

Sun Bong Kim

Senior Software Engineer

Irvine, CA, United States | [LinkedIn](#)

I build and run the systems where money, identity, and settlement all have to change together.

For the past 9 years I've been the lead engineer on Pointropay, a fintech platform in Korea that converts gift card PINs and cash into points and pays out as bank refunds and mobile gift cards. I own the Java 17 / Spring Boot 3 backend — a transaction ledger with Redis-based distributed locking, cancellation and month-boundary reconciliation, partial-failure handling for multi-item issuance, and a token-based identity layer — and the production side that keeps it running: Kubernetes, a 13M+ row time-partitioned PostgreSQL 17 ledger, backups and WAL archiving, and request-correlated observability. On top of that sit a React/GraphQL customer web, a Next.js/Supabase operations CMS for settlement staff, and a Flutter app for Android and iOS.

Before that, 16 years at Omnitel, where I led a backend team as the company grew from startup to IPO on the Korean market.

What I care about:

- Correctness under concurrency — append-only ledgers, idempotency, compensations, and knowing exactly what a lock does and doesn't guarantee
- Databases as a first-class part of the design — partitioning, index-aligned query paths, zero-downtime schema changes
- Operability from day one — trace IDs, vendor latency instrumentation, PII masking, alerts that mean something
- AI-assisted engineering with discipline — I use Claude Code daily in a spec-first, test-first loop for refactoring, characterization tests, and legacy conversion; nothing merges unreviewed

Stack:

Java, Spring Boot, Spring Security, JPA/QueryDSL, PostgreSQL, Redis, GraphQL, ReactJS, Next.js, TypeScript, Flutter, Docker, Kubernetes, GitLab CI/GitHub Actions, AWS (Lambda, API Gateway, S3), Supabase, OAuth 2.0/JWT.

Based in Irvine, CA. Bilingual Korean/English — comfortable working between Korean headquarters and US teams. Open to senior backend, full stack, and platform modernization roles.

EXPERIENCE

Senior Software Engineer (Java / Full Stack)

Apr 2017 — Present

Omninetworks Inc.

Seoul, South Korea

Lead engineer for Pointropay, a fintech platform that converts gift card PINs and cash into points and pays out as bank refunds and mobile gift cards. Own the Java/Spring Boot backend, the production Kubernetes environment, and the React, Next.js, and Flutter clients on top of it.

- Designed a Java 17 / Spring Boot 3 transaction backend (Hexagonal architecture) deployed as 16 role-separated Kubernetes services from a single artifact
- Built user-scoped Redis/Redisson distributed locks, an append-only cancellation ledger with post-transfer guards and month-boundary reconciliation, and per-item ledger records for partial-failure gift issuance
- Implemented identity and access flows: Spring Security, OAuth 2.0/JWT sessions, Redis-backed opaque identity tickets, PostgreSQL row-level security — kept consistent across web and mobile
- Manage a 13M+ row time-partitioned PostgreSQL 17 ledger (66 monthly partitions, pg_partman retention, pg_cron) and tune query paths with partition keys, composite FKs, and index-aligned filters
- Built production observability: request trace IDs, AOP vendor latency/failure instrumentation, PII masking; operate daily pg_basebackup + WAL archiving with 14-day retention
- Operate Docker/Kubernetes (RKE2, K3s, Rancher) delivery with GitLab CI/CD, ingress-nginx/Traefik, cert-manager, and HAProxy load balancing for external payment vendors; integrate AWS Lambda, API Gateway, S3
- Developed the React/Apollo GraphQL customer web (Express BFF, SSR), the Next.js/Refine/Supabase operations CMS (search, server-side aggregates, CSV reconciliation exports, role-based access), and the Flutter Android/iOS app (biometric login, gift conversion, Fastlane/TestFlight releases)
- Use Claude Code daily in a spec-first, test-first workflow for refactoring, characterization tests, and legacy code conversion

Backend Java Software Engineer / Team Lead

Jan 2001 — Mar 2017

Omnitel Inc.

Seoul, South Korea

Led a backend development team as the company grew from startup to a successful IPO in Korea, scaling Java systems that supported millions of users.

- Designed, developed, and maintained Spring and Spring Boot enterprise applications using OOP principles, relational databases (MySQL, PostgreSQL), and system design best practices
- Mentored engineers and owned code quality, delivery timelines, and alignment with business requirements through code reviews and technical guidance
- Delivered projects across the full SDLC under both Waterfall and Agile methodologies, from requirements analysis to production support

EDUCATION

Hanyang University

Bachelor of Science - BS in Computer Science

SKILLS

Java · Spring Boot · PostgreSQL · Code Review · Mentoring · Technical Leadership · Claude Code · AI-Assisted Development · FinTech · Payment Systems · Systems Design · Software Development Life Cycle (SDLC) · Continuous Integration and Continuous Delivery (CI/CD) · Test-Driven Development · Domain-Driven Design (DDD) · Hexagonal Architecture · Application Monitoring · Software Observability · Backup & Recovery Systems · Database Partitioning · Performance Tuning · Database Design · Identity and Access Management (IAM) · JSON Web Token (JWT) · OAuth · Supabase · HAProxy · GitHub · Gitlab · Docker · Dart · Flutter · Node.js · TypeScript · Next.js · React.js · GraphQL · REST APIs · Distributed Systems · Microservices · Redis · QueryDSL · Jakarta Persistence · Spring Security · Spring Framework · Kubernetes · Java, Spring Framework, Team Leadership, System Design, MySQL · Java, Spring Boot, PostgreSQL, Kubernetes, React.js · Software Infrastructure · Engineering