Kangfu Mei

Department of Electrical and Computer Engineering
Whiting School of Engineering
Johns Hopkins University

kmei1@jhu.edu
+1 443 240 5261
Homepage
Google Scholar

EDUCATION

Ph.D.	Johns Hopkins University	2021-2025
M.S.	The Chinese University of Hong Kong, Shenzhen	2019-2021
B.S.	Jiangxi Normal University	2015-2019

INTERNSHIPS

2024/06– 24/08	Google Research, USA Research Intern, working on generative models
2023/06– 24/04	Google Research, USA Student Researcher, working on generative models
2022/06–22/11	Adobe Research, USA Research Intern, worked on generative restoration
2020/06–20/11	DAMO Academy, Alibaba-Group, China Research Intern, worked on automatic old film reparation algorithms.
2018/07–19/05	Kwai Technology, China Image Algorithm Engineer Intern, mobile camera quality engineer.
2017/07–17/11	JD.COM, China Software Architecture Engineer Intern, Javascript, CSS, and HTML

RESEARCH AREAS

Generative Models

Computational Photography and Imaging

GRANTS AND AWARDS

Awards and Honors

2019	First place, Advances in Image Manipulation Challenges (RAW2RGB) in ICCV 2019
2019	6-th, New Trends in Image Restoration and Enhancement (Dehazing) in CVPR 2018

Fellowships

2021–22	Johns Hopkins University, PhD Fellowships
2019–21	The Chinese University of Hong Kong, Shenzhen, Research Assitant Fellowships

PUBLICATIONS

Preprints

2024 **Mei, K.**, Tu, Z., Delbracio, M., Talebi, H., Patel, V.M., & Milanfar, P. " Bigger is not Always Better: Scaling Properties of Latent Diffusion Models" CVPR24 EDGE Workshop && Under review [arXiv]

2024 **Mei, K.**, Mo, Zhou., & Patel, V. M. "T1: Scaling Diffusion Probabilistic Fields to High-Resolution on Unified Visual Modalities" Under review [arXiv]

Journal Articles

2023 **Mei, K.**, & Patel, V. M. "LTT-GAN: Looking Through Turbulence by Inverting GANs." *IEEE Journal of Selected Topics in Signal Processing (JSTSP).* [arXiv] [Impact Factor: 7.695]

2020 Li, J., Fang, F., Li, J., **Mei, K.**, & Zhang, G."MDCN: Multi-scale dense cross network for image super-resolution." *IEEE Transactions on Circuits and Systems for Video Technology (TCSVT).* [arXiv] [Impact Factor: 5.859]

Conference Proceedings

2024 **Mei, K.**, Delbracio, M., Talebi, H., Tu, Z., Patel, V.M., & Milanfar, P. "CoDi: Conditional Diffusion Distillation for Higher-Fidelity and Faster Image Generation" *Conference on Computer Vision and Pattern Recognition (CVPR).*

2024 **Mei, K.**, Luis, L., Lin, Z., Ding, Z., Scott, C., & Patel, V. M. "Latent Feature-Guided Diffusion Models for Shadow Removal" *Winter Conference on Applications of Computer Vision (WACV).*

2023 **Mei, K.**, & Patel, V. M. "VIDM: Video Implicit Diffusion Models." *AAAI Conference on Artificial Intelligence (AAAI).* [arXiv] [Oral]

2022 **Mei, K.**, Patel, V. M., & Huang, R. "Deep Semantic Statistics Matching (D2SM) Denoising Network." *European Conference on Computer Vision (ECCV).* [arXiv]

2021 **Mei, K.**, Ye, S., & Huang, R. "SDAN: Squared Deformable Alignment Network for Learning Misaligned Optical Zoom." *International Conference on Multimedia and Expo (ICME).* [arXiv]

2021 Song, Q., **Mei, K.**, & Huang, R. "AttaNet: Attention-Augmented Network for Fast and Accurate Scene Parsing." *AAAI Conference on Artificial Intelligence (AAAI).* arXiv

2019 **Mei, K.**, Li, J., Zhang, J., Wu, H., Li, J., & Huang, R. "Higher-resolution network for image demosaicing and enhancing." *International Conference on Computer Vision Workshop (ICCVW).* [arXiv]

2018 Li, J., Fang, F., **Mei, K.**, & Zhang, G. "Multi-scale Residual Network for Image Super-Resolution." *European Conference on Computer Vision (ECCV).* OpenAccess

2018 **Mei, K.**, Jiang, A., Li, J., & Wang, M. "Progressive feature fusion network for realistic image dehazing." *Asian Conference on Computer Vision (ACCV).* [arXiv]

SERVICE

Academic Journal Peer Review

International Journal of Computer Vision (IJCV)

IEEE Transactions on Image Processing (TIP)

IEEE Transactions on Multimedia (TMM)

IEEE Transactions on Circuits and Systems for Video Technology (TCSVT)

Computer Vision and Image Understanding (CVIU)

Academic Conference Peer Review

CVPR, ICCV, ECCV, WACV, AAAI, …

REFERENCES

JHU

Vishal M. Patel — mailto: vpatel36@jhu.edu

Google

Mauricio Delbracio — mailto: mdelbra@google.com

Peyman Milanfar — mailto: milanfar@google.com

Updated June 2024