JUNWOO PARK

South Korea | (+82) 10-5107-4199 | junwoop5@uci.edu | junwoop0.github.io

EDUCATION

University of California, Irvine — **Irvine, CA**
M.S. in Computer Science — Sep. 2026 – Jun. 2028 (Expected)

Sungkyunkwan University (SKKU) — **Suwon, Korea**
B.S. in Computer Science and Engineering, GPA: 4.31/4.50 — Mar. 2024 – Feb. 2026

Sejong University — **Seoul, Korea**
Aerospace Engineering — Mar. 2020 – Feb. 2024

- Fulfilled mandatory alternative military service (2022–2023) before transferring to SKKU.

RESEARCH EXPERIENCE

SKKU AI-Healthcare Lab
Research Assistant (Advisor: Prof. Sujee Lee) — Feb. 2025 – Present

- Developed a multimodal deep learning model that integrates molecular graphs, sequences, images, and spectra using attention mechanisms for toxicity prediction [1].
- Collaborated with Samsung C-Lab on the "Muscle Tracker" project.

SKKU Human Language Intelligence Lab
Research Assistant (Advisor: Prof. JinYeong Bak) — Sep. 2024 – Dec. 2024

- Analyzed and preprocessed user activity data including diary entries, therapeutic game logs, and media consumption to characterize depression-related behavioral patterns.

PUBLICATIONS

[1] **J. Park** and S. Lee, MoltiTox: a multimodal fusion model for molecular toxicity prediction, Frontiers in Toxicology, 2025.

PROJECTS

Project SKKU Character: AI Platform for University Mascot, SKKU
AI Engineer — Oct. 2025 – Feb. 2026

- Secured 5M KRW (∼3,600 USD) in funding through the university entrepreneurship program.
- Developed an AI image generation system by fine-tuning a FLUX model on mascot datasets and implementing a FastAPI backend for generation requests.

Muscle Tracker: AI-driven Analysis for Strength Training, SKKU
Research Assistant — Aug. 2025 – Nov. 2025

- Collected and preprocessed EMG and IMU sensor data from 14 subjects through a Python pipeline applying Butterworth filtering, interpolation, and RMS computation.
- Designed an algorithm to predict maximum muscle activation via sigmoid curve fitting and co-developed an exercise classification model with 96% accuracy using a temporal convolutional network.

NotiSKKU: Student Announcement App, SKKU
Team Leader — Aug. 2024 – Nov. 2025

- Led a four-member team to develop a mobile app that aggregates campus announcements, based on a survey of over 60 students.
- Built the frontend using Flutter and launched the service on Google Play.

VisualVroom: Alert System for Hearing-Impaired Drivers, SKKU
Team Leader Apr. 2025 – Aug. 2025

- Directed a team to create a real-time auditory alert system for hearing-impaired drivers.
- Developed a Vision Transformer-based model to classify sound sources and their directions from smartphone audio input, achieving 83.9% accuracy.
- Integrated Google Speech-to-Text API to support in-car communication.

TEACHING & MENTORING EXPERIENCE

Course: Basis and Practice in Programming, SKKU
Teaching Assistant Fall 2025

- Guided 60 students in C programming coursework, evaluating assignments and providing feedback.

Software Mentoring Program, SKKU
Mentor May – Sep. 2024, May – Sep. 2025

- Taught Python fundamentals and conducted lab sessions for high school students.

EXTRACURRICULAR ACTIVITIES

Google Developer Groups on Campus, SKKU
President Feb. 2025 – Feb. 2026

- Led ∼20 members, fostering collaboration through workshops and team-based projects.
- Established an international partnership with Mission San Jose High School in California, co-hosting a joint programming contest in Feb. 2026.
- Hosted monthly tech talks featuring professionals and researchers from global tech companies.

AWARDS & HONORS

First Place, 2025 Uni-DTHON (Hackathon) Nov. 2025

Excellence Award, SW High School Creative Science-thon Nov. 2025

- Awarded for leading a team of 4 high school students as a mentor.

2025 President's List, Sungkyunkwan University Sep. 2025

Grand Prize, ICT Award Korea 2025 Aug. 2025

SKILLS

Languages	Python, C, C++, Java, SQL, HTML/CSS
Frameworks & Tools	PyTorch, FastAPI, Flutter, Git, Docker, Linux, MATLAB