

Qing Wu

Email: wuqing@shanghaitech.edu.cn

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 – Present | ShanghaiTech University
– Ph.D. Candidate in <i>Electronic Science and Technology</i>
– Advisor: Prof. Yuyao Zhang | Shanghai, China |
| 2016 – 2020 | China University of Geosciences, Wuhan
– B.S. in <i>Communication Engineering</i> | Hubei, China |

Selected publications

- | | |
|------------------|--|
| NeurIPS 2023 | <u>Qing Wu</u> , Lixuan Chen, Ce Wang, Hongjiang Wei, S. Kevin Zhou, Jingyi Yu, Yuyao Zhang, “Unsupervised Polychromatic Neural Representation for CT Metal Artifact Reduction”, <i>Thirty-seventh Conference on Neural Information Processing Systems</i> . |
| IEEE TCI 2023 | <u>Qing Wu</u> , Ruimin Feng, Hongjiang Wei, Jingyi Yu, Yuyao Zhang, “Self-Supervised Coordinate Projection Network for Sparse-View Computed Tomography”, <i>IEEE Transactions on Computational Imaging</i> . |
| IEEE ISBI 2023 | <u>Qing Wu</u> , Xin Li, Hongjiang Wei, Jingyi Yu, Yuyao Zhang, “Joint Rigid Motion Correction and Sparse-View CT via Self-Calibrating Neural Field”, <i>IEEE 20th International Symposium on Biomedical Imaging</i> . |
| IEEE TCAS-I 2023 | Chaolin Rao*, <u>Qing Wu</u> *, Pingqiang Zhou, Jingyi Yu, Yuyao Zhang, Xin Lou, “An Energy-Efficient Accelerator for Medical Image Reconstruction From Implicit Neural Representation”, <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> . |
| IEEE J-BHI 2022 | <u>Qing Wu</u> , 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”, <i>IEEE Journal of Biomedical and Health Informatics</i> . |
| MICCAI 2021 | <u>Qing Wu</u> , 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”, <i>24th International Conference on Medical Image Computing and Computer Assisted Intervention</i> . |

Patents

- WO2023284275A1 CN117651975A Yu Jingyi, Zhang Yuyao, Lou Xin, Wu Qing, Rao Chaolin, Yang Jiawen, “Real-time volumetric rendering”, *Filing date: 2022-01-11, Publication date: 2023-01-19.*
- WO2023283795A1 CN115619632A Yu Jingyi, Zhang Yuyao, Xu Lan, Li Yuwei, Wu Qing, “Method for high-resolution image reconstruction”, *Filing date: 2021-07-12, Publication date: 2023-01-19.*
- WO2024078049A1 Yu Jingyi, Zhang Yuyao, Wu Qing, “System and method for near real-time and unsupervised coordinate projection network for computed tomography images reconstruction”, *Filing date: 2023-06-30, Publication date: 2024-04-18.*

Teaching experience

- Fall 2022/2023 **CS276: Computational Photography** ShanghaiTech University
– Position: Guest Lecture
– Instructor: Prof. Jingyi Yu
- Spring 2023 **CS276: Computational Photography** ShanghaiTech University
– Position: Teaching Assistant
– Instructor: Prof. Yuyao Zhang

Honors and scholarships

- 2023 **Outstanding Student** (Top 5%) ShanghaiTech University
- 2021 **Merit Student** (Top 10%) ShanghaiTech University

Academic service

- Reviewer **Conferences:** ICML 2024, CVPR 2024, MICCAI 2023/2024, IEEE ISBI 2024
Journals: 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.