

PROFESSIONAL SUMMARY**Engineering Leader | Data Platform & Cloud Architecture**

Tech Lead and Acting SDM with 10+ years of experience delivering large-scale distributed systems and cloud data platforms at Amazon, Meta, Coupang, and Auger. Experienced across AWS and Azure, leading cross-functional teams to build reliable, data-driven systems with strong operational excellence. Proven ability to thrive in both Big Tech and early-stage startup environments—balancing execution speed with long-term architectural rigor.

WORKING EXPERIENCE**Tech Lead & Acting SDM**

Auger, Inc.

2025.05 – Current

- As an early engineer at Auger - a Series A startup founded by ex-Amazon executives and backed by \$100M from Oak HC|FT—I contributed to building the first AI-powered end-to-end supply chain OS, unifying global data for real-time insights and automation.
- Designed and led** Auger's **end-to-end data platform** on **Azure Data Lake, Microsoft Fabric, and Azure Synapse**, enabling real-time analytics and AI model pipelines across billions of supply-chain events daily.
- Standardized** the company's **data contracts and schema governance** using **Delta tables and Snowflake**, cutting integration time between ML and analytics teams by 70%.
- Integrated** the Fabric data ecosystem with **Power BI and Azure OpenAI Service**, enabling product teams to surface AI driven insights directly in customer dashboards.
- Managed and mentored** a cross-functional team of **10–12 engineers** (backend, FDE, contractor), defining sprint cadence, technical design process, and on-call rotations.

Staff Software Engineer II

Coupang, Inc.

2021.11 – 2025.05

- Coupang is the leading marketplace and largest online retailer in South Korea, which is the world's 4th largest e-commerce market, behind China, the U.S. and the UK.
- Founding engineer of [Rocket Growth](#), a business that help Coupang sellers succeed by handling product packaging, storage, shipping, management and customer service on their behalf.
- Tech Lead of a team of 7 engineers in the **Supply Chain Management** domain, pioneered the design, development and enhancement of the business's entire **Reverse Logistics** from scratch, including [customer return](#) and vendor return.
- Rearchitected the [inventory loss and damaged compensation system](#), and reduced compensation costs by 50%, equivalent to approximately 1% of GMV.
- Tech Lead of the **Inventory Management** area, where I led the design and development of the [logistics center storage fee](#), contributing to tens of millions of dollars in revenue. Additionally, I invented an algorithm for calculating inventory age, for which a patent is filed and approved.
- Heavily involved in establishing the technical direction, as well as engineering and operational processes and best practices for the organization.
- Mentored and supported engineers both within and outside of the team, successfully facilitating the promotions of 3 engineers.

**Software Engineer
Ads Infra**

Meta Platforms, Inc.

2020.06 – 2021.11

- Worked at Ads Infra, an org that is primarily responsible for showing the right ad to the right person at the right time.
- Modernized three major data sources of Ads infra to be privacy aware and enforced without performance regression. These three data sources include 1) storage of user profile, 2) MySQL databases containing ad attributes and 3) indexing service for Facebook's Hive tables.
- Pioneered to adopt company-wide privacy solution to major services in Ads infra through cross-organization discussion and collaboration. We are the first customer to use this solution in production and this serves as an example for many other teams to onboard.

**Software Development Engineer II
Amazon Go**

Amazon.com, Inc.

2015.03 - 2020.06

- Re-architected and launched Amazon Go failure-resilient tracking systems and reduced the infrastructure cost by 50%.
- Designed and implemented the infrastructure to automatically monitor, detect and report accuracy related issues for all the Amazon Go stores globally.

Alexa AI

- Built Alexa metrics to measure end-to-end customer satisfaction of interaction between customer and Alexa by utilizing advanced machine learning model-based logic.
- Set up a high-performance Spark-powered data pipeline to collect and generate Alexa Metrics for all Alexa traffic on hourly basis.
- Designed and implemented a scalable Java service to publish Alexa Metrics to down streams, including AWS Redshift, CloudWatch and A/B testing platform.
- Created Spark SQL based tooling for engineers and scientists to execute SQL-like queries against the metrics data.

Amazon Prime

- Launched Amazon Key, a delivery program that provides an innovative yet secure option for couriers to deliver packages and items directly inside customers' home or vehicle.
- Contributed to migrating 20% existing delivery experience business logic that is being used globally to newly plugin framework without any mismatch and discrepancies.
- Collaborated with parallel teams to introduce same-day delivering physical Amazon gift card with \$0.01 shipping fee and target no charge in months.

Payments Platform

- Worked at Payment Core Engine team, serving millions of customers and collaborated with hundreds of partners worldwide.
- Contributed to the launch of Amazon Mexico Retail by seamlessly switching our partner's workflow to be idempotent.
- Reduced >20% P100 latency of Amazon payment query service by introducing a cache layer.
- Ensured customers shopping experience by being responsible for ops excellence during peak seasons, including Black Friday, Cyber Monday, Christmas and New year.

SKILLS

- **Language:** Java, Python, SQL, JavaScript
- **Technologies:** AWS, Azure, PrestoDB, MySQL, Redis, Kafka, Spark, Elasticsearch, Snowflake

PATENT

- South Korean Patent KR10-2024-001478 – Method, Device, and Recording Medium for Inventory Management (Granted 2025)
- U.S. Patent Application US18/942068 – Pending

EDUCATION

Illinois Institute of Technology, Chicago, IL	GPA:3.9/4.0	2012.08 – 2014.05
<i>M.S. in Computer Science</i>		
<i>Major Courses:</i> Algorithm Design and Implementation, Data Mining, Parallel and Distributed Computing		
Jilin University, Changchun, Jilin, China	GPA:3.2/4.0	2008.09 – 2012.06
<i>B.S. in Computer Science and Technology</i>		