Qing Wu

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Address: 393 Middle Huaxia Road, 201210, Shanghai, China

Google Scholar: https://scholar.google.com/citations?user=A1E80HUAAAAJ

Research interests

Inverse Problems in Medical Imaging, Neural Representations.

Education

2020 - ShanghaiTech University Shanghai, China
PRESENT - Ph.D. Candidate in Electronic Science and Technology
- Advisor: Prof. Yuyao Zhang

2016 - 2020 China University of Geosciences, Wuhan
- B.S. in Communication Engineering

Selected publications

PREPRINT Qing Wu, Hongjiang Wei, Jingyi Yu, Yuyao Zhang, "Unsupervised Multi-Parameter Inverse Solving for Reducing Ring Artifacts in 3D X-Ray CBCT", arXiv preprint arXiv:2412.05853

ICLR 2025 Qing Wu*, Chenhe Du*, XuanYu Tian, Jingyi Yu, Yuyao Zhang, Hongjiang Wei,

ICLR 2025 Qing Wu*, Chenhe Du*, XuanYu Tian, Jingyi Yu, Yuyao Zhang, Hongjiang Wei,
"Moner: Motion Correction in Undersampled Radial MRI with Unsupervised Neural
Representation", 13th International Conference on Learning Representations

NEURIPS 2023 Qing Wu, Lixuan Chen, Ce Wang, Hongjiang Wei, S. Kevin Zhou, Jingyi Yu, Yuyao Zhang, "Unsupervised Polychromatic Neural Representation for CT Metal Artifact Reduction", 37th Conference on Neural Information Processing Systems

IEEE TCI Qing Wu, Ruimin Feng, Hongjiang Wei, Jingyi Yu, Yuyao Zhang, "Self-Supervised Coordinate Projection Network for Sparse-View Computed Tomography", IEEE Transactions on Computational Imaging

IEEE ISBI Qing Wu, Xin Li, Hongjiang Wei, Jingyi Yu, Yuyao Zhang, "Joint Rigid Motion Correction and Sparse-View CT via Self-Calibrating Neural Field", IEEE 20th International Symposium on Biomedical Imaging

IEEE TCAS-I Chaolin Rao*, Qing Wu*, Pingqiang Zhou, Jingyi Yu, Yuyao Zhang, Xin Lou, "An 2023 Energy-Efficient Accelerator for Medical Image Reconstruction From Implicit Neural Representation", IEEE Transactions on Circuits and Systems I: Regular Papers

IEEE J-BHI Qing Wu, Yuwei Li, Yawen Sun, Yan Zhou, Hongjiang Wei, Jingyi Yu, Yuyao Zhang,

"An Arbitrary Scale Super-Resolution Approach for 3D MR Images via Implicit Neural
Representation", IEEE Journal of Biomedical and Health Informatics

MICCAI 2021 Qing Wu, Yuwei Li, Lan Xu, Ruimin Feng, Hongjiang Wei, Qing Yang, Boliang Yu, Xiaozhao Liu, Jingyi Yu, Yuyao Zhang, "IREM: High-Resolution Magnetic Resonance Image Reconstruction via Implicit Neural Representation", 24th International Conference on Medical Image Computing and Computer Assisted Intervention

Patents

Yu Jingyi, Zhang Yuyao, Lou Xin, <u>Wu Qing</u>, Rao Chaolin, Yang Jiawen, "Real-time volumetric rendering", WO2023284275A1/CN117651975A

Yu Jingyi, Zhang Yuyao, Xu Lan, Li Yuwei, Wu Qing, "Method for high-resolution image reconstruction", WO2023283795A1/CN115619632A

Yu Jingyi, Zhang Yuyao, <u>Wu Qing</u>, "System and method for near real-time and unsupervised coordinate projection network for computed tomography images reconstruction", WO2024078049A1

Teaching experience

$\begin{array}{c} \text{Fall} \\ 2022/2023 \end{array}$	CS276: Computational Photography - Position: Guest Lecture - Instructor: Prof. Jingyi Yu	Shanghaitech University
Spring 2023	CS270B: Advanced Digital Image Processing	Shanghaitech University

Position: Teaching AssistantInstructor: Prof. Yuyao Zhang

Honors and scholarships

2023 - 2024	Outstanding Student (Top 5%)	ShanghaiTech University
2022 - 2023	Outstanding Student (Top 5%)	ShanghaiTech University
2020 - 2021	Merit Student (Top 10%)	ShanghaiTech University

Academic service

REVIEWER Conferences: NeurIPS 2025/2024, ICML 2025/2024, ICLR 2025, CVPR 2025/2024,

MICCAI 2025/2024/2023, AISTATS 2025, AAAI 2025, IEEE ISBI 2024 Journals: MedIA, IEEE TNNLS, IEEE TCI, IEEE J-BHI, JCDE

VOLUNTEER Conference: ASSIST 2023

Technical skills

Programming languages: Python, MATLAB

 $\textbf{Software:} \ \ \, \LaTeX, \ \, \text{Git, ITK-SNAP, Microsoft Word, Microsoft PowerPoint, etc.}$

Languages: Mandarin (native), English (basic)

Other interests

Esports (e.g., CS2, League of Legends), Music, Sleeping.