Wenqi Huang 黄文麒

wenqi.huang@tum.de | wenqihuang.me | Google Scholar | GitHub | LinkedIn



I'm a PhD student at the Chair of AI in Healthcare and Medicine, Technical University of Munich (TUM), supervised by Prof. Daniel Rueckert. My research focuses on novel representations for fast MRI reconstruction, with minimal or no training data.

Education

2021 – present	**PhD in Computer Science**, Technical University of Munich (TUM), Germany Topic: Advanced Algorithms for Fast MRI · Supervisor: Prof. Daniel Rueckert
Jan – Mar 2025	**Visiting Student Researcher**, Stanford University, USA Supervisor: Prof. Kawin Setsompop
2018 – 2021	**M.Sc. in Pattern Recognition & Intelligent Systems**, Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences Supervisor: Prof. Dong Liang
2014 – 2018	**B.Eng. in Information Engineering**, Soochow University, China

Selected Publications

MICCAI 2026 SPOTLIGHT	**Gabor Primitives for Accelerated Cardiac Cine MRI Reconstruction** **W Huang**, V Spieker, N Stolt-Ansó, N Niessen, M Dannecker, SG Kafali, S Kurugol, JA Schnabel, D Rueckert Paper Code
MICCAI 2025	**Physics-Informed Implicit Neural Representations for Joint B_0 Estimation and Echo Planar Imaging** **W Huang**, N Wang, C Liao, Y Lin, M Gao, D Rueckert, K Setsompop Paper Code
IPMI 2025	**Subspace Implicit Neural Representations for Real-Time Cardiac Cine MR Imaging** **W Huang**, V Spieker, S Xu, G Cruz, C Prieto, JA Schnabel, K Hammernik, T Kuestner, D Rueckert Paper Code
IPMI 2023 ORAL	**Neural Implicit k-Space for Binning-free Non-Cartesian Cardiac MR Imaging** **W Huang**, H Li, J Pan, G Cruz, D Rueckert, K Hammernik Paper Code
Medical Image Analysis, 2021	**Deep Low-Rank Plus Sparse Network for Dynamic MR Imaging** **W Huang**, Z Ke, ZX Cui, J Cheng, Z Qiu, S Jia, L Ying, Y Zhu, D Liang Paper Code
IEEE Transactions on Medical Imaging, 2021	**Learned Low-Rank Priors in Dynamic MR Imaging** Z Ke*, **W Huang***, ZX Cui, J Cheng, S Jia, H Wang, X Liu, H Zheng, L Ying, Y Zhu, D Liang Paper Code

Presentations

Oct 2026 POSTER	MICCAI 2026 OFF-GRID Workshop · Strasbourg Primitive Representation Learning for Unsupervised Dynamic Contrast Enhanced MRI Reconstruction
Sep 2026 SPOTLIGHT	MICCAI 2026 · Strasbourg Gabor Primitives for Accelerated Cardiac Cine MRI Reconstruction
May 2026 ORAL	SFB MR-DYNAMO Workshop on Mathematical Methods in MRI · Graz Gabor Primitives for Accelerated Cardiac Cine MRI Reconstruction
Jan 2026 POSTER	ISMRM Workshop on Data Sampling & Image Reconstruction · Sedona Joint B_0 Estimation and Distortion-Free Reconstruction from Rotated-View EPI
Jul 2025 INVITED	Seminar on DL for Inverse Problems in Medical Imaging · Munich Implicit Neural Representations for MRI Reconstruction

Jun 2025 POSTER	**IPMI 2025** · Kos Island Subspace INRs for Real-Time Cardiac Cine MRI (extended full paper)
May 2025 ORAL	**ISMRM 2025** · Honolulu Subspace INRs for Real-Time Cardiac Cine MRI (abstract)
Jan 2025 INVITED	**NVIDIA Research Radar Talk** · Online Implicit Neural Representations for Non-Cartesian Cardiac MR Imaging
May 2024 POSTER	**ISMRM 2024** · Singapore TransGRAPPA: Self-supervised Transformer Network for k-Space Interpolation
Nov 2023 ORAL	**JIS Summit 2023** · Virtual Neural Implicit k-Space for Binning-free Non-Cartesian Cardiac MR Imaging
Jun 2023 ORAL	**IPMI 2023** · Bariloche Neural Implicit k-Space for Binning-free Non-Cartesian Cardiac MR Imaging
Jan 2023 ORAL	**ISMRM Workshop on Data Sampling & Image Reconstruction** · Sedona Universal K-Space Interpolation Network for Non-Cartesian CINE Imaging
Sep 2022 INVITED	**SIAM MDS 2022** · Virtual Algorithm Unrolling: Key for Physics-Based Learning in MRI Reconstruction

Teaching & Supervision

Oct 2026 – Mar 2027	Master's Seminar: AI Research in the Large Language Models Era (IN2107) Co-organizer with Nil Stolt-Ansó · Winter Semester 2026/27, TUM
Jul 2025	Guest Lecture: Implicit Neural Representations for MRI Reconstruction Seminar on Deep Learning for Inverse Problems in Medical Imaging, TUM
Oct 2023 – Sep 2024	Applied Deep Learning in Medicine: Implicit Neural Representations for MRI Master Practical Course Supervisor · Winter Semester 2023/24 & Summer Semester 2024, TUM
Sep – Dec 2023	Neural Implicit k-Space with Trainable Periodic Activation Functions for Cardiac MR Imaging Master Interdisciplinary Project Advisor · Published at BVM 2024 (Oral)
Jul 2022 – Sep 2023	Self-supervised Low-rank plus Sparse Network for Radial MRI Reconstruction Master Interdisciplinary Project Co-supervisor · Published at NeurIPS 2023 Workshop

Academic Service

Reviewer	IEEE Transactions on Medical Imaging (TMI), Medical Image Analysis (MedIA), Magnetic Resonance in Medicine (MRM), IEEE Transactions on Biomedical Engineering (TBME), Advanced Science, MICCAI, ISMRM