Kangfu **MEI**

(+86) 13065123348 | kangfumei@link.cuhk.edu.cn | kfmei.page | MKFMIKU | Google Scholar

Summary

My topics of interest include computer vision, computational photography, and machine learning. I'm particularly interested in Scene (2D and 3D) Synthesis and Understanding. I'm familiar in Python and JavaScript, and have contributed code to PyTorch and other open-source projects.

Education

The Chinese University of Hong Kong, Shenzhen *Shenzhen*

Computer Information Engineering - Master of Philosophy (GPA: 3.3/4) *Sep. 2019 - Jun. 2021*

- Funded by Shenzhen Institute of Artificial Intelligence and Robotics for Society, and Robotics

Jiangxi Normal University *Nangchang*

Computer Science and Technology - Bachelor (GPA: 3.4/4) GRADUATED WITH HIGH DISTINCTION *Sep. 2015 - Jun. 2019*

- 2015-2016 University Scholarship / China Telecommunications Scholarship

Experience

DAMO Academy, Alibaba-Group (阿里巴巴达摩院)

Research Intern *Jul. 2020 - 2021*

- Working on the research of old film enhancement with limited data. Under Prof. Lei Zhang (FIEEE).

Kwai Technology (快手)

Image Algorithm Engineer Intern *Jul. 2018 - Jun. 2019*

- Worked on improving the photography capability of low-quality mobile cameras by Deep Learning. The final output was turned into the practical application for daily usage in KuaiShou APP.

JD.COM, Inc (京东)

Software Architecture Engineer Intern *Jul. 2017 - Nov. 2017*

- Worked on Intelligent Poster Generation System as a front-end software engineer. p.s. I was a second year bachelor student at that time.

Selected Publications

Disentangle Perceptual Learning through Online Contrastive Learning (arXiv)

KANGFU MEI, Yao Lu, Qiaosi Yi, Haoyu Wu, Juncheng Li, Rui Huang* *2021*

Semantic Similarity Measurement for Scene Restoration and Understanding (TIP under review)

KANGFU MEI, Rui Huang* *2021*

AttaNet: Attention-Augmented Network for Fast and Accurate Scene Parsing (AAAI)

QI SONG, KANGFU MEI, RUI HUANG* *2021*

MDCN: Multi-scale Dense Cross Network for Image Super-Resolution (TCSVT)

Juncheng Li, Faming Fang*, Jiaqian Li, KANGFU MEI, Guixu Zhang *2020*

HighEr-Resolution Network for Image Demosaicing and Enhancing (ICCV Workshop)

KANGFU MEI, Juncheng Li, Jiajie Zhang, Haoyu Wu, Jie Li, Rui Huang* *2019*

Residual Refine based Pseudo Multi-frame Network for Effective Single Image Super Resolution (IET IMAGE PROCESSING)

KANGFU MEI, AIWEN JIANG*, JUNCHENG LI, JIHUA YE, MINGWEN WANG *2018*

Progressive Feature Fusion Network for Realistic Image Dehazing (ACCV)

KANGFU MEI, AIWEN JIANG*, JUNCHENG LI, JIHUA YE, MINGWEN WANG *2018*

Multi-Scale Residual Network for Image Super-Resolution (ECCV)

JUNCHENG LI, FAMING FANG*, KANGFU MEI, GUIXU ZHANG *2018*

Research

Connections Exploration between The Image Restoration and Understanding

Leader *Jul. 2018 - Present*

- In this research, my works mainly focus on improving the performance low-level vision tasks, e.g., super-resolution, de-hazing, and enlighten with high-level vision features. As well as improving the high-level vision tasks, i.e., semantic segmentation on restored degraded scenes with image enhancement technologies. Outputs are submitted to TIP, CVPR, ICME for peer review now.

Honors & Awards

International

2019	**1st Place**, Advances in Image Manipulation Challenges (RAW2RGB) in conjunction with ICCV 2019	*Seoul, Korea*
2019	**Oral**, Learning for Computational Imaging (LCI) Workshop in conjunction with ICCV 2019	*Seoul, Korea*
2018	**6th Place and Honorable Mention Award**, NTIRE-CVPR 2018 (Dehazing)	*Salt Lake City, U.S.A*

Domestic

2019	**4th Place and Geek Award**, Alibaba-Youku Video Enhancement and Super Resolution Challenge (4/1514)	*Hangzhou, China*
2018	**3rd Place**, Single Image Dehazing Challenge in conjunction with ChinaMM 2018	*Xian, China*
2018	**Gold Award & Best innovative Award**, University Programming Challenge in Pearl River Delta (1/3000~)	*Macau, China*
2017	**24th Place**, JD.COM Potential User Prediction (24/4240)	*Beijing, China*
2016	**2nd Award**, National Computer Program Design Challenge	*Shanghai, China*

Academic Service

- Reviewer, IJCV/TCSVT/CVIU/SPL