

Seungeui Byun

shoreview01@korea.ac.kr | github.com/shoreview01 | shoreview01.github.io

RESEARCH INTERESTS

- Communications, Message Passing, Machine Learning, Quantum Computing

EDUCATION

Korea University <i>Graduate Student</i>	Mar. 2026 – Present <i>Seoul, Korea</i>
Korea University <i>Undergraduate Student</i>	Mar. 2020 – Feb. 2026 <i>Seoul, Korea</i>

- Master of Science in Electrical and Computer Engineering
- Bachelor of Science in Electrical Engineering
- Cumulated GPA of 4.08/4.5 (3.84/4.0), graduated with Great Honors

RESEARCH EXPERIENCES

Graduate Research Assistant <i>Lab for Informatics, Communications, and Systems Korea University</i>	Mar. 2026 – Present <i>Seoul, Korea</i>
Undergraduate Research Assistant <i>Lab for Informatics, Communications, and Systems Korea University</i>	Jan. 2025 – Feb. 2026 <i>Seoul, Korea</i>
<ul style="list-style-type: none">• Advisor: Professor Sang Hyun Lee• Advisor: Professor Sang Hyun Lee• Researched about NLoS position determination technology.• Solved problem by message passing and quantum algorithm.• Verified algorithm using Python and 3D city model by Unity engine.• Gave a poster presentation and wrote Bachelor's thesis about the research.	

- Advisor: Professor Sang Hyun Lee
- Advisor: Professor Si-Hyeon Lee
- Studied about resource allocation optimization in mobile edge computing (MEC) environment.
- Established new multi-user, multi-UAV model using clustering algorithm.

PERSONAL PROJECTS

Maze Tracker <i>Production for HandS Hardware Hackathon</i>	Sep. 2024
<ul style="list-style-type: none">• Built maze-tracking car using infrared sensors and MOSFETs, hardware-only logic without microcontrollers.	
Style-Finding Model for Historical Paintings <i>Pytorch, pandas, Imagenet, Resnet</i>	June 2024
<ul style="list-style-type: none">• Developed CNN model using VGGNet-19 and ResNet-152, achieved accuracy of 84 %.• Gave a poster presentation about the model and its results.	

AWARDS AND HONORS

Semester High Honors	Jan. 2026
Semester High Honors	July 2025
Semester High Honors	Jan. 2025
4th place on IBM Qiskit Fall Fest 2024, IBM Quantum and Korea University	Nov. 2024
1st place on HandS Hardware Hackathon, Korea University (around 30 participants)	Sep. 2024
Semester High Honors	Jan. 2021
Semester High Honors	July 2020

SKILLS

Programming Languages: C, Python, MATLAB, Verilog, L^AT_EX

Languages: Korean (Native), English (Fluent, TOEIC 990)

Developer Tools: Git, VS Code, Visual Studio

Libraries: pandas, NumPy, Matplotlib, Pytorch, Qiskit

ACTIVITIES

Korea University Engineering Community Service

Mar. 2024 – Feb. 2026

Member of management team

- Voluntary organization dedicated to teaching elementary school students about engineering.
- Brought diverse science experiments to elementary students in the Dongdaemun and Seongbuk districts, Seoul.
- Participated in KUECS School, introducing middle and high school students to university life and academics.

Quantum Information Club at Korea University

Mar. 2024 – Aug. 2025

Regular member

- Participated in IBM Qiskit Fall Fest 2023 and 2024, held in Korea University.
- Participated in Quantum Summer School 2024, held by Korean Physical Society.
- Joined Quantum Information Science Club Association (Korea Univ., Seoul Nat'l Univ., Yonsei Univ., KAIST).

K2 Global Leadership Program

Aug. 2025

Korea University, Keio University

Seoul, Korea and Tokyo, Japan

- Full-funded program held by Korea University Innovation Center for Engineering Education.
- Korea University–Keio University undergraduate exchange program focused on global leadership development.
- Engaged in lectures and discussions conducted entirely in English on key subject related to international relations.
- Awarded a certificate of completion and MVP award for the program.

HandS, KU EE Hardware & Software Community

Sep. 2023 – Feb. 2025

Regular member

- Participated in Raspberry Pi seminar, imbedded system and CV studies.
- Participated in HandS Hardware Hackathon, won first place.
- Worked in natural language processing project, related to deep learning.

One and Zero, KU EE Software Community

Mar. 2023 – Feb. 2024

Regular member

- Participated in deep learning study and Python seminar.

Korea University Computer Club

Sep. 2020 – Aug. 2021

Member of management team

- Studied pandas package in Python for various data processing.
- Participated in HTML/CSS/JS study and simple web programming project.

OTHER EXPERIENCES

Dolbit, Korea University Movie Production Club

Mar. 2023 – Aug. 2025

Sound Director, Production Leader, Actor

- Participated in four movies as an actor, three movies as a sound director.

Military Band, 2nd Operations Command, Republic of Korea Army

Sep. 2021 – Mar. 2023

Clarinetist, Personnel Administrative Clerk

Daegu, Korea

- Mandatory service as a Republic of Korea citizen.
- Served as a first clarinet role for military band of the command.
- Managed squad's personnel information, selected as an Excellent Personnel Unit.