

Claire Wang

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PROFESSIONAL SUMMARY

Software engineer with 3 years of experience designing and scaling distributed backend systems across 10+ enterprise services, including hands-on C++ development and a foundation in Linux-based infrastructure. Skilled in building fault-tolerant, low-latency distributed architectures, CI/CD pipelines with Kubernetes-orchestrated deployments, and SQL-backed relational databases. Experienced debugging complex distributed system failures with automated testing and observability practices.

EDUCATION

Georgia Institute of Technology

MS in Computer Science

Atlanta, Georgia

Aug. 2025 – Present

University of Illinois at Urbana-Champaign

B.S. in Computer Science

Urbana, IL

Aug. 2019 – May 2023

EXPERIENCE

Full Stack Engineer

June 2023 – Present

Johnson Controls - Produces fire, HVAC, and security equipment for buildings

Chicago, IL

- Spearheaded the end-to-end migration of a legacy, in-house authentication system to a distributed Auth0-based architecture, securing over 2.5 million active users and reducing security-related support tickets by 45%
- Designed and implemented OAuth2 and OIDC flows across 15+ microservices in a distributed system, enforcing granular RBAC and mitigating unauthorized API access risks by 35%, while caching JWTs in Redis to cut authentication latency by 30%
- Improved code quality and delivery reliability through automated testing frameworks (JUnit), code reviews, and CI/CD pipelines with containerized, Kubernetes-orchestrated deployments, running automated vulnerability scans to maintain 100% GDPR/CCPA compliance and reduce defects by 20%

Machine Learning Intern

May 2022 – August 2022

Sensormatic

Chicago, IL

- Led end-to-end design process in a Linux environment, transforming a prototype into a finalized solution using C++, JavaScript, HTML, and shell scripting
- Engineered real-time data interaction features in C++ and designed a web server enabling low-latency communication with a hardware device, with instant feedback on user updates

PROJECTS

OPA Authorization | *Distributed Systems, High Performance*

May 2025 – Present

- Led development of a scalable, distributed authorization system using Open Policy Agent (OPA) and OPAL, enabling dynamic policy evaluation and troubleshooting across distributed services
- Designed high-performance RESTful APIs and communication pipelines between OPAL clients and backend services, optimizing for low-latency, real-time authorization decisions
- Architected solutions for distributed systems, ensuring consistency, fault tolerance, and reliability in authorization decisions across multiple services

Identity Broker | *Java, Distributed Systems, Kubernetes*

June 2023 – Present

- Designed and implemented secure Single Sign-On (SSO) solutions using SAML and OIDC protocols across identity providers including Keycloak, Okta, and Microsoft, improving authentication reliability and scalability
- Developed and maintained Java-based backend services deployed on Kubernetes, ensuring secure, reliable data exchange between identity providers, internal services, and relational databases
- Implemented multi-threaded processing for authentication workflows, improving performance and reducing login latency under concurrent user load

TECHNICAL SKILLS

Languages: C/C++, Java, Python, SQL, Golang, JavaScript, HTML/CSS, R, Shell

Frameworks: Spring Boot, Angular, React, Node.js, Flask, JUnit, Material-UI

Infrastructure & DevOps: OpenTelemetry, Grafana, Prometheus, Git, Docker, Kubernetes, Terraform, GCP, Tekton, GitLab/GitHub CI/CD

Databases: PostgreSQL, MySQL, Redis

Other: Kafka, PubSub, OAuth2, pandas, NumPy, LLM-assisted coding tools (Claude, Copilot)