# JIAJUN (NICK) HUO

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#### **EDUCATION**

# University of Illinois Urbana Champaign

Aug 2024 – May 2026

Master of Science in Information Science (STEM)

Urbana, IL

GPA 3.9/4.0 · A in Applied Machine Learning & Database Systems · U.S. News #1 Information Systems program

**Shenzhen University** 

Sep 2019 – Jun 2023

**Bachelor of Science in Mathematics** 

Shenzhen

GPA 3.79/4.50 (Top 10 %) · 2× merit scholarships · 4 national awards in ML modeling (supply-chain, finance, computer-vision)

### **WORK EXPERIENCE**

**Donut Labs** Jun 2025 – Aug 2025

**Software Engineer Intern** – 1st AI Agentic Crypto Browser (Sequoia-backed)

Remote · NYC HQ

- Built GPU-free sentiment pipeline for 50K daily tweets, cut inference cost from \$6 to \$0.03/day using custom ANN model
- Scaled 18-route FastAPI microservice to  $3\times$  QPS with P95 220 ms; reduced 4xx/5xx 40%, frontend adoption to 66%
- Integrated 46 crypto actions across 16 providers; improved agent task completion 22% with constrained decoding
- · Designed Next.js microservice mesh with 5 MCP endpoints, enabling horizontal scaling and isolated failure handling
- Implemented Redis model weight caching and KV reuse strategy, reducing P99 latency 26% and GPU costs \$2K/month

**Sonic SVM** Mar 2023 – Jul 2024

**Software Engineer, Data Solution** – Bitkraft-backed SaaS for game studios

Shenzhen

- Led the development of data governance system, drove 3 C-level strategic decisions on product roadmap, report to CPO
- Scaled data platform 2× by integrating new sources while maintaining <1hr SLA through incremental processing
- Automated PostgreSQL→BigQuery ETL workflows, cutting data processing time 43% and enabling real-time analytics
- Created Prometheus + Grafana dashboards tracking KPIs that influenced product roadmap and secured 10+ partnerships

**Tencent** Nov 2020 - May 2021

Technical Product Manager Intern – The largest WeChat ecosystem platform for universities

Shenzhen

- Drove the full SDLC for campus app, mitigating risks and unblocking dependencies to launch from scratch in 12 weeks
- Translated product requirements into technical specifications for a real-time notification system serving 50k+ students
- Leveraged user engagement metrics from A/B tests to guide feature priorities, boosting student engagement by 22%

# **PROJECTS**

# ReplicaGenie – Real-time, cost-efficient RAG platform for personalized LLMs

- Architected 4-service LLM platform; modular microservices allow independent scaling, isolated failures & fast rollouts
- Delivered 4-bit LoRA fine-tuning on SageMaker, trimming GPU training cost 77% and guaranteeing reproducibility
- Built MongoDB  $\rightarrow$  RabbitMQ CDC stream pushing changes to feature store in <1 s, enabling real-time personalization
- · Automated scraping for 4 data sources via Selenium on AWS Lambda, parsing and persisting structured data in MongoDB

### **BiteMatch** – Smart recipe recommender, ranked top-10% in class

GitHub · Demo

- Owned the backend development, creating a RESTful API with 12+ endpoints for user auth, CRUD, and video search
- Reduced YouTube API calls by caching videos in Redis and using a quota-aware fetch logic to avoid exceeding limits
- Worked with 4-member Agile squad, grooming backlog and delivering on 2-week sprints with 100% sprint goal hit rate

## **Claude Code Extension for Raycast**

GitHul

- Built TypeScript & React Raycast extension (5 modules) transforming Claude CLI into a GUI, accelerating dev workflows
- Implemented JSONL session search with real-time filters, plus memory limits and timeout guards for reliable performance

#### **SKILLS**

Languages Python, TypeScript/JavaScript, Go, SQL, Java

**Technologies** Backend: FastAPI, Django, Node.js | Frontend: React, Next.js | Data: PostgreSQL, MongoDB, Redis **Cloud/DevOps** AWS (EC2, S3, Lambda, SageMaker), GCP, Docker, Kubernetes, Terraform, Kafka, CI/CD, Prometheus