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EDUCATION

The University of Hong Kong (HKU), Hong Kong SAR, China

Sep. 2015 – Jan. 2021

Ph.D. Computer Science

- Supervisor: Dr. Kenneth K.Y. Wong
- PhD Dissertation: Face Sketch Synthesis and Face Super Resolution in the Wild with Deep Learning

Huazhong University of Science and Technology (HUST), Wuhan, China

Sep. 2011 – Jun. 2015

B.Eng. Computer Science

- GPA: 92.3/100; Rank: Top 2% out of 300

RESEARCH INTERESTS

Computer Vision: Multi-modal content generation; Real world image restoration and enhancement; Image-to-image translation; 3D-aware image rendering; Face related tasks

RESEARCH/WORKING EXPERIENCE

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| • Postdoctoral research fellow at S-Lab in NTU, working with Prof. Weisi Lin | Sep. 2021 – Present |
| • Research Assistant at GAP Lab CUHKSZ, worked with Prof. Xiaoguang Han | Mar. 2021 – Aug. 2021 |
| • Research Intern at Alibaba DAMO Academy, worked with Prof. Lei Zhang and Dr. Xiaoming Li | Nov. 2019 – Mar. 2021 |
| • Research Visitor at VLLab UC Merced, worked with Prof. Ming-Hsuan Yang | May. 2019 – Oct. 2019 |
| • Research Intern at Tencent AI Lab, worked with Prof. Zhifeng Li and Dr. Dihong Gong | Jun. 2018 – Mar. 2019 |

PUBLICATIONS (GOOGLE SCHOLAR)

Highlight summary: CVPR (1), ICCV (1), ECCV (4), NeurIPS (1), MM (2), AAAI (2), TIP (2) — Orals x3

(# corresponding author, * equal contribution)

Conference Papers

- [1] **[AAAI 2023]** Shuliang Ning*, Mengcheng Lan*, Yanran Li, **Chaofeng Chen**, Qian Chen, Xunlai Chen, Xiaoguang Han, Shuguang Cui. "MIMO Is All You Need: A Strong Multi-In-Multi-Out Baseline for Video Prediction." *Association for the Advancement of Artificial Intelligence (AAAI)*, 2023.
- [2] **[NeurIPS 2022]** Wenqi Yang, Guanying Chen, **Chaofeng Chen**, Zhenfang Chen, Kwan-Yee K. Wong. "S³-NeRF: Neural Reflectance Field from Shading and Shadow under a Single Viewpoint." *Conference on Neural Information Processing Systems (NeurIPS)*, 2022.
- [3] **[ECCV 2022]** Haoning Wu, **Chaofeng Chen**, Jingwen Hou, Liang Liao, Annan Wang, Wenxiu Sun, Qiong Yan, Weisi Lin. "FAST-VQA: Efficient End-to-end Video Quality Assessment with Fragment Sampling." *European Conference on Computer Vision (ECCV)*, 2022.
- [4] **[ECCV 2022]** Wenqi Yang, Guanying Chen, **Chaofeng Chen**, Zhenfang Chen, Kwan-Yee K. Wong. "PS-NeRF: Neural Inverse Rendering for Multi-view Photometric Stereo." *European Conference on Computer Vision (ECCV)*, 2022.
- [5] **[ECCV2022]** Xiaoming Li, **Chaofeng Chen**, Xianhui Lin, Wangmeng Zuo, Lei Zhang. "From Face to Natural Image: Learning Real Degradation for Blind Image Super-Resolution." *European Conference on Computer Vision (ECCV)*, 2022.
- [6] **[MM 2022 Oral]** **Chaofeng Chen***, Xinyu Shi*, Yipeng Qin, Xiaoming Li, Tao Yang, Xiaoguang Han, Shihui Guo. "Real-World Blind Super-Resolution via Feature Matching with Implicit High-Resolution Priors." *ACM Multimedia*, 2022.
- [7] **[MM 2022 Oral]** Liang Liao, Kangmin Xu, Haoning Wu, **Chaofeng Chen**, Wenxiu Sun, Qiong Yan, Weisi Lin. "Exploring the Effectiveness of Video Perceptual Representation in Blind Video Quality Assessment." *ACM Multimedia*, 2022.
- [8] **[ICIP 2022]** Shaozhe Hao, **Chaofeng Chen**, Zhenfang Chen, Kwan-Yee K. Wong. "A Unified Framework for Masked and Mask-Free Face Recognition via Feature Rectification." *IEEE International Conference on Image Processing (ICIP)*, 2022.
- [9] **[ICCV 2021]** Guanying Chen, **Chaofeng Chen**, Shi Guo, Zhetong Liang, K.-Y. K. Wong, Lei Zhang. "HDR Video Reconstruction: A Coarse-to-fine Network and A Real-world Benchmark Dataset." *International Conference on Computer Vision (ICCV)*, 2021.
- [10] **[CVPR 2021]** **Chaofeng Chen**, Xiaoming Li, Lingbo Yang, Xianhui Lin, Lei Zhang, Kwan-Yee K. Wong. "Progressive Semantic-Aware Style Transformation for Blind Face Restoration." *Computer Vision and Pattern Recognition (CVPR)*, 2021.

