

# Rachel (Younwoo) Park

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## Education

### Sungkyunkwan University

Bachelor of Science, Computer Science & Engineering

Bachelor of Engineering, Industrial Engineering

**Expected Dec 2025**

GPA 4.44 / 4.5

**Relevant Coursework:** Distributed System, Data Science, Operating Systems, Data Structures, Algorithms

## Experiences & Projects

### Project: AI-Powered Language Therapist (Chitchat)

**Jul. 2024 - Present**

*Sungkyunkwan University startup program SPARK, Project Manager & Full Stack Developer*

- Spearheaded the development game-like application powered by an AI speech therapist for children with language disorders, overseeing all aspects of the project from concept to deployment
- Implemented backend services using Flask and developed the frontend with NextJS & React-Native, focusing on robust API development to ensure smooth interactions between the server and client
- Applied project management principles to coordinate team efforts and maintain effective communication
- Achieved 6th place out of 96 teams at SeSAC Hackathon, organized by Seoul & Google Korea

### Project: Malicious URL Detection Service (URLS)

**Jul. 2024 - Oct. 2024**

*Korea Information Security Industry Association (KISIA), Backend & AI Developer*

- Architected and implemented a scalable backend using NestJS and Flask, integrated with PostgreSQL, and deployed on AWS EC2 with docker and a CI/CD pipeline for continuous integration and deployment
- Developed a model aggregation system to combine outputs of three models, enhancing accuracy to over 92%
- Engineered a network packet analysis model using RNN within a Docker container to ensure system security, achieving 94% accuracy in detecting malicious URLs
- Led a team to 1st place (out of 25 finalists) at KISIA Information Security Developer Hackathon

### Python Study Group Instructor, Samsung Institute of Technology

**Mar. 2024 - Present**

- Mentored Samsung employees in applying Python for real-world data analysis and automation tasks
- Developed and delivered a comprehensive Python curriculum focusing on data processing, visualization, web scraping, and open API using Numpy, Pandas, and more

### Research Intern, Sungkyunkwan University

**March 2024 - June 2024**

- Collaborated with Professor Miae Son on transforming the KMTF (Korean Military Tactical Framework) to NIEM format to enhance interoperability within the Ministry of National Defense's battlefield systems
- Analyzed and interpreted the structure of various communication networks to support data system conversion
- Performed foundational work on data interpretation and restructuring, focusing on improving the efficiency of military information systems through the conversion of MTF data to NIEM format

## Awards & Certifications

**Korean Ministry of Science and ICT Award**, KISIA Information Security Developer Hackathon

**Aug. 2024**

**Seoul Business Agency Excellence Award**, SeSAC Hackathon (Seoul x Google Korea)

**Aug. 2024**

**KT AICE**, Machine Learning & Artificial Intelligence utilization skill assessment (KT)

**Jul. 2023**

## Leadership and Extracurricular Activities

### PR Officer of Snowboarding Club, Sungkyunkwan University

**Mar. 2022 - Feb. 2023**

- Recruited over 200 members, increasing club funds by 70%, while producing media content
- Negotiated and signed housing contracts to facilitate winter training events and provided snowboarding lessons to new members, fostering a welcoming and supportive environment for beginners

## Skills

**Programming Languages:** C/C++, Python, Java, Kotlin, R, SQL, TypeScript, JavaScript, HTML/CSS

**Framework/Libraries:** Node.js, Next.js, NestJS, Vue.js, Flask, Tailwind, Spring, REST API, Scikit-Learn, Pandas

**Databases:** MySQL, PostgreSQL, SQLite

**Tools & Platforms:** AWS, Google Cloud Platform, Docker, Figma, Prisma, Git, Android Studio, Linux,