Kangfu Mei

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EDUCATION

Ph.D.   Electrical and Computer Engineering, JHU, Baltimore, USA, 2021-

M.S.   Computer and Information Engineering, CUHK, Shenzhen, China, 2019-2021

B.S.   Computer Science and Technology, JXNU, Nangchang, China, 2015-2019

INTERNSHIPS

2022–   Adobe Research, USA
          Research Intern, working on shadow removal projects

2020–21   DAMO Academy, Alibaba-Group, China
          Research Intern, worked on automatic old film reparation algorithms with generative methods

2018–19   Kwai Technology, China
          Image Algorithm Engineer Intern, worked on algorithms for improving the low-quality
          mobile cameras with Deep Learning.

2017–18   JD.COM, China
          Software Architecture Engineer Intern

RESEARCH AREAS

Computational Photography

Generative Models

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–   Johns Hopkins University, PhD Fellowships

2019–21   The Chinese University of Hong Kong, Shenzhen, Research Assitant Fellowships

PUBLICATIONS

Journal Articles

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

Conference Proceedings

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

2022   Nair, N. G., Mei, K., & Patel, V. M. "AT-DDPM: Restoring Faces degraded by Atmospheric Turbulence using Denoising Diffusion Probabilistic Models." *Winter Conference on Applications of Computer Vision (WACV).* arXiv

2021   Mei, K., Ye, S., & Huang, R. "SDAN: Squared Deformable Alignment Network for Learning Misaligned Optical Zoom." *IEEE 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 (ICCV).* 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

Preprints

2022   Mei, K., & Patel, V. M. "VIDM: Video Implicit Diffusion Models." Under review

2022   Mei, K., Nair, N. G., & Patel, V. M. "Bi-Noising Diffusion: Towards Conditional Diffusion Models with Generative Restoration Priors" Under review

2022   Mei, K., Luis, L., Lin, Z., Ding, Z., Scott, C., & Patel, V. M. "ShadowDiffuser: On the Intrinsic Image Modeling from Shadows for Diffusional Removal" Under review

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

Computer Vision and Pattern Recognition Conference (CVPR)

European Conference on Computer Vision (ECCV)

Winter Conference on Applications of Computer Vision (WACV)

AAAI Conference on Artificial Intelligence (AAAI)

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