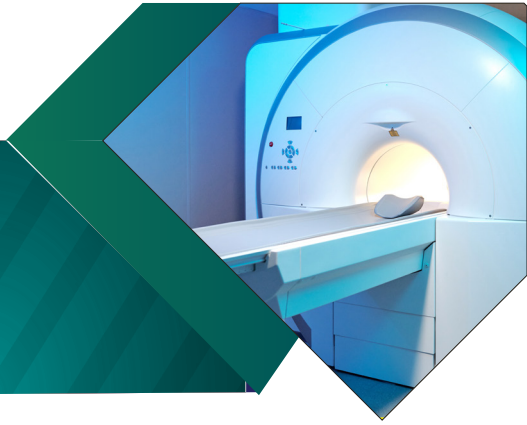


e-Conference on

Modern MRI:

From Core Principles to AI-Driven Applications

Thursday, 29th May 2025

Speakers' Profiles

Dr. Hammad Omer

Dr. Hammad Omer *(T.I.)* is a Tenured Associate Professor at Department of Electrical & Computer Engineering, COMSATS University Islamabad (CUI), Pakistan and concurrently serves as the Head of the International Office (Principal Seat) at CUI. His notable contributions in the field of Engineering were recognized with the prestigious '*Tamgha-e-Imtiaz*' award on March 23, 2024, presented by the President of Pakistan. Dr. Omer's academic journey includes a Ph.D. in 'Magnetic Resonance Imaging (MRI)' from Imperial College London in 2012, where he was a Commonwealth scholar. With a prolific research career, he has mentored 11 Ph.D. students as main supervisor, supervised over 60 M.S. and undergraduate theses, authored 200+ papers in peer-reviewed international journals and conferences, presented at conferences around the world, and secured four patents from the United States Patents and Trademark Office (USPTO) for his inventions in Magnetic Resonance Imaging (MRI). Dr. Omer currently leads a thriving research group comprising more than 35 researchers at CUI.

Dr. Sohaib Ayaz Qazi

Dr. Sohaib Ayaz Qazi is a Postdoctoral Researcher and Clinical Scientist at the Center for Medical Image Science and Visualization (CMIV), Linköping University Hospital, Sweden. His work focuses on advanced 4D Flow MRI techniques and providing research support on clinical MRI scanners. His research bridges technical development and clinical applications in cardiovascular imaging.

Dr. Ibtisam Aslam

Dr. Ibtisam Aslam is a Postdoctoral Researcher at the Microstructure & Mapping Lab, Central Hospital University of Vaud (CHUV), and the Geneva Memory Center, Hospital University of Genèva (HUG), Switzerland. Dr. Ibtisam is an electrical engineer turned medical imaging scientist, specialized in MR data acquisition, image reconstruction, and analysis for 1.5T to Ultra High field 7T MRI systems. His current research focuses on mapping glymphatic flow in the human brain via diffusion MRI using ultra high field.

Dr. Hassan Shahzad

Dr. Hassan Shahzad is currently working as Principal Scientist at National Centre for Physics, Islamabad. He completed his PhD in 2017 from COMSATS University Islamabad. He has authored 20+ papers in peer-reviewed international journals and conferences, and secured two patents from the United States Patents and Trademark Office (USPTO) for his inventions in Magnetic Resonance Imaging (MRI). His research focuses on High Performance Computing application in MRI Image Reconstruction.

Dr. Zoona Javed

Dr. Zoona Javed is currently working as a Postdoctoral Research Associate in Magnetic Resonance Physics at the University of Sheffield, U.K., where she is part of the Polaris research group led by Professor Jim Wild. Her work is centered on creating advanced methods for metabolic and functional imaging of the human brain using MRS. Dr. Zoona is an alumni of MIPRG research group and former lecturer at COMSATS University Islamabad. She completed her PhD in Electronics and Telecommunication Engineering at Universitat Autònoma de Barcelona, Spain, as part of the INSPiRE-MED European Union project under the Marie Curie and Horizon 2020 scholarship.

Mr. Abdul Basit

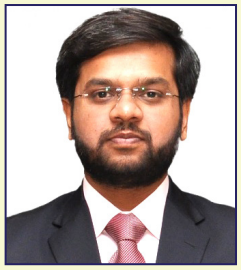
Mr. Abdul Basit is a Ph.D. scholar at the Medical Image Processing Research Group (MIPRG) at COMSATS University Islamabad. His research focuses on accelerated Cartesian MRI reconstruction and the development of hardware accelerators for advanced reconstruction algorithms. His work aims to bridge the gap between cutting-edge MRI techniques and real-time clinical applicability through efficient algorithm design and hardware implementation.

Dr. Madiha Arshad

Dr. Madiha Arshad is an Assistant Professor at the Department of Computer Engineering, National University of Technology (NUTECH), Islamabad. Her research focuses on developing advanced deep learning algorithms to address the challenges in Magnetic Resonance (MR) image reconstruction. She aims to enhance image quality, reduce acquisition time, and contribute to more efficient diagnostic imaging solutions.

Ms. Yumna Bilal

Ms. Yumna Bilal is a Ph.D. scholar at the Medical Image Processing Research Group (MIPRG) at COMSATS University Islamabad, Pakistan. She is also serving as an Assistant Professor at the Department of Electrical Engineering, University of Gujrat, Pakistan. Her research focuses on accelerated non-Cartesian MRI reconstruction and the development of hardware accelerators for advanced reconstruction algorithms. Her work aims to bridge the gap between cutting-edge MRI techniques and real-time clinical applicability through efficient algorithm design and hardware implementation.



Mr. Adnan Nasim

Mr. Adnan Nasim is a computer engineer with a passion for medical image processing and its transformative potential in healthcare. He is currently pursuing a Ph.D in the field of deep learning-based MR image reconstruction. His research focuses on developing advanced algorithms that enhance image quality and accelerate acquisition time.