

YUXIANG JIANG

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EDUCATION

Cornell Tech, M.S. Computer & Information Sciences | New York, NY Aug 2024 – May 2026
Jinan University, B.E. Internet of Things Engineering | Guangzhou, China Sep 2020 – Jul 2024

TECHNICAL SKILLS

Languages: Java, Python, C++, TypeScript/JavaScript, HTML/CSS, SQL, Go

Backend: Spring Boot, FastAPI, Node.js/Express

Frontend: React (TypeScript)

Infra: Docker, AWS, Nginx, CI/CD

Data/Storage: PostgreSQL, Redis, MySQL, MongoDB, Supabase

EXPERIENCE

Dataman Analytics (quantdefi.ai), Software Engineering Intern New York, NY | Jun 2025 – Present

- **Own and re-architect** a FastAPI microservices platform, cutting p99 latency by ~70% and **doubling peak RPS** with cache-aside Redis, connection pooling, and async I/O.
- **Lead standardization** of the pool scanner on DeFiLlama and ship it as a **FastAPI service** with a Streamlit dashboard and opportunity alerts so **non-engineers can pull insights without dev help**.
- **Design and ship** an ARIMA-based APY forecasting pipeline for 19,000+ pools and a market-regime-adaptive ranking powering bots/newsletter.
- **Establish** end-to-end observability (structured logs, request IDs, p95/p99, error rates, dashboards, **SLO-based Slack alerts**) enabling rapid rollback and on-call readiness.
- **Harden** auth and reliability with **JWT**, **ECDSA signatures**, **rate limiting**, and **idempotency keys**.

PROJECTS

Scalable URL Shortener & Real-time Analytics | Node.js, React, Redis, Docker

- **Designed** a high-throughput URL shortener handling **500+ RPS** with p95 latency < **50 ms**, leveraging cache-aside Redis and NanoID identifiers.
- Implemented non-blocking Redis queues with batch aggregation, **reducing PostgreSQL write I/O by 90%**.
- **Containerized** the full application stack with Docker Compose and hardened security through rate limiting and input sanitization.

PolyPoll — Browser Extension + Real-time Backend (ETHGlobal NYC 2025 Submission)

Chrome Extension, FastAPI, PostgreSQL/Supabase Realtime, Redis, TypeScript, Pydantic, JWT, ECDSA

- Improved **activation reliability** across major news publishers by adding **per-route CORS** and site fingerprinting, validated with browser integration tests.
- Streamlined poll creation from **five steps to one click** by moving defaults to the backend and adding an optimistic UI, achieving < 200 ms end-to-end latency with Redis cache-aside and connection pooling.
- Proved scale in a **10-minute k6 soak** (~500 virtual clients, 28,000+ requests, < 0.5% errors) and maintained integrity and security with **idempotency keys**, a dead-letter queue, ECDSA signatures, short-lived JWTs, and rate limiting.

Postgraduate Recommendation & Evaluation System | Spring Boot, React, MyBatis, MySQL, Redis, AWS

- Automated the postgraduate recommendation workflow for **500+** faculty and students, eliminating 90% of paper and email steps.
- Optimized MyBatis queries and introduced Redis caching, **slashing average page load by 70%** (from 400 ms to 120 ms) and **boosting form-submission success to 99%**.
- **Orchestrated zero-downtime releases** for the containerized services on AWS EC2 using a CodePipeline CI/CD.