

RUNZHUO (ROYCE) YANG

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Software engineer with 6 years at **Microsoft** and **AWS** building large-scale **identity & authorization** platforms, distributed microservices, and cloud data services, with depth in high-throughput API design, event-driven architecture, observability, and **LLM-powered automation**.

EXPERIENCE

Microsoft

Redmond, WA

Software Development Engineer II

June 2022 – August 2026

- Drove the **company-wide JIT access-integration standard**: led cross-org design reviews and aligned security, product, and 30+ partner engineering teams on a standardized provider-hosted API contract (Resolve/Grant/Revoke) that new resource providers (**200+ and counting**) now build against.
- Architected and built the **full CI/CD pipeline** for the JIT service: instrumented OpenTelemetry metrics and distributed traces, added on-demand and per-change integration tests, and created infrastructure-as-code Grafana dashboards for monitoring.
- Re-architected the authorization hot path (previously a synchronous fan-out to ownership, compliance, and access services on every check) with an event-driven pipeline of scanner microservices that pre-materialized the authorization graph into a denormalized Cosmos DB cache (refreshed via change-data-capture within ~5s); collapsed per-request fan-out **from ~25 calls to 1** and cut latency, dependency-call volume, and cost **by more than half**.
- Built an **LLM-powered incident-response agent** that correlates each firing alert with recent deploys/PRs and prior incidents from our runbooks, then drafts a root-cause hypothesis and remediation steps into the on-call channel, **cutting time-to-mitigation by 40%** and saving 20+ engineering hours weekly.

Amazon Web Services

Seattle, WA

Software Development Engineer II

November 2021 – June 2022

- Owned critical components of the Amazon Redshift control plane (Data API, Query Monitoring, and Statistics services), supporting **tens of thousands of customers and millions of daily requests**.
- Launched a **serverless telemetry platform** for Redshift operational metrics, enabling customer-facing observability and faster root-cause investigations across large-scale database workloads.

Software Development Engineer I

August 2020 – November 2021

- Led end-to-end design and implementation of **Partner Integration APIs**, connecting Redshift with external analytics ecosystems while reducing onboarding effort for strategic partners.
- Delivered core enhancements to the Redshift Data API, including multi-statement execution and serverless query support, contributing to a service processing **6M+ requests daily**.

EDUCATION

The University of Chicago

Chicago, IL

B.S. in Computer Science & B.A. in Economics

September 2016 – June 2020

TECHNICