

Dong Min Kim

M.S. Student, KAIST

dongmin.kim@kaist.ac.kr



Website



GitHub



LinkedIn

Daejeon, South Korea

RESEARCH INTERESTS

Reliable Clinical Foundation Models; Large Language Model Faithfulness

EDUCATION

KAIST (Korea Advanced Institute of Science and Technology)

M.S. in Electrical Engineering

Advisor: Sung-Ju Lee

Daejeon, Korea

Sep 2025 – Present

KAIST

B.S. in Electrical Engineering

GPA: 4.06/4.3; *summa cum laude*

Daejeon, Korea

Sep 2019 – Aug 2025

Rice University

Visiting Exchange Student, ECE & CS; GPA: 4.0/4.0

Houston, TX, USA

Jan 2024 – May 2024

RESEARCH EXPERIENCE

Mobile Intelligence & Interaction Lab, KAIST

Jun 2024 – Present

M.S. Research, advised by Prof. Sung-Ju Lee

- **Explanation Faithfulness in ECG Language Models (Lead):** Developing an evaluation framework to test whether model explanations help predict behavior on related ECGs beyond the information in the original answer.
- **Federated Multimodal Medical Learning (MedMix)** [P.1]: Contributed to method ideation, baseline implementation, medical dataset integration, and experiments for federated multimodal medical learning.
- **Low-Latency Test-Time Adaptation (SNAP)** [C.1]: Contributed to preliminary analysis, sampling-method design, baseline implementation, and writing; conducted on-device latency and memory measurements.

Intelligent Network Architecture Lab, KAIST

Jun 2023 – Dec 2023

Undergraduate Research Intern, advised by Prof. Dongsu Han

- Analyzed microservices trace data from the Alibaba Cluster Trace Program for the scalability analysis of an adaptive overload control framework for SLO-oriented microservices.

PUBLICATIONS

(C: Conference, P: Preprint)

[C.1] **SNAP: Low-Latency Test-Time Adaptation with Sparse Updates**

Hyeongheon Cha, **Dong Min Kim**, Hye Won Chung, Taesik Gong, Sung-Ju Lee.

NeurIPS, 2025. [Project] [Paper] [Code]

[P.1] **MedMix: Specialization-Consistent Federated Sparse MoEs under Modality Heterogeneity**

Adiba Orzikulova, **Dong Min Kim**, Jaehong Yoon, Sung-Ju Lee.

arXiv preprint, 2026. [Paper]

SELECTED TECHNICAL PROJECTS

Parallel Computing (Rice coursework): Implemented parallel game-tree search (Cilk Plus), LU decomposition (OpenMP), 2.5D matrix multiplication (MPI), and hole compaction (CUDA).

Pacwar (Rice coursework, team of two): Implemented a genetic algorithm and simulated annealing to optimize competitive agents in the Pacwar simulation.

Dallyeo, Personalized Running Buddy (coursework, team of two): Built an Android app for LLM-based running coaching, compiling user goals into executable DSL plans and triggering real-time spoken feedback from mobile sensor metrics.

Out-of-Domain Face Recognition (coursework): Designed a pipeline using MobileFaceNet and Sub-center Arc-Face loss; ranked 3rd out of 66 on test-set equal error rate.

Pintos (operating-systems coursework): Implemented threads, user programs, and virtual memory; received full marks on all projects.

HONORS AND AWARDS

Kwon Young-se Scholarship 4M KRW Merit-based Scholarship from KAIST	Nov 2025
Undergraduate Research Participation Program 2M KRW Research Grant from KAIST	Jan 2025
KAIST Study Abroad Scholarship 4M KRW Study Abroad Scholarship	May 2024
National Science and Technology Scholarship 2M KRW Merit-based Scholarship	Aug 2023

HIGHLIGHTED COURSES

KAIST: Foundations of Big Data Analytics, Deep Learning for Computer Vision, Advanced Topics in Deep Reinforcement Learning, Speech Recognition Systems, Operating Systems and System Programming for Electrical Engineering, Computer Networks, System Programming, Data Structures, Discrete Mathematics.

Rice University: Artificial Intelligence, Machine Learning Concepts and Techniques, Introduction to Computer Vision, Parallel Computing.

TEACHING AND ACADEMIC SERVICE

Head Teaching Assistant , Embedded Systems, KAIST	Fall 2026
Head Teaching Assistant , Computer Networks, KAIST	Spring 2026
Teaching Assistant , EE Design Project for Social Impact, KAIST	Fall 2025
Reviewer , ACM MobiCom and ACM MobiSys	2026

ADDITIONAL EXPERIENCE

KAIST Science Outreach Program One-on-one English mentoring for middle and high school students	Apr 2023 – Jul 2023
Republic of Korea Army Military Service	Jun 2021 – Dec 2022
The KAIST Herald Head of Society Division	Aug 2019 – Jun 2021

SKILLS

Programming Languages: Python, Java, C/C++, HTML

Frameworks: PyTorch, Hugging Face, scikit-learn, Pandas, Numpy

Platforms: Linux, Git, Android

Spoken Languages: Korean (native), English (TOEFL 115), Chinese (HSK 5)