


OBJECTIVE

Responsible and curious student driven by a passion for continuous improvement and solving complex problems at scale. Experienced in designing and optimizing high-performance backend systems with Java, Spring Boot, and distributed technologies like Kafka and Redis. Thrives on ambitious challenges and seeks to collaborate in a fast-paced, candid environment where I can both contribute my skills and learn rapidly from others.



EXPERIENCE

- **Kakao bootcamp**  January 2025 - July 2025
Pangyo, Korea
Backend Development Course
 - Applied performance optimization strategies, including such as database indexing, query tuning, and cache optimization, achieving measurable improvements in API response times and system throughput.
 - Led backend development within a cross-functional team of AI, Frontend, and Cloud engineers. Collaborated in an agile workflow, rapidly iterating on a web application and ensuring tight alignment between backend services and user-facing features.

EDUCATION

- **Sogang University** March 2022 - Present
Seoul, Korea
Computer Science and Engineering, currently enrolled in 6th semester
 - GPA: 3.79/4.5
 - Related coursework:
(Completed) Data Structures, Algorithms, Computer Architecture, Digital Circuits, Deep Learning, Information Security
(Currently taking) Operating Systems, Compiler Construction, Computer Vision
- **Hankuk Academy of Foreign Studies** March 2019 - January 2022
Yongin, Korea
Secondary Education, Natural Science Track

PROJECTS

- **Project A: AI-powered automated calendar** April 2025 - July 2025

Tools: Spring Boot, JPA, PostgreSQL, Redis, Kafka
 - Developed a real-time collaborative calendar **backend** using **Spring Boot**, enabling schedule synchronization through **WebSocket** and **SSE**, with **Kafka** for asynchronous message streaming.
 - Reduced **95th percentile query latency by 32.3%** and achieved **96% cache hit rate** through **Redis caching strategies** (Cache Aside, TTL + jitter, Redisson distributed locks).
 - **Improved database performance** by resolving N+1 queries and optimizing indexing, significantly accelerating high-frequency schedule queries.
 - Built **real-time collaboration features** using WebSocket and SSE, supporting instant schedule synchronization and event notifications across distributed users.
 - Designed **scalable event streaming pipelines** with Kafka + KStream to support chatbot functionality and multi-instance consistency.
- **Project B: Q&A system for students** January 2025 - March 2025

Tools: Spring Boot, JPA, MySQL, HTML, CSS, Vanilla JS
 - Developed an anonymous Q&A system for students using Spring Boot and JPA, ensuring efficient data management and persistence.
 - Established test code practices to verify functionality and maintain high software quality.

SKILLS

- **Programming Languages:** Java, C++, Python, C, Javascript
- **Web Technologies:** Spring Boot, JPA(hibernate), Redis, Kafka, Django, React
- **Testing Tool:** JUnit, Mockito
- **Infra:** Docker
- **Database Systems:** MySQL, PostgreSQL, MongoDB, h2 database
- **Data Science & Machine Learning:** LangChain, PyTorch, Matplotlib
- **Web Crawling & Automation:** Selenium, BeautifulSoup

ADDITIONAL INFORMATION

Languages: Korean (Native), English (Fluent, OPIc AL – ACTFL Speaking Assessment)

Interests: Enhancing system scalability and modularity. Physical AI and basically exploring new technologies.