HoJeong Kim

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Seoul, Korea

Objective

Motivated software engineer seeking a challenging role in Systems Development to leverage my expertise in full-stack web development - along with hands-on experience designing and implementing backend solutions. Experienced building applications for Kubernetes-based environments with Docker, and collaborating on CI/CD-driven workflows to ensure efficient and reliable delivery.

Experience

- **Kakao bootcamp [🌐]** *January 2025 - July 2025*
  BootCamp Pangyo, Korea
  - Currently developing expertise in full-stack web development using Spring boot, React, and MySQL, with a focus on scalable and maintainable applications
  - Learning and implementing CI/CD pipelines with GitHub Actions and Docker to streamline deployment processes
  - Exploring microservices architecture using Kubernetes, aiming to enhance system scalability and modularity
  - Planning to apply web development skills to a community service project, improving accessibility and efficiency of digital resources
  - Researching performance optimization techniques for APIs, including database indexing and query optimization, to improve response times

Education

- **Sogang University** *March 2022 - Present*
  Computer Science and Engineering Seoul, Korea
  Currently in penultimate year (completed 5th semester)
  - GPA: –/4.3
- **Hankuk Academy of Foreign Studies** *March 2019 - January 2022*
  Secondary Education Yongin, Korea

Projects

- **Project A: AI-powered automated calendar** *April 2025 - July 2025*
  Tools: Spring Boot, JPA, PostgreSQL, Redis, Kafka [GitHub]
  - Developed a real-time collaborative calendar backend using **Spring Boot**, enabling schedule synchronization through **WebSocket** and **SSE**, with **Kafka** for asynchronous message streaming.
  - Applied advanced **Redis caching strategies** (**Cache Aside**, **Write-Through** with TTL + jitter, distributed locks) achieving **96% cache hit rate** and reducing **95th percentile query latency by 32.3%**.
  - Enhanced database performance in **PostgreSQL** by resolving N+1 query issues, applying indexing optimizations, and converting sequential scans to **index scans**, leading to significant execution time reduction for high-frequency queries.
- **Project B: Q&A system for students** *January 2025 - March 2025*
  Tools: Spring Boot, JPA, MySQL, HTML, CSS, Vanilla JS [GitHub]
  - Developed an anonymous Q&A system for students using Spring Boot and JPA, ensuring efficient data management and persistence.
  - Optimized system performance by applying concurrency control techniques to handle high volumes of simultaneous requests.
  - Established comprehensive test code practices to verify functionality and maintain high software quality.
- **Project C: AI Eminem Chatbot** *November 2024*
  Tools: Python, Streamlit [GitHub]
  - Developed an AI-powered rap generation system using Chain-of-Thought prompt engineering to craft contextually rich verses on any topic.
  - Implemented a Huggingface-based text-to-speech module that synthesizes Eminem-style rap in real time, offering five distinct style options for a personalized audio experience.
  - Created an interactive Streamlit dashboard for users to input topics and visualize generated rap verses, enhancing engagement and usability.
  - Engineered a modular integration layer to seamlessly connect the natural language processing and TTS components, ensuring scalability for future enhancements.

Skills

- **Programming Languages:** Java, C++, Python, C, Javascript
- **Web Technologies:** Spring Boot, JPA(hibernate), Redis, Kafka, Django, React
- **Database Systems:** MySQL, PostgreSQL, MongoDB, h2 database
- **Data Science & Machine Learning:** LangChain, PyTorch, Tensorflow, Matplotlib
- **Other Tools & Technologies:** Selenium, BeautifulSoup

Additional Information

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

Interests: Physical AI and basically exploring new technologies.