Minkyu Park

parkparkmk@gmail.com MinkyuPark0816 Minkyu Park

RESEARCH INTERESTS

Computer Architecture, Memory System, Energy Efficient Systems

EDUCATION

B.S. in Big Data, College of Information Science, Hallym University, Mar. 2020 – Feb. 2026

- Cumulative GPA: 4.06 / 4.5
- Junior/Senior GPA : 4.24 / 4.5
- Full Tuition Scholarship, awarded upon admission for 4 semesters
- Full Tuition Scholarship, awarded to the top-ranked undergraduate student (1st place) in the department, Spring 2025

RESEARCH EXPERIENCE

Research Intern, CSArch, Korea University, Aug. 2026 – Present

- Advisor: Prof. Gunjae Koo

Research Intern, PSAL, POSTECH, Jan. 2026

- Advisor: Prof. Gwangsun Kim
- Implemented support for a new ATen operator in PyTorchSim by defining custom lowerings and MLIR-based execution paths.
- Designed and documented an end-to-end contributor tutorial as a GitHub Wiki for extending MLIR-backed ATen operator support.

Undergraduate Researcher, AIAC Lab, Hallym University, Jul. 2024 – Present

- Advisor: Prof. Jeong-Gun Lee
- Conducted research on Edge AI inference performance modeling, predicting delay, power, energy, and EDP using regression-based approaches.
- Built an experimental measurement pipeline on Jetson Orin Nano for collecting fine-grained runtime and power data.

PUBLICATIONS

Minkyu Park*, Jaemin Jeong, Jiho Cho, Jeong-Gun Lee. Predicting Delay, Power, and Energy of Edge AI Inference with Ridge Regression. *IEEE International Conference on Consumer Electronics (ICCE 2026)*.
박민규*, 김홍권, 정재민, 이정근 : Edge형 GPU 시스템에서 딥러닝 모델의 성능 및 에너지 소모 특성 분석. *2025 한국정보처리학회 학술대회논문집 Vol.32 No.1*.

AWARDS

Grand Prize (Minister of Science and ICT Award) — 2025 National ICT Smart Device Competition, *hosted by the Ministry of Science and ICT*, Sep. 2025
2nd Prize — SW Capstone Design Competition, Hallym University, *sponsored by the Ministry of Science and ICT*, Dec. 2024
3rd Prize & Popularity Award — 2024 SW-Central University Digital Competition, *hosted by the Ministry of Science and ICT*, Aug. 2024
Startup Competition Awards

- Innovation Award — 2025 University Startup Idea Challenge, Sep. 2025
- Top Team Selection — Hana Social Venture University, Sep. 2025
- Honorable Mention — 2025 Northeast ICT Innovation Square Startup Idea Competition, *hosted by the Ministry of Science and ICT*, Aug. 2025

- Grand Prize — 13th Pan-Government Public Data Utilization Startup Competition, Gangwon Regional Preliminary, Jun. 2025

ACADEMIC ACTIVITIES

2025 Accelerator Programming Winter School, SNU Thunder Research Lab - Participant, Feb. 2025

- Program Director: Prof. Jaejin Lee
- Completed hands-on training in CUDA programming and GPU-based acceleration techniques.

CES 2025, Las Vegas, NV - Attendee, Jan. 2025

- Observed emerging technologies and industry trends.

Academic Club CAERANG, Hallym University - Team Leader of Tensor Division Jan. 2024 – Dec. 2024

- Provided lectures (3hr / week) and prepared exercises on Deep Learning to freshman and sophomore students.

PROJECTS

Startup Team CAMORIX - Team Member, Jan. 2025 – Feb. 2026

- Developed YOLO-based models and enabled real-time edge inference on Jetson Orin Nano for a fall detection system in elderly care monitoring.

SW Capstone Design Team - Team Member, Aug. 2024 - Dec. 2024

- Evaluated a custom C/CUDA-based deep learning framework by implementing and benchmarking fire detection, vehicle CAN data classification, and pill image classification models.

SW-Central University Digital Competition Team - Team Member, Jan. 2024 - Aug. 2024

- Developed a model for detecting AI-generated fake voice content in the AI competition track.

LANGUAGE SKILLS

English: Proficient (TOEIC 855)

MILITARY SERVICE

Sergeant, Republic of Korea Army, 31st Infantry Division — Signal Corps, Jan. 2021 – Jul. 2022