Qing Wu PH.D.

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Google Scholar: https://scholar.google.com/citations?user=A1E8OHUAAAAJ

Research interests

Inverse Problems in Medical Imaging, Neural Representations.

Education

2020 – 2025 **ShanghaiTech University** Shanghai, China
– Ph.D. in *Electronic Science and Technology*
– Advisor: Prof. Yuyao Zhang

2016 – 2020 **China University of Geosciences, Wuhan** Hubei, China
– B.S. in *Communication Engineering*

Selected publications

AAAI 2026 Qing Wu, Hongjiang Wei, Jingyi Yu, Yuyao Zhang, "Unsupervised Multi-Parameter Inverse Solving for Reducing Ring Artifacts in 3D X-Ray CBCT", *40th Annual AAAI Conference on Artificial Intelligence*

ICLR 2025 SPOTLIGHT 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 2023 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 2023 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 2023 Chaolin Rao*, Qing Wu*, Pingqiang Zhou, Jingyi Yu, Yuyao Zhang, Xin Lou, "An Energy-Efficient Accelerator for Medical Image Reconstruction From Implicit Neural Representation", *IEEE Transactions on Circuits and Systems I: Regular Papers*

IEEE J-BHI 2022 — 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, Wu Qing, 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, Wu Qing, "System and method for near real-time and unsupervised coordinate projection network for computed tomography images reconstruction", *WO2024078049A1*

Teaching experience

Fall 2022/2023 — **CS276: Computational Photography** — Shanghaitech University
– Position: Guest Lecture
– Instructor: Prof. Jingyi Yu

Spring 2023 — **CS270B: Advanced Digital Image Processing** — Shanghaitech University
– Position: Teaching Assistant
– Instructor: 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:** *ICLR'26/'25, NeurIPS'25/'24, ICML'25/'24, CVPR'26/'25/'24, AISTATS'26/'25, AAAI'26/'25, MICCAI'25/'24/'23, IEEE ISBI'24*
Journals: *MedIA, IEEE TNNLS, IEEE TCI, IEEE J-BHI, JCDE*

Volunteer — **Conference:** *ASSIST 2023*

Technical skills

Programming languages: Python, MATLAB

Software: LaTeX, Git, ITK-SNAP, Microsoft Word, Microsoft PowerPoint, etc.

Languages: Mandarin (native), English (basic)

Other interests

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