### 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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• Address: Rm P501, Graduate House, The University of Hong Kong,

Pokfulam, Hong Kong.

RESEARCH INTEREST Computer Vision, Generative Models, Image Editing and Transfer Learning

EXPERIENCE PostDoc 2021.12 - Present

The University of Hong Kong, Department of Computer Science

Supervisor: Prof. Ping Luo

*Intern* 2021.09 - 2021.11

Tencent, Interactive Entertainment Group, Turing Lab

Mentor: Dr. Junle Wang

**PUBLICATION** 

Summary: CVPR & ICCV (2), IEEE & ACM Transactions (7)

- \* Corresponding author
- <sup>+</sup> Equal Contribution
  - 1. 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.
  - 2. 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.
  - 3. 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
  - 4. Pro-PULSE: Learning Progressive Encoders of Latent Semantics in GANs for Photo Upsampling

Yang Zhou<sup>+</sup>, Yangyang Xu<sup>+</sup>, Yong Du, Qiang Wen and Shengfeng He\*

IEEE Transactions on Image Processing (TIP), 2022.

DOI: 10.1109/TIP.2022.3140603

5. 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

### 6. 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

### 7. Invertible Grayscale with Sparsity Enforcing Priors

Yong Du, **Yangyang Xu**, Taizhong Ye, Qiang Wen, Chufeng Xiao, Junyu Dong, Guoqiang Han, Shengfeng He\*

ACM Transactions on Multimedia Computing Communications and Applications (TOMM), 2021.

DOI: 10.1145/3451993

### 8. Background Matting via Recursive Excitation

Junjie Deng<sup>+</sup>, **Yangyang Xu**<sup>+</sup>, **Zeyang Zhou and Shengfeng He**\* **IEEE International Conference on Multimedia and Expo (ICME)**, 2022.

### 9. 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

### 10. 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

## 11. 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

### 12. 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

### 13. 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

#### PRE-PRINT

# 1. Self-supervised Matting-specific Portrait Enhancement and Generation Yangyang Xu, Zeyang Zhou, Shengfeng He\* Submitted to IEEE Transactions on Image Processing (TIP), Major revision

2. Parsing-Conditioned Anime Translation: A New Dataset and Method Zhansheng Li<sup>+</sup>, Yangyang Xu<sup>+</sup>, Nanxuan Zhao, Yang Zhou, Yongtuo Liu, Dahua

*Lin and Shengfeng He\* Submitted to ACM Transactions on Graphics (TOG), Major revision* 

- 3. **RIGID:** Recurrent GAN Inversion and Editing of Real Face Videos Yangyang Xu, Shengfeng He, Kwan-Yee K. Wong, Ping Luo Submitted to Thirty-sixth Conference on Neural Information Processing Systems (NeurIPS), 2022
- 4. Open-set Mixed Domain Adaptation via Visual-Linguistic Focal Evolving Bangzhen Liu, Yangyang Xu, Xuemiao Xu, Shengfeng He Submitted to Thirty-sixth Conference on Neural Information Processing Systems (NeurIPS), 2022
- 5. HoliStyle: Discovering Holistic Interpretable Direction for Multi-Attribute Face Editing

Ruihua Zeng<sup>+</sup>, **Yangyang Xu**<sup>+</sup>, Xuemiao Xu\*, Ping Luo and Shengfeng He\* Submitted to ACM MultiMedia (**MM**), 2022

6. Class-aware Global Feature Alignment for Adaptive Object Detection
Shan Xu, Huaidong Zhang, Xuemiao Xu, Xiaowei Hu, Yangyang Xu, Liangui Dai,
Pheng-Ann Heng, Kup-Sze Choi
Submitted to IEEE Transactions on MultiMedia (TMM)

#### **ACTIVITIES**

#### 1. Reviewer:

SIGGRAPH 2022, SIGGRAPH Asia 2022, NeurIPS 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. 2018.12

3. Volunteer:

Chinagraph 2018

### PROGRAM SKILLS

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