng, Lei Wang, Feng Liu, and Dapeng Tao
 IEEE Signal Processing Letters (SPL), 2018.
 DOI: 10.1109/LSP.2018.2841649
- [16] **Human Action Recognition by Learning Spatio-Temporal Features With Deep Neural Networks**
Lei Wang, Yangyang Xu, Jun Cheng, Jianqin Yin, and Jiaji Wu
 IEEE Access, 2018.
 DOI: 10.1109/ACCESS.2018.2817253
- [17] **DTA: Double LSTM with temporal-wise attention network for action recognition**
Yangyang Xu, Lei Wang, Jun Cheng, and Jiaji Wu
 IEEE International Conference on Computer and Communications. 2017.
 DOI: 10.1109/CompComm.2017.8322825

ACTIVITIES

1. **Reviewer:**
 NeurIPS 2023, SIGGRAPH 2023, ICCV 2023, ICML 2023, CVPR 2023, SIGGRAPH 2022, SIGGRAPH Asia 2022, NeurIPS 2022, ECCV 2022, ICML 2022, CVPR 2022, ICCV 2021, CVPR 2021, AAAI 2021, ECCV 2020, CVPR 2020, P&G 2020.
 IEEE TIP, IEEE TNNLS, Pattern Recognition, Neural Computing, IEEE SPL.
2. **Seminar report:**
 “Graph Convolutional Neural Networks for Zero-shot Action Recognition”, City University of Hong Kong, Hong Kong. Dec/2018
 “Research on Several Problems Based on Generative Adversarial Models”, Tencent, Shenzhen. Nov/2021
 “Image and Video Editing Based on Generative Adversarial Networks”, Shanghai AI Lab, Shanghai. Jun/2022
 “Image and Video Processing using Generative Models”, VITA Lab in EPFL, Remote. Feb/2023
3. **Volunteer:**
 Chinagraph 2018

PROGRAM SKILLS

Proficiency with Python, Matlab, C/C++.