

KangHyun Lee

(Kris)

SOFTWARE ENGINEER
PRODUCTION SUPPORT &
OPERATIONS

CONTACT

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TECHNICAL SKILLS

BACKEND & APIS

Python · Django · GraphQL
OAuth 2.1 · PKCE

DATA & DISTRIBUTED

PostgreSQL · Redis
Elasticsearch

CLOUD

AWS · Lambda · Kubernetes

SUPPORT & OPERATIONS

Incident Response
Prometheus · Grafana

AI & AUTOMATION

AWS Bedrock · GitHub Actions

LANGUAGES

KOREAN Native

ENGLISH Fluent

EDUCATION

KAIST

B.S. Computer Science
Minor in Industrial Eng.

Aug 2014 – Feb 2021

Includes mandatory military service
(2016–2018)

Minnehaha Academy

High School Diploma
Minnesota, USA

May 2014

Profile

Software engineer who stays calm when production systems fail and follows problems through to resolution. I have owned payment incidents, investigated API and data-pipeline failures, recovered customer orders, and turned postmortem findings into safer systems and automation. I work closely with technical and non-technical teams to explain tradeoffs and prevent repeat issues.

Professional Experience

Blue Garage · Software Engineer

Jun 2024 – Present

Global fan commerce & community platform for JYP Entertainment artists · 1.1M MAU · Seoul

- Built the platform's payment system from scratch in **4 months**, covering the full order lifecycle — payments, refunds, cancellations, chargebacks — across **6 currencies** and **10+ payment methods**, processing **1M+ orders** with **~\$78M GMV** in its first year
- Owned payment incident response during a **41-minute outage**: reconciled **~20K** paid-but-unrecorded transactions against the payment provider, restored **12K+ orders** the same day with a re-runnable script, and drove postmortems and structural fixes
- Replaced per-row database and Elasticsearch writes with bulk operations, cutting state transitions from **9.5 seconds to under 1 second** and reducing shipment-group updates from **~10,000 queries to ~10** per batch
- Built the platform's identity & verification stack — a serverless **OAuth 2.1 authorization server** and a global **SMS management system**
 - Deployed the authorization service for fan-club presale verification with NOL Ticket
 - Designed a multi-channel, 242-country verification router with real-time fraud-cost alerts, stopping SMS pumping after a **₩50M monthly abuse incident**
- Shipped high-traffic **fan-event systems**, including a queue-based drop registration absorbing **10K+ concurrent applicants** at open with zero errors
- Led backend work for the company's first **ISMS certification**, which passed on the first attempt; implemented PII controls and represented engineering in external auditor interviews
- Partnered closely with artist teams to turn fast-changing requests into reusable platform capabilities without fragmenting the shared codebase
- Contributed to **company-wide AI adoption** by building a **Slack AMA bot** that triages employee requests and routes them to specialized tools and workflows
- Drove platform engineering and reliability
 - Added **Prometheus/Grafana** API observability to track system health
 - Designed **zero-downtime Elasticsearch reindexing** via read/write aliases, removing search downtime from weekly releases

Buzzvil · Software Engineer

May 2022 – May 2024

Seoul, South Korea

- Diagnosed and eliminated **99% of HTTP request timeouts** across internal APIs
 - Reduced geographical data size by **96%** using a convex-hull compression algorithm
 - Optimized high-volume database tables with a monthly aggregation strategy
 - Rebuilt the unique-count pipeline on **HyperLogLog** across 3B records, cutting heavy memory and compute time
- Worked directly with ad managers to understand how they compared campaigns and creatives, then built an **A/B testing platform** for running and evaluating experiments across high-throughput ad inventory
- Reduced DynamoDB write cost by **67%** by replacing upsert logic with incremental insert and decremental delete