

Saemee Choi

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Seoul, South Korea

AI researcher and research engineer with expertise in medical imaging [J.1][C.1], and image/video generation [P.1][I.1]. Completed a Master's degree in Artificial Intelligence at KAIST, with multiple publications in top venues. Passionate and responsible in applying AI to real-world problems across healthcare, creative applications, and everyday convenience.

keywords: Medical AI, Image/Video Generation, Diffusion models

EDUCATION

- **Korea Advanced Institute of Science and Technology (KAIST)** Mar. 2023 - Feb. 2025
Master of Science, AI Seoul, Korea
 - Advisor: Prof. Jaegul Choo
- **Sung Kyun Kwan University** Mar. 2019–Feb. 2023
Bachelor of Science, Data Science Seoul, Korea
 - Honors: Magna Cum Laude (GPA: 4.23/4.5) [[Certificate](#)]

PUBLICATIONS

C=CONFERENCE, J=JOURNAL, P=PREPRINT



- [J.1] S. Kong*, **S. Choi***, W. Cho, S. Park, J. Choo, J. Kim, S. Kim, C. Shin, "Enhancing Vertebral Fracture Prediction Using Multitask Deep Learning: Computed Tomography Imaging of Bone and Muscle" **European Radiology**, 2025 [[Paper](#)] [[Code](#)]
- [P.1] **S. Choi***, S. Jeong, H. Jang, J. Choo, J. Kim, "Good Noise Makes Good Edits: Toward Controllable Zero-shot Diffusion-based Video Editing via Image and Text Guidance" arXiv preprint arXiv:2506.12520, 2025 [[Paper](#)]
- [C.2] W. Cho*, Y. Kang*, **S. Choi***, and J. Choo, "Training Spatial-Frequency Visual Prompts and Probabilistic Clusters for Accurate Black-Box Transfer Learning" **ACM Multimedia (MM'24)**, 2024 [[Paper](#)]
- [C.1] W. Cho*, D. Choi*, H. Lim*, J. Choi, **S. Choi**, H. Min, S. Lim, J. Choo, "Slice and Conquer: A Planar-to-3D Framework for Efficient Interactive Segmentation of Volumetric Images" Proceedings of the IEEE/CVF Winter Conference on Applications of Computer Vision (**WACV'24**), 2024 [[Paper](#)]

*: Equal contribution

INDUSTRIAL PROJECTS

- [I.2] **AI-Driven Educational Video Generation Pipeline** Feb. 2024 – Feb. 2025
with [Iscream-media](#) & [KAIST AI](#)
 - **Developed** an AI-driven pipeline for generating scene scripts, videos, and audio for educational materials.
 - **Project Management:** Coordinated communication between labs and partners, ensuring timely progress.
 - **Image Module Lead:** Reproduced and improved SOTA image generation/editing models for usability.
 - **Designed and implemented** an interactive interface and API with Gradio and FastAPI.
- [I.1] **AI-Based Microplastic Detection from Spectral Data** Sep. 2023 – Jul. 2024
with [Cheminet](#) & [Thermo Fisher Scientific](#) & [KAIST AI](#)
 - **Developed** AI models to detect microplastics from ENVI spectral data using sequence modeling approaches.
 - **Improved** accuracy through advanced data preprocessing and out-of-distribution robustness techniques.
 - **Implemented** an algorithm to calculate microplastic particle size from 3D spectral data.
 - **Authored** a technical patent document describing the proposed detection framework.

WORK EXPERIENCES

- **LETSUR**  Mar. 2023 - Aug. 2023
AI Researcher Intern Seoul, Korea
 - Conducted and published research on parameter-efficient transfer learning
- **AZothBio**  Jan. 2021 - Jul. 2021
AI Researcher Intern Seoul, Korea
 - Developed AI methods for molecular property prediction

TECHNICAL SKILLS

- **Programming Languages:** Python, C, SQL, R, Bash
- **Languages:** Korean (Native), English (Professional working proficiency; IELTS Overall 7.0)

ACADEMIC SERVICES

- **Reviewer**
 - 2026 CVPR, ECCV, NeurIPS