CHEOLMIN OH

Boston, MA • +1-617-821-5892 • jasonoh1998@gmail.com • github.com/jasonoh1998 • linkedin.com/in/cheolminoh

EDUCATION

Boston University, Boston, MA   Expected May 2024
BA in Computer Science
Relevant Coursework: Software Engineering; Operating Systems; Algorithms; Artificial Intelligence

PROFESSIONAL EXPERIENCE

BU Spark, Boston, MA   May 2023 – Jan 2024
Software Engineer Intern
- Migrated website to Next.js and Vite.js, boosting load time by 30% with optimizations and caching.
- Developed RESTful API using Express.js, Next.js, and a headless CMS, integrated with PostgreSQL and Firebase.
- Reduced Firebase resource usage by 17% by optimizing application code and data retrieval.
- Updated CI/CD pipelines with GitHub Actions, cutting deployment time by 50% and boosting team productivity.
- Identified security issues in the code, safeguarding user data and preventing unauthorized access to the APIs.

Republic of Korea Air Force, Gyeryoung-si, South Korea   Sep 2020 – Jun 2022
Data System Engineer
- Normalized a large database using MySQL, resulting in faster data retrieval, and reducing onboarding time by 50%.
- Built macros to automate repetitive tasks, saving over 100 hours of manual work per month.
- Reengineered legacy Java codes to a RESTful architecture using Express.js, revitalizing 30+ inefficient APIs.
- Revamped website using JSP, improving task tracking and resource management, boosting productivity by 22%.
- Facilitated meetings for senior officials, including 5-star generals and National Assembly audits of state affairs.

PROJECTS

Student Record Management System   Dec 2023 – Present
- Automated backups and disaster recovery with Railway cloud, ensuring data integrity and operational continuity.
- Collaborated with South Korean academies, employing agile development to tailor solutions.
- Replaced a paid OracleDB app with a custom PostgreSQL solution using Prisma, reducing costs by over 90%.
- Planned shift to AWS/Azure multi-tenant databases, with the addition of SMS features.

Spare-it: AI Waste Contamination Identifier   Jan 2024 – Present
- Utilized YOLOv8 and ResNet152 to enhance classification of recyclable objects, boosting waste sorting accuracy.
- Reviewed 9,000+ images and JSON segmentation to classify waste types and detect contamination.
- Applied sampling techniques to address class imbalance, leading to a 30% reduction in misclassification.

Bad Landlords   May 2023 – Jan 2024
- Initiated biweekly meetings with Boston City Council to shape web app development for public services.
- Implemented Python scripts fetching data from 5 APIs, boosting data updates by 68% throughout the project.
- Generated batch jobs for database updates, achieving updates with near 100% reliability.
- Spearheaded Docker environments to standardize safe testing and deployment processes.
- Cooperated closely with UI/UX designers using Figma to refine application interfaces.

SKILLS

Front-end stack: JavaScript, TypeScript, React.js, Next.js, Expo, HTML, CSS, Tailwind CSS, jQuery
Back-end stack: Python, Node.js, Express.js, Flask, Strapi, Jest
Database: Prisma, PostgreSQL, MySQL, MongoDB, Cloud Firestore
Other: Docker, Railway, AWS, Azure, TensorFlow, PyTorch, Trello, Slack, Figma
Languages: Korean (Native), English (Fluent)