

Senior software engineer with **7+ years** of experience building production-scale distributed systems and AI products. At Amazon, I lead ambiguous, cross-organizational programs from architecture through delivery — with systems supporting **1B+ annual customer interactions** and **\$25M+** in combined annualized impact. My recent work focuses on agentic execution, production LLM systems, and human-supervised autonomy.

EXPERIENCE

Amazon *Senior Software Development Engineer*

2021 — PRESENT

Java · TypeScript · Python · GraphQL · React · CDK · AWS · Bedrock · Agentic Systems · RAG

L4 → L5 · OCT 2023 / L5 → L6 · APR 2026

PLATFORM ARCHITECTURE & DISTRIBUTED SYSTEMS

- Led the technical vision, cross-org alignment and delivery of the **Case Management platform for Amazon's entire Customer Service organization**, unifying **all 49 touchpoints** handling **1B+** annual interactions. Secured Principal-Engineer alignment across 5+ orgs — eliminating **991K** repeat contacts/year (**\$11.15M**) and cutting worldwide Average Handle Time by >10s (**\$14M** annualized).
- Architected a large-scale, event-driven **workflow orchestration platform** at **99.99%** reliability, establishing a reusable integration model adopted by **15+** teams and cutting onboarding time from 3 weeks to <1 week.

AGENTIC & GENERATIVE AI

- Architected a net-new **AI commitment lifecycle** that extracts, verifies and policy-validates promises from customer conversations, then tracks them through SLA-based escalation and backend-verified closure — targeting a gap of **~38M** unverified promises and **10M+** customer re-contacts annually, representing **~\$3.4B** in estimated customer-spend exposure.
- Conceived and built an **AI-native engineering execution system** that turns project-level intent into persistent dependency graphs; designed the orchestration model, agent execution lifecycle, dynamic replanning and human safety boundaries enabling parallel agents to carry coding, research, review and downstream work across **10+** real engineering initiatives and dozens of task / CR lifecycles.
- Built and operated an **always-on agentic on-call system** for a live Amazon production queue; designed the architecture for autonomous triage and investigation across logs, metrics, code, deployments and internal knowledge, with durable incident state and deterministic safety gates across **10** weekly rotations and **80+** real tickets.
- Shipped a **natural-language analytics product** pairing multi-stage LLM reasoning with semantic retrieval over **440GB+** of operational data, cutting time-to-insight from 15 minutes to **30s** and removing a standing engineer dependency for reporting.
- Automated a recurring engineering operations workflow with **LLM agents + human approval gates**, cutting average resolution time by **80.9%** (137h → 26h) with **0%** workflow errors; presented org-wide as a reusable HITL pattern.
- Scaled a Bedrock **context-summarization pipeline** to multi-millions of summaries/month at sub-second latency, reducing associate comprehension time **35%**; complementary visibility tools served **200+** users and cut data lookup time **30×**.

Qualcomm *Engineer*

2019 — 2021

C · Python · Perl · Linux

- Contributed to the audio subsystem of the Snapdragon mobile SoC.

CKBH Inc. *Co-Founder & CTO*

2018 — 2019

Python · Django · PostgreSQL · JavaScript · React · AWS

- Co-founded and launched an e-commerce + community platform for China's youth fashion market; owned technology end-to-end, hired and led a 4-person engineering team, helped raise **C\$400K**, and grew the product to **5,000+** peak active users.

EDUCATION

University of Toronto

B.A.Sc, Computer Engineering

MAY 2019 · TORONTO, ON

Ranked 3rd in faculty · Dean's List '14-'18

Georgia Institute of Technology

M.Sc, Computer Science

SPRING 2024 · ONLINE · CGPA 3.9

Computational Perception & Robotics

CAPABILITIES

AI / AGENTIC SYSTEMS

Agent Orchestration · Tool Use & MCP · Human-in-the-Loop · Bedrock & AgentCore · RAG · Embeddings & Semantic Retrieval · Agentic SDLC Automation

CLOUD / DISTRIBUTED SYSTEMS

AWS · CDK · Serverless · Event-Driven Systems · Microservices · Containerization · CI/CD · Observability

LANGUAGES

Java · Python · TypeScript · JavaScript · GraphQL · C++

FRAMEWORKS & DATA

React · Node.js · FastAPI · Docker · PostgreSQL · DynamoDB · Redis · OpenSearch · Redshift / Athena