

Dongze (Ethan) Li

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Skills

Languages: Java, JavaScript/TypeScript, Python, SQL, C, Lua, Bash/Shell, HTML/CSS

Databases & Middleware: MySQL, Redis (Redisson), RocketMQ, SQLite, Nginx

Frameworks: Spring Boot, Spring Cloud (Nacos/Feign), Spring Data JPA, MyBatis Plus, JUnit, React, Tailwind CSS

DevOps & Tools: AWS, Docker, OpenShift, GitHub Actions, Jenkins, Linux, Git, Maven, Jira

Core Concepts: Distributed Systems, Microservices, Event-Driven Architecture, Async Programming, OOP, TDD, REST APIs

Experience

Java Backend Intern, Beijing Ainfinit Technology Co., Ltd – Shijiazhuang, China

Dec 2024 – May 2025

- Optimized device logging via a RocketMQ-based async event-driven architecture, **reducing command latency by 80%** and improving system resilience under peak traffic
- Designed and implemented an internal notification module for a smart-vending video-annotation platform, supporting reliable task and reward alert delivery for **2,000+ daily active users** (DAU)
- Migrated object mapping from Orika to MapStruct across **7 microservices**, replacing reflection with compile-time code generation to improve performance and reduce CPU overhead
- Delivered **38+ functional enhancements** for smart retail core services and resolved 15+ production issues in an Agile environment, directly improving platform stability and supporting feature growth

Projects

Campus Utility Telegram Bot | *Java, React, TypeScript, Tailwind, AWS, Docker, LLM*

github.com/fortii2/watloo

- Developed a Spring Boot-based UWaterloo utility bot integrating Telegram and OpenAI APIs for **LLM-based intent correction**, improving robustness of user command handling
- Architected a responsive web dashboard using React, TypeScript, and Tailwind CSS, delivering a modern, mobile-first interface for managing bot configurations and visualizing utility data
- Engineered a fully automated **CI/CD pipeline** using GitHub Actions and multi-stage Docker builds, enabling seamless containerized deployment to AWS EC2 via GHCR

High-Concurrency Coupon Distribution System | *Java, Spring Boot, Redis, MySQL, Lua*

github.com/fortii2/bitelog

- Engineered a high-concurrency flash sale engine using Lua scripts and dual-layer idempotency (Redis & MySQL), **reducing P95 latency by 73%** (723ms to 193ms) via Redis Stream-based asynchronous decoupling, ensuring atomic inventory updates under high concurrency
- Implemented **Cache Aside** with null-value caching and logical expiration to prevent cache penetration and breakdown under high traffic
- Streamlined distributed authentication and service delivery by implementing **JWT-based cross-cluster session sharing** and Redis-cached SMS verification, optimizing both system security and responsiveness

Bookkeeper | *Next.js, PostgreSQL, Prisma, Data Pipeline*

github.com/fortii2/bookkeeper

- Built a full-stack bookkeeping system with a **transaction ingestion pipeline** supporting multi-format CSV imports and schema normalization across heterogeneous financial data
- Designed **data quality and analytics layer** with rule-based categorization, deduplication, and indexed PostgreSQL queries, improving reporting accuracy and query performance

Education

University of Waterloo

Master of Engineering in Electrical and Computer Engineering

Expected Dec 2026

Cumulative GPA 83.3 / 100

Hebei Normal University

Bachelor of Engineering in Computer Science and Technology

Graduated June 2025

Ranking 1st, GPA 3.92 / 4.0