

# CHEOLMIN OH

Boston, MA • +1-617-821-5892 • [jasonoh1998@gmail.com](mailto:jasonoh1998@gmail.com) • [github.com/jasonoh1998](https://github.com/jasonoh1998) • [linkedin.com/in/cheolminoh](https://linkedin.com/in/cheolminoh)

## EDUCATION

---

**Boston University**, Boston, MA

Expected May 2024

BA in Computer Science

Cumulative GPA: 3.48/4.0

Relevant Coursework: Software Engineering; Operating Systems; Algorithms; Artificial Intelligence

## PROFESSIONAL EXPERIENCE

---

**BU Spark**, Boston, MA

May 2023 – Jan 2024

### Software Development 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.
- Implemented Python scripts fetching data from 5 datasets, boosting data updates by 68% throughout the project.
- 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 Management Group – Squad Leader (May 2021 – Jun 2022)

- Normalized large database using MySQL, resulting in faster data retrieval, and reducing onboarding time by 50%.
- Revamped website using JSP, improving task tracking and resource management, boosting productivity by 22%.
- Reengineered legacy Java codes to a RESTful architecture using Node.js, activating 30+ neglected APIs.
- Facilitated meetings for senior officials, including 5-star generals and National Assembly audits of state affairs.

## PROJECTS

---

### CMS for Student Record Management

Dec 2023 – Present

- Automated backups and disaster recovery with Railway cloud, ensuring data integrity and operational continuity.
- Pinpointed South Korean academies' needs to craft software design and performance specs.
- Deployed website with Next.js/Prisma/PostgreSQL, optimizing caching for steady performance in high traffic.
- Planned shift to AWS/Azure multi-tenant databases, with the addition of SMS features.
- Slashed monthly costs from \$1000 to \$5.

### CNN Model for Human Audio Analysis

Sep 2023 – Dec 2023

- Attained 91.51% test and 88.76% validation accuracy in gender classification with early stopping in 15 epochs.
- Analyzed 2300 audio samples using a Python TensorFlow/Keras CNN, classifying gender and age.
- Adapted spectrograms, Mel-spectrograms, and MFCCs for detailed audio feature extraction.

## SKILLS

---

**Front-end stack:** JavaScript, TypeScript, React.js, Next.js, Vite.js, HTML, CSS, Tailwind CSS, jQuery

**Back-end stack:** Python, Node.js, Express.js, Flask, Firebase, Strapi, Docker

**Database:** PostgreSQL, MySQL, MongoDB Atlas, Railway, Cloud Firestore

**Other:** Trello, Slack, Figma

**Languages:** Korean (Native), English (Fluent)