Jeongbin Sohn (손정빈)

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EDUCATION

GIST(Gwangju Institute of Science and Technology) Mar. 2020 - Feb. 2026

B.S. Mechanical and Robotics Engineering Major / Electrical Engineering and Computer Science Minor Total GPA: 4.38/4.5

University of California, Berkeley

Jan. 2026 - May. 2026

Study Abroad Program

Boston University

Jul. 2021 - Aug. 2021

Student Exchange Program Total GPA: 4.0/4.0

GSA(Gwangju Science Academy for the Gifted)

Mar. 2017 - Feb. 2020

High School Graduation

RESEARCH EXPERIENCE

GIST Machine Perception and Intelligence (MPIL) Lab $\operatorname{Jan.}\ 2025$ - $\operatorname{Current}$

Student Intern

Supervisor: Prof. Pyojin Kim

Developed a ground-based technique by applying astronomical coordinate transformations to overcome the satellite-only limitations of traditional star trackers; presented this work at a domestic robotics conference. Currently researching Star Identification, a critical step in star tracking, using Graph Neural Networks with the goal of publishing at European Conference on Computer Vision(ECCV) 2026.

GIST Bio-Robotics Lab

Jul. 2024 - Dec. 2024

Student Intern

Supervisor: Prof. Jongho Lee

Studying Robot Operation System(ROS) and Path Planning algorithms, I narrowed down my research interest to robotics.

KITECH(Korea Institute of Industrial Technology) Aug. 2023 - Feb. 2024

Research Assistant

Supervisor: Dr. Hojae Lee

By translating code and improving program by using the ray-casting algorithm, I discovered the joy of research through solving problems and applying knowledge from diverse fields.

PUBLICATIONS

- 1. Conference Presentations
 - **Sohn** and Park 2025 3DV, "ECOE: Event-based Celestial Orientation Estimation", Accepted for Poster Presentation
 - Park, **Sohn**, and Lee 2025 ICROS, "A Low-Cost Celestial Compass Under Low-Light Featureless Environment", Accepted for Poster Presentation

- 2. Articles in preparation
 - Sohn, Lee, Park, and Hepburn-Dickins 2026 ECCV, "Edge of Stars: Learning Stellar Graphs through Angular-Edge Inversion"

AWARDS & **FELLOWSHIPS**

Study Abroad Program Scholarship

Jan. 2026 - May. 2026

A scholarship granting 26,000 USD for eight students accepted for Study Abroad Program(SAP) to UC Berkeley.

Korea National Science and Engineering Scholarship Mar. 2020 - Feb. 2026 A scholarship to fund full tuition for 8 semesters from Korea Student Aid Foundation, Ministry of Education (국가이공계장학금)

Korea-U.S. Exchange Program for Advanced Fields Jan. 2026 - May. 2026 An incentive scholarship of 9,000 USD bestowed by the Korea Institute of Advancement of Technology for 113 undergraduate students in South Korea.

Woonhae Scholarship (운해장학금)

Mar. 2025 - Feb. 2026

An incentive scholorship granting 2,780 USD per semester for 1 year bestowed by Woonhae foundation. It is granted for students whose GPAs are over 4.0.

Jeongwon Scholarship (정원장학금)

Jul. 2025 - Aug. 2025

An incentive scholorship of 1,440 USD bestowed by Jeongwon foundation.

U.S. Army Commendation Medal Jun. 2023 GIST Mech-Eng Internship Presentation Award (2nd place) Jun. 2021

TEACHING

Teaching Assistant

Sep. 2024 - Dec. 2024

EXPERIENCE GIST GS2001 Multivariable Calculus and Applications

TECHNOLOGY Programming Languages:¹

SKILLS

Python, C++, C, MATLAB Working knowledge of:

Familiar with: Python Operating Systems: Linux, Windows

Others: LabVIEW, Siemens NX, COMSOL Multyphysics, OpenFOAM

LANGUAGE **PROFICIENCY**

Korean (native) English (fluent²)

Japanese (basic knowledge)

OTHER ACTIVITIES GIST Swimming Club Leader

Mar. 2025 - Aug. 2025

Swimming, training, and having recreation and barbecue with the club members made a collaborative sense of bond.

ELITE Club Foundation Member

July. 2025 - Dec. 2025

ELITE(English for Learning, Inquiry, Thought, and Expression) club is an English study club supervised by Prof. Ellis Lee. The foundation members build specific plans for club activities and lead group studies.

¹In order of decreasing familiarity.

²A year and a half of working at the U.S. Army base as KATUSA(Korean Augmentation To the United States Army) and 6 weeks living in the U.S as an exchange student to Boston University