Uten YARACH

DEPARTMENT OF RADIOLOGIC TECHNOLOGY

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Education

1999 – 2002
B.Sc. (Radiologic Technology)
Department of Radiologic Technology
Faculty of Associated Medical Sciences, Chiang Mai University, Thailand

2007 – 2009
M.Sc. (Radiation Science)
Department of Radiologic Technology
Faculty of Associated Medical Sciences, Chiang Mai University, Thailand

2012 – 2016
Doctor rerum naturalium (PhD equivalent) in Physics
Department of Biomedical Magnetic Resonance
Otto-von-Guericke University, Magdeburg, Germany

Research areas of interest

➢ Advanced MRI acquisition and reconstruction

➢ Diffusion MRI and tractography

➢ Deep learning for MRI reconstruction

➢ Motion correction and distortion correction

➢ High-field MRI (7T) and high-performance gradients

➢ Quantitative MRI and clinical translation

➢ Data analysis

Research theme
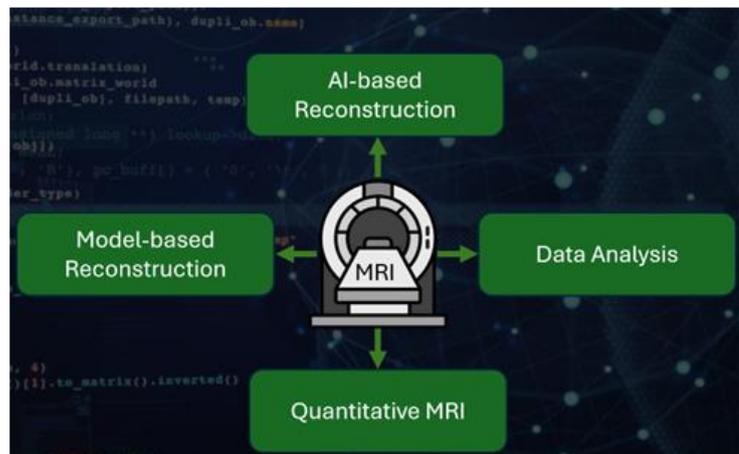
Publication

1. Ratiphunpong P, Inmutto N, Angkurawaranon S, Wantanajittikul K, Suwannasak A, Yarach U. A Pilot Study on Deep Learning With Simplified Intravoxel Incoherent Motion Diffusion-Weighted MRI Parameters for Differentiating Hepatocellular Carcinoma From Other Common Liver Masses. Top Magn Reson Imaging. 2025; 34(1): e0316.

2. Yarach, U., Chatnuntawech, I., Liao, C., Teerapittayanon, S., Iyer, S. S., Kim, T. H., Haldar, J., Cho, J., Bilgic, B., Hu, Y., Hargreaves, B., Setsompop, K. Blip-up blip-down circular EPI (BUDA-cEPI) for distortion-free dMRI with rapid unrolled deep learning reconstruction. Magnetic resonance imaging. 2024: 110277

3. Suwannasak, A., Angkurawaranon, Uten, Y., et al. Deep learning-based super-resolution of structural brain MRI at 1.5 T: application to quantitative volume measurement. Magn Reson Mater Phy (2024). https://doi.org/10.1007/s10334-024-01165-8

4. Yarach, U., Chatnuntawech, I., Setsompop, K. et al. Improved reconstruction for highly accelerated propeller diffusion 1.5 T clinical MRI. Magn Reson Mater Phy 37, 283–294 (2024). https://doi.org/10.1007/s10334-023-01142-7

5. Liao C, Yarach U, Cao X, Iyer SS, Wang N, Kim TH, Tian Q, Bilgic B, Kerr AB, Setsompop K. 2023. High-fidelity mesoscale in-vivo diffusion MRI through gSlider-BUDA and circular EPI with S-LORAKS reconstruction. Neuroimage. 275: 120168.

6. Uten Yarach, Suwit Saekho, Kawin Setsompop, Atita Suwannasak, Ratthaporn Boonsuth, Kittichai Wantanajittikul, Salita Angkurawaranon, Chaisiri Angkurawaranon, Prapatsorn Sangpin (2021), "Feasibility of Accelerated 3D T1-Weighted MRI using Compressed-SENSE: Application to Quantitative Volume Measurement of Human Brain Structures" Magn Reson Mater Phy. https://doi.org/10.1007/s10334-021-00939-8