

SUMIN PARK

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 [Linkedin](#) |  [Github](#) |

EDUCATION

- **Korea Advanced Institute of Science and Technology (KAIST)** *Sep 2024 – Present*
Daejeon, South Korea
M.S. in Computer Science
 - GPA: 4.18 / 4.30
- **Ewha Womans University** *Mar 2016 – Feb 2021*
Seoul, South Korea
B.S. in Brain and Cognitive Sciences & B.S. in Life Sciences
 - GPA: 4.07 / 4.30 (Summa Cum Laude)
 - Thesis: *Differential Mechanism of Positive and Negative Valence Representation: A Focus on Amygdalar Circuitry*

EXPERIENCE

- **Big Data Analysis & Learning Laboratory (BigDyL), KAIST** *Sep 2024 – Present*
Daejeon, South Korea
Master's Student Researcher
 - Advisor: Noseong Park
 - Research Topic: LLM architectures, Mixture-of-Experts, Representation learning, Explainable LLMs, Brain-inspired AI.
- **Big Data Analysis & Learning Laboratory (BigDyL), Yonsei University** *Jul 2023 – Aug 2024*
Seoul, South Korea
Research Intern
 - Advisor: Noseong Park
 - Research Topic: Graph representation learning, Graph neural networks (GNN)
- **DNI Consulting** *Feb 2022 – Apr 2024*
Seoul, South Korea
Data Scientist
 - Research Topic: Data analysis and modeling for B2B marketing and customer segmentation
- **Cell Physiology Laboratory, Seoul National University** *Aug 2020 – Jan 2021*
Seoul, South Korea
Undergraduate Research Intern
 - Advisor: Seokho Lee
 - Research Topic: PFC-involved systems consolidation
- **Neurobiology Laboratory, Seoul National University** *Dec 2018 – Feb 2019*
Seoul, South Korea
Undergraduate Research Intern
 - Advisor: Bongkiun Kaang
 - Research Topic: Molecular analysis on dopaminergic reward circuitry

PUBLICATIONS

INTERNATIONAL CONFERENCES

- [C3] **How Many Experts Are Enough? Towards Optimal Semantic Specialization for Mixture-of-Experts** | *AAAI 2026*
 - Sumin Park and Noseong Park
- [C2] **DARS: Robust Sparse Fine-Tuning with Regularized Subspace Disalignment** | *ICLR 2025 Workshop (SCOPE)*
 - Sumin Park and Noseong Park
- [C1] **PANDA: Expanded Width-Aware Message Passing Beyond Rewiring** | *ICML 2024*
 - Jeongwhan Choi, Sumin Park, Hyowon Wi, Sung-Bae Cho, and Noseong Park

INDUSTRIAL PROJECTS

- **Simulation-Based Defect Variable Identification from High-Resolution Images** *Mar 2025 – Dec 2025*
 - Ongoing Samsung-KAIST industry-academia project
 - Developed a multi-task, multi-class image classification framework to predict defective variables from simulation-generated images
 - Designed a ViT architecture with hierarchical attention for efficient high-resolution image processing, achieving 99.41% classification accuracy

LEADERSHIP AND EXTRACURRICULARS

- **Ewha Institute of Brain & Cognitive Science, Ewha Womans University** *Spring 2020 – Fall 2020*
President
 - Led and organized academic activities including weekly open research sessions and end-of-semester undergraduate journal publications
 - Reviewed multiple journals per session and authored weekly summary reports
- **Debate Association of Ewha (DAE), Ewha Womans University** *Spring 2019 – Fall 2019*
Regular Member
 - Participated in weekly team debate sessions
 - Competed in national debate tournaments (SRT, KNC); SRT 2019 Quarter Finalist

HONORS AND AWARDS

- Summa Cum Laude, Ewha Womans University *2016 – 2020*
- Dean's List (7 semesters), Ewha Womans University *2016 – 2020*
- Academic Honors Scholarship, Ewha Womans University *Spring 2020*
- Global Leader in Major, Ewha Womans University *Spring 2020*
- Academic Honors Scholarship, Ewha Womans University *Spring 2019*
- Admissions Scholarship (Full Tuition, 2 Years), Ewha Womans University *2016 – 2018*

SKILLS

- **PROGRAMMING & FRAMEWORKS:** Python, R, C++, PyTorch, Triton
- **SYSTEMS & TOOLS:** Linux, Git, Docker, AWS, SQL