Curriculum Vitae

Personal Information		
Title	**Dr.**	
Name	**Kanghyun Ryu**	
Degree	**PhD**	
Country	**S. Korea**	
Affiliation	**Korea Institute of Science and Technology**	

Educational Background

- B.S. Electrical Engineering, Yonsei Univ. (2009.03 ~ 2015.08)
- Ph.D. Electrical Engineering, Yonsei Univ. (2015.09 ~ 2020.02)

Professional Career

- Postdoctoral Researcher, Stanford Univ. (2020.02 ~ 2022.08)
- Senior Researcher, Korea Institute of Science and Technology. (2022.09 ~ Present)
- Assistant Professor, AI and Robotics Division, UST. (2025.02 ~ Present)

Research Field

- Medical AI: Registration, Segmentation, Detection
- Computer Vision AI: Object detection (2D/3D), Object Tracking, Action Recognition
- MRI : fastMRI Reconstruction (Cartesian, Radial), Dynamic or Multi-contrast MR (Cardiac Cine, Multi-echo) imaging

Main Scientific Publications

- J Lee, D Kim, T. Kim, M Al-masni, Y Han, DH Kim, **K Ryu** "Meta-Learning Guidance for Robust Medical Image Synthesis: Addressing the Real-World Misalignment and Corruptions" Comput. Med. Imaging Graph. 2025
- D Kim+, M Al-masni+, J Lee, DH Kim*, **K Ryu*** Improving Pelvic MR-CT Image Alignment with Self-supervised Reference-Augmented Pseudo-CT Generation Framework" WACV 2025
- **K. Ryu***, C Lee*, Y Han, S Pang, YH Kim, C Choi, I Jang+, SS Han+ "Multi-planar 2.5 D U-Net for image quality enhancement of dental cone-beam CT" Plos One 2023.
- **K. Ryu**, C. Alkan, S. Vasanawala., "Improving high frequency image features of Deep Learning reconstruction via k space refinement with null space kernel." Magn. Reson. Med. 2022
- **K. Ryu**, J. Lee, Y. Nam, G. Gho, H. Kim, D. Kim., "Accelerated multicontrast reconstruction for synthetic MRI using joint parallel imaging and variable splitting networks." Med. Phys. 2021