- [11] [ECCV 2020] Xiaoming Li, **Chaofeng Chen**, Shangchen Zhou, Xianhui Lin, Wangmeng Zuo, Lei Zhang. “Blind Face Restoration via Deep Multi-scale Component Dictionaries.” *European Conference on Computer Vision (ECCV)*, 2020.
- [12] [ACCV 2018] **Chaofeng Chen**, Liu Wei, Xiao Tan, K.-Y. K. Wong. “Semi-Supervised Learning for Face Sketch Synthesis in the Wild.” *Asia Conference on Computer Vision (ACCV)*, 2018.
- [13] [ACCV 2018] Wei Liu, **Chaofeng Chen**, K.-Y. K. Wong. “SAFE: Scale Aware Feature Encoder for Scene Text Recognition.” *Asia Conference on Computer Vision (ACCV)*, 2018.
- [14] [WACV 2018] **Chaofeng Chen***, Xiao Tan*, K.-Y. K. Wong. “Face Sketch Synthesis with Style Transfer using Pyramid Column Feature.” *Winter Conference on Applications of Computer Vision (WACV)*, 2018.
- [15] [AAAI 2018 Oral] Wei Liu, **Chaofeng Chen**, K.-Y. K. Wong. “Char-Net: A Character-Aware Neural Network for Distorted Scene Text Recognition.” *AAAI Conference on Artificial Intelligence (AAAI)*, 2018.
- [16] [BMVC 2016] Wei Liu, **Chaofeng Chen**, K.-Y. K. Wong, Z. Su and J. Han. “STAR-Net: A SpaTial Attention Residue Network for Scene Text Recognition.” *British Machine Vision Conference (BMVC)*, 2016.

Journal Papers

- [17] [TCSVT 2023] Haoning Wu, **Chaofeng Chen**, Liang Liao, Jingwen Hou, Wenxiu Sun, Qiong Yan, Weisi Lin. “DisCoVQA: Temporal Distortion-Content Transformers for Video Quality Assessment.” *IEEE Transactions on Circuits and Systems for Video Technology (TCSVT)*, 2023.
- [18] [TIP 2023] Wenqi Yang, Zhenfang Chen, **Chaofeng Chen**, Guanying Chen, Kwan-Yee K. Wong. “Deep Face Video Inpainting via UV Mapping.” *IEEE Transactions on Image Processing (TIP)*, 2023.
- [19] [TIP 2020] **Chaofeng Chen**, Dihong Gong, Hao Wang, Zhifeng Li, Kwan-Yee K. Wong. “Learning Spatial Attention for Face Super-Resolution.” *IEEE Transactions on Image Processing (TIP)*, 2020.

PROFESSIONAL ACTIVITIES

- Conference Reviewer
 - IEEE Conference on Computer Vision and Pattern Recognition (CVPR)
 - International Conference on Computer Vision (ICCV)
 - European Conference on Computer Vision (ECCV)
 - Association for the Advancement of Artificial Intelligence (AAAI)
 - ACM International Conference on Multimedia (ACM MM)
- Journal Reviewer
 - IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)
 - IEEE Transactions on Image Processing (TIP)
 - IEEE Transactions on Multimedia (TMM)
 - IEEE Transactions on Circuits and Systems for Video Technology (TCSVT)
 - Elsevier Journal of Neurocomputing (Neurocomputing)

TEACHING EXPERIENCE

- Teaching Assistant at Department of Computer Science, HKU
 - COMP3317 Computer Vision Spring, 2017 – 2018
 - COMP2396 Object-Oriented Programming and Java Fall, 2016 – 2017
 - COMP2396 Object-Oriented Programming and Java Spring, 2015 – 2016

HONORS AND AWARDS

- Hong Kong PhD Fellowship (*HKPF, Highest Distinction in Hong Kong*) 2015 – 2018
- National Scholarship (*Top Distinction in China*) 2013 – 2014
- National Encouragement Scholarship (*Top Distinction in China*) 2012 – 2014
- Excellent Student for Academic Performance of Qiming College (*Top Distinction in HUST*) 2012 – 2013

SKILLS

- Programming in: Python, C/C++, Java, Matlab
- Language: Mandarin (native speaker), English (working proficiency)
- Tools: PyTorch, LaTeX, OpenCV, Linux, Vim, Git, etc.