Rachel Park

Santa Cruz, CA | (669) 233-1837 | rachelie.dwg@gmail.com | Linkedin | Github

Education

Sungkyunkwan University   **Expected Dec 2025**
Bachelor of Science, Computer Science & Engineering   GPA 4.44 / 4.5
Bachelor of Engineering, Industrial Engineering

Relevant Coursework: Distributed System, Data Science, Machine Learning, Operating Systems, Data Structures

Highlighted Experience and 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

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, Korean AI utilization skill assessment (KT)   **Jul. 2023**

Leadership and Extracurricular Activities

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

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: Next.js, NestJS, Vue.js, Flask, Tailwind CSS, Spring, REST API, Scikit-Learn, Pandas, NumPy
Databases: MySQL, PostgreSQL, SQLite
Tools & Platforms: AWS, Google Cloud Platform, Docker, Figma, Prisma, Git, Android Studio, Linux