

Kangfu Mei

CONTACT	1600 Amphitheatre Pkwy Mountain View, CA 94043 United States	Tel: (+1) 443-240-5261 Email: mikumkf@gmail.com
CURRENT	<ul style="list-style-type: none">Google Research Research Scientist <i>Work responsibilities:</i> 1. develop large-scale text2image model. 2. design high-quality multimodal conditioned image & video generation 3. efficient diffusion sampling	Mountain View, CA 94043 2024 - current
INTERESTS	<ul style="list-style-type: none">Image & Video Generation with Diffusion ModelsMultimodal Large Language Vision Models and Applications	
EXPERIENCE	<ul style="list-style-type: none">Google Research Student ResearcherAdobe Research, Research Engineering and Design Lab (RED) Research InternAlibaba-Group, DAMO Academy Research InternKwai Technology Imaging Algorithm Engineer Intern	Mountain View, CA 05/2023 - 2024 San Jose, CA 05/2022 - 11/2022 Shenzhen, China 06/2020 - 11/2020 Beijing, China 07/2018 - 05/2019
EDUCATION	<ul style="list-style-type: none">Johns Hopkins University <i>Ph.D.</i> Department of Electrical and Computer EngineeringThe Chinese University of Hong Kong <i>M.Phil.</i> School of Science and EngineeringJiangxi Normal University <i>B.Eng.</i> School of Computer Science and Engineering	Baltimore, MD 09/2021 - 01/2025 Shenzhen, China 09/2019 - 06/2021 Nanchang, China 09/2015 - 06/2019
PUBLICATIONS	Google Scholar Profile: https://scholar.google.com/citations?user=e_nu_TIAAAAJ&hl=en (Jan 2025) Citations: 1803 H-Index: 14	
	CONFERENCE PAPERS: (1 ICLR, 2 CVPR, 2 ECCV, 2 AAAI, 2 WACV, 1 ACCV)	
[PDF]	[C01] Kangfu Mei, Hossein Talebi, Mojtaba Ardakani, Vishal M. Patel, Peyman Milanfar, Mauricio Delbracio. “ <i>The Power of Context: How Multimodality Improves Image Super-Resolution</i> ” IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2025.	
[arXiv]	[C02] Kangfu Mei, Mo Zhou, Vishal M. Patel. “ <i>Field-DiT: Diffusion Transformer on Unified Video, 3D, and Game Field Generation</i> ” International Conference on Learning Representations (ICLR), 2025.	

