Qing Wu

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EDUCATION

ShanghaiTech University

Shanghai, China

■ Ph.D. Student in *Electronic Science and Technology*

Sep 2020 – Jul 2025 (Expected)

■ Advisor: Prof. Yuyao Zhang

• Focus: Inverse Problems in Medical Imaging

China University of Geosciences, Wuhan

Hubei, China

■ B.S. in Communication Engineering

Sep 2016 – Jul 2020

RESEARCH EXPERIENCE

Smart Medical Image Learning & Enhancement (SMILE) LAB

Shanghai, China

■ Ph.D. Student

■ Advisor: Prof. Yuyao Zhang

Sep 2020 – Present

■ Project: Unsupervised Model-driven Neural Representation for CT Reconstruction

• Focus: Sparse-View CT, CT Metal Artifact Reduction, CT Calibration, MRI Super-Resolution, etc.

SELECTED PUBLICATIONS

JOURNALS

- [J1] 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 TCI)*
- [J2] 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 (IEEE J-BHI)
- [J3] 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 TCAS-I)

CONFERENCES

- [C1] Qing Wu, Lixuan Chen, Ce Wang, Hongjiang Wei, S. Kevin Zhou, Jingyi Yu, Yuyao Zhang, "Unsupervised Polychromatic Neural Representation for CT Metal Artifact Reduction", Thirty-seventh Conference on Neural Information Processing Systems (NeurIPS 2023)
- [C2] 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 (MICCAI 2021)
- [C3] 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 ISBI 2023)*

TEACHING EXPERIENCE

CS276: Computational Photography, ShanghaiTech University

Shanghai, China

Guest Lecture

2022/2023 Fall

■ Instructor: Prof. Jingyi Yu

CS270B: Advanced Digital Image Processing, ShanghaiTech University

Shanghai, China

■ Teaching Assistant

2023 Spring

■ Instructor: Prof. Yuyao Zhang

AWARDS & SCHOLARSHIPS

Outstanding Student, ShanghaiTech University

2022 - 2023

■ Top 5% students selected by Reward and Punishment Committee of ShanghaiTech University.

Merit Student, ShanghaiTech University

2020 - 2021

• Top 10% students selected by Reward and Punishment Committee of ShanghaiTech University.

SERVICE Reviewer for Journals

- *IEEE Transactions on Computational Imaging (IEEE TCI)*
- IEEE Journal of Biomedical and Health Informatics (IEEE J-BHI)
- Journal of Computational Design and Engineering

Reviewer for Conferences

- *International Conference on Machine Learning (ICML 2024)*
- IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR 2024)
- International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI 2023/2024)
- IEEE International Symposium on Biomedical Imaging (IEEE ISBI 2024)

Volunteer

■ Annual ShanghaiTech Symposium on Information Science and Technology (ASSIST 2023)

LANGUAGES

- Mandarin: Native language.
- English: Intermediate (reading, writing).

SKILLS

LATEX, Python, MATLAB, ITK-SNAP, Pytorch, Microsoft Word, Microsoft PowerPoint, etc.

INTERESTS

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

REFERENCES

■ Prof. Yuyao Zhang

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