

Qingyun Xu

Shanghai, China | 133-0199-8597 | qingyunxu810@gmail.com | LinkedIn

Technical Skills

Languages: Java, Python, TypeScript, JavaScript, SQL

Backend & Distributed Systems: Spring Boot, REST APIs, Kafka, Pulsar, Redis, FastAPI

AI & Retrieval: LangChain, RAG, LLM Agents, Embeddings, Multi-Query Retrieval, RRF, PyTorch, TensorFlow

Data & Cloud: PostgreSQL, pgvector, MySQL, AWS, Docker

Frontend & Engineering Practice: React, Next.js, Tailwind CSS, TestNG, Pytest, Git, CI/CD, Grafana, Splunk, OpenObserve

Experience

Anlaiye (Shanghai) Network Technology Co., Ltd.

July 2026 – Present

Java Developer

Shanghai, China

- Refactored SMS login and payment flows into shared backend services for the mobile app and WeChat mini program; audited the platform's distributed-lock aspect, uncovered a lock-key degradation defect affecting 40+ call sites, and replaced it with per-user Redis rate limiting while driving a platform fix.
- Decoupled the legacy withdrawal flow behind a transfer-channel abstraction, implemented a direct-bank path, and validated Pulsar processing and XXL-JOB status reconciliation against a bank-provided test system.
- Designed and delivered an app-to-mini-program payment bridge (Create/Get/Consume/Status endpoints) using short-lived Redis-backed tickets with per-user rate limiting, enabling app-initiated payments without modifying the shared mini-program payment sequence; verified via HTTP smoke tests and handed off for front-end integration.

Walmart Global Tech

May 2025 – October 2025

Java Backend Developer

Sunnyvale, California

- Developed Java/Spring Boot APIs for post-purchase order amendments, translating business rules into eligibility checks, request/response mappings, and state validation to keep amendment results consistent across service boundaries.
- Integrated Kafka-based amendment events to decouple synchronous handling from downstream updates and batch processing; built TestNG E2E coverage and correlated Grafana, Splunk, and OpenObserve telemetry to trace API call chains and diagnose latency and dependency failures.
- Built an internal AI order-information aggregator that assembles payloads from upstream and downstream services by user/order ID and uses an LLM to extract key fields and call relationships with source citations, reducing manual comparison of complex payloads during debugging.
- Investigated a production incident of batch order failures during a checkout data-source migration: analyzed failure samples, built E2E and integration reproductions, and provided payloads and repro steps to the owning team, leading to a config-change fix.

Innovation AI

July 2024 – December 2024

Software Engineering Intern

San Jose, California

- Developed FastAPI services for an AI reading platform, managing book content in Amazon S3 and supporting document-processing and model-conversation workflows.
- Built a cross-document RAG pipeline with PostgreSQL and pgvector to retrieve relevant passages across books and assemble grounded context for LLM responses.
- Applied multi-query retrieval and reciprocal rank fusion to broaden passage coverage and improve ranking before building the LLM context.

Projects

Structured Multi-Agent Deliberation Framework

March 2026 – Present

- Designed a multi-agent review system where separate agents each handle fact verification, risk and counterexample analysis, intent understanding, and actionability.
- Implemented a schema-driven state machine spanning Proposal, Review, Conflict Ledger, and Revision, enabling structured parsing and issue tracking throughout the review cycle.
- Built a controller that routes unresolved issues by verdict, severity, and issue type to targeted revision, user clarification, external validation, continued review, or termination.

Education

Northeastern University

January 2023 – December 2024

Master of Science in Computer Science

San Jose, California

Michigan State University

September 2017 – December 2022

Bachelor of Science in Computational Mathematics, Minor in Computer Science

East Lansing, Michigan

Certifications

AWS Certified Solutions Architect – Associate

March 2025 – March 2028