

QING WU

Email: wuqing@shanghaitech.edu.cn

Home: <https://iwuqing.github.io>

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

Preprint	Qing Wu , Hongjiang Wei, Jingyi Yu, Yuyao Zhang, “ Unsupervised Multi-Parameter Inverse Solving for Reducing Ring Artifacts in 3D X-Ray CBCT ”, <i>arXiv preprint arXiv:2412.05853</i>
Preprint	Qing Wu* , Chenhe Du*, XuanYu Tian, Jingyi Yu, Yuyao Zhang, Hongjiang Wei, “ Moner: Motion Correction in Undersampled Radial MRI with Unsupervised Neural Representation ”, <i>arXiv preprint arXiv:2409.16921</i>
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 ”, <i>Thirty-seventh Conference on Neural Information Processing Systems</i> .
IEEE TCI 2023	Qing Wu , 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	Qing Wu , 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*, Qing Wu* , 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, <u>Wu Qing</u> , Rao Chaolin, Yang Jiawen, “ Real-time volumetric rendering ”, <i>Filing date: 2022-01-11, Publication date: 2023-01-19</i> .
WO2023283795A1 CN115619632A	Yu Jingyi, Zhang Yuyao, Xu Lan, Li Yuwei, <u>Wu Qing</u> , “ Method for high-resolution image reconstruction ”, <i>Filing date: 2021-07-12, Publication date: 2023-01-19</i> .
WO2024078049A1	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 ”, <i>Filing date: 2023-06-30, Publication date: 2024-04-18</i> .

Teaching experience

Fall 2022/2023	CS276: Computational Photography – Position: Guest Lecture – Instructor: Prof. Jingyi Yu	ShanghaiTech University
Spring 2023	CS270B: Advanced Digital Image Processing – Position: Teaching Assistant – Instructor: Prof. Yuyao Zhang	ShanghaiTech University

Honors and scholarships

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

Academic service

Reviewer	Conferences: <i>ICML’25, CVPR’25, AISTATS’25, AAAI’25, ICLR’25, NeurIPS’24, ICML’24, CVPR’24, MICCAI’24, IEEE ISBI’24, MICCAI’23</i> Journals: <i>MedIA, IEEE TNNLS, IEEE TCI, IEEE J-BHI, JCDE</i>
Volunteer	Conference: <i>ASSIST’23</i>

Technical skills

Programming languages: Python, MATLAB

Software: L^AT_EX, Git, ITK-SNAP, Microsoft Word, Microsoft PowerPoint, etc.

Languages: Mandarin (native), English (basic)

Other interests

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