Chen Chaofeng

CB411, Chow Yei Ching Building, The University of Hong Kong, Pokfulam Road, Hong Kong Homepage: chaofengc.github.io E-mail: chaofenghust@gmail.com Phone(HK): +852 92077137 Phone(CN): +86 13244706899



RESEARCH Interests Computer Vision: Low-level and physics-based vision, including super resolution, style transfer and GAN based image synthesis; Face Analysis, including face sketch synthesis and face recognition; 3D Vision, such as Neural Radiance Field (NeRF). **Deep Learning**, including CNN, GAN, Transformer, Implicit field

EDUCATION

The University of Hong Kong (HKU)

Hong Kong SAR, China

Ph.D. Computer Science

Sep, 2015 - Jan, 2021

WuHan, China

• Supervisor: Dr. Kenneth K.Y. Wong

Huazhong University of Science and Technology (HUST)

B.Eng., Computer Science Sep, 2011 - June, 2015

• Thesis: Salient Region Detection and Scene Classification.

• GPA 4.0/4.0 (92.3/100), top 1% of 300

RESEARCH EXPERIENCE

DAMO Academy, Alibaba

Nov. 2019 - Present

Research Internship, Artificial and Intelligence Center

Supervisor: Prof. Lei Zhang

• Project: Face restoration and video enhancement.

University of California, Merced

May, 2019 - Sep, 2019

Research Student Visitor, Vision and Learning Lab

Supervisor: Prof. Ming-Hsuan Yang

• Project: Photo-realistic face generation with GAN.

Tencent AI Lab

June, 2018 - Apr, 2019

Research Internship

Supervisor: Prof. Zhifeng Li

• Project 1: Face super resolution based on spatial attention.

• Project 2: Occluded face recognition through occlusion removal.

The University of Hong Kong

Jul, 2014 - Aug, 2014

Research Internship, Dept. of Computer Science

Supervisor: Dr. Kenneth K.Y. Wong

• Project: Object detection and 2D-3D alignment by silhouette matching.

Huazhong University of Science and Technology

Mar, 2013 - Nov, 2014

Student Innovation Project

Supervisor: Professor Enming Song

• Project: Stereo Matching with Adaptive Windows.

Publications

1. **Chaofeng Chen**, Xiaoming Li, Lingbo Yang, Xianhui Lin, Lei Zhang, Kwan-Yee K. Wong. Progressive Semantic-Aware Style Transformation for Blind Face Restoration. *ArXiv preprint arXiv:2009.08709*, 2020. (Under review of CVPR2021)

2. **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.

- 3. 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.
- 4. 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.
- 5. Wei Liu, **Chaofeng Chen**, K.-Y. K. Wong. SAFE: Scale Aware Feature Encoder for Scene Text Recognition. Asia Conference on Computer Vision (ACCV), 2018.
- 6. 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. (* equal contribution)
- 7. 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. **Oral Presentation**
- 8. 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.

AWARDS

Student Awards — The University of Hong Kong

• Hong Kong PhD Fellowship (HKPF, Highest Distinction in Hong Kong) 2015 – 2018

Student Awards — Huazhong University of Science and Technology 2013 – 2014

• National Encouragement Scholarship (Top Distinction in China)

2012 - 2013

- Excellent Student for Academic Performance of Qiming College (Top Distinction in HUST)
- Merit Student Title of Huazhong University of Science and Technology (Top Distinction in HUST)
- National Encouragement Scholarship (Top Distinction in China)

2011 - 2012

- National Scholarship (Top Distinction in China)
- Merit Student Title of Huazhong University of Science and Technology (Top Distinction in HUST)

TEACHING EXPERIENCE

The University of Hong Kong

Department of Computer Science, Teaching Assistant

COMP3317 Computer Vision
COMP2396 Object-Oriented Programming and Java

• COMP2396 Object-Oriented Programming and Java

Spring, 2015 – 16 Fall, 2016 – 17

Spring, 2017 - 18

TECHNICAL SKILLS

- Programming in: Python, C/C++, Java, Matlab
- Language: Mandarin (native speaker), English (working proficiency)
- Others: PyTorch, Keras, Theano, LaTeX, OpenCV, etc