- [PDF] [arXiv] [Github] [C03] Kangfu Mei, Mauricio Delbracio, Hossein Talebi, Zhengzhong Tu, Vishal M Patel, Peyman Milanfar. “*CoDi: Conditional Diffusion Distillation for Higher-Fidelity and Faster Image Generation*” IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2024.
- [PDF] [arXiv] [Github] [C04] Kangfu Mei, Luis Figueroa, Zhe Lin, Zhihong Ding, Scott Cohen, Vishal M. Patel. “*Latent Feature-Guided Diffusion Models for Shadow Removal*” IEEE/CVF Winter Conference on Applications of Computer Vision (WACV), 2024.
- [PDF] [arXiv] [Github] [C05] Kangfu Mei, Vishal M Patel. “*VIDM: Video Implicit Diffusion Models*” AAAI Conference on Artificial Intelligence (AAAI), Oral, 2023.
- [PDF] [arXiv] [Github] [C06] Nithin Gopalakrishnan Nair, Kangfu Mei, Vishal M Patel. “*AT-DDPM: Restoring Faces degraded by Atmospheric Turbulence using Denoising Diffusion Probabilistic Models*” IEEE/CVF Winter Conference on Applications of Computer Vision (WACV), 2023.
- [PDF] [arXiv] [Github] [C07] Kangfu Mei, Vishal M Patel, Rui Huang. “*Deep Semantic Statistics Matching (D2SM) Denoising Network*” European Conference on Computer Vision (ECCV), 2022.
- [PDF] [arXiv] [Github] [C08] Kangfu Mei, Shenglong Ye, Rui Huang. “*SDAN: Squared Deformable Alignment Network for Learning Misaligned Optical Zoom*” IEEE International Conference on Multimedia and Expo (ICME), 2021.
- [PDF] [arXiv] [Github] [C09] Qi Song, Kangfu Mei, Rui Huang. “*AttaNet: Attention-augmented network for fast and accurate scene parsing*” AAAI conference on artificial intelligence (AAAI), 2021.
- [PDF] [Github] [C010] Juncheng Li, Yiting Yuan, Kangfu Mei, Faming Fang. “*Lightweight and Accurate Recursive Fractal Network for Image Super-Resolution*” IEEE/CVF International Conference on Computer Vision Workshop (ICCVW), 2019.
- [PDF] [C011] Kangfu Mei, Juncheng Li, Jiajie Zhang, Haoyu Wu, Jie Li, Rui Huang. “*Higher-resolution network for image demosaicing and enhancing*” IEEE/CVF International Conference on Computer Vision Workshop (ICCVW), 2019.
- [PDF] [Github] [C012] Juncheng Li, Faming Fang, Kangfu Mei, Guixu Zhang. “*Multi-scale Residual Network for Image Super-Resolution*” European Conference on Computer Vision (ECCV), 2018.
- [PDF] [Github] [C013] Kangfu Mei, Aiwen Jiang, Juncheng Li, Mingwen Wang. “*Progressive feature fusion network for realistic image dehazing*” Asian Conference on Computer Vision (ACCV), 2018.

JOURNAL ARTICLES:

(1 JSTSP, 1 TCSVT, 1 TMLR)

- [arXiv] [J01] Kangfu Mei, Zhengzhong Tu, Mauricio Delbracio, Hossein Talebi, Vishal M. Patel, Peyman Milanfar. “*Bigger is not Always Better: Scaling Properties of Latent Diffusion Models*” Transactions on Machine Learning Research (TMLR), 2025.
- [PDF] [arXiv] [J02] Kangfu Mei, Vishal M. Patel. “*Ltt-gan: Looking through turbulence by inverting gans*” IEEE Journal of Selected Topics in Signal Processing (JSTSP), 2023.

[PDF] [arXiv]

[J03] Juncheng Li, Faming Fang, Jiaqian Li, Kangfu Mei, Guixu Zhang. “*MDCN: Multi-scale Dense Cross Network for Image Super-Resolution*” IEEE Transactions on Circuits and Systems for Video Technology (TCSVT), 2020.

ACTIVITIES

- Reviewer of International Conferences
 - IEEE Conf. on Computer Vision and Pattern Recognition (CVPR) 2020 – 2024
 - International Conf. on Computer Vision (ICCV) 2021 – 2023
 - European Conf. on Computer Vision (ECCV) 2020 – 2024
 - AAAI Conf. on Artificial Intelligence (AAAI) 2021 – 2022
 - Winter Conf. on Applications of Computer Vision (WACV) 2021 – 2024
 - Asian Conf. on Computer vision (ACCV) 2018 – 2024
- Reviewer of International Journals
 - IEEE Trans. on Neural Networks and Learning Systems (TNNLS) 2022
 - IEEE Trans. on Circuits and Systems for Video Technology (TCSVT) 2022
 - IEEE Trans. on Image Processing (TIP) 2022
 - IEEE Trans. on Multimedia (TMM) 2023
 - International Journal of Computer Vision (IJCV) 2023 – 2024
 - Computer Vision and Image Understanding (CVEU) 2021 – 2022

PRESENTATIONS

Deep Generative Models and Computational Photography, Luma Seminar, Google. (Jun 2023)

Conditional Diffusion Distillation for Higher-Fidelity and Faster Image Generation, CCI CVPR Share-a-thon, Google. (Dec 2023)

Video Implicit Diffusion Models, AAAI23 Pre-presentation, AI TIME. (Jan 2023)

HONORS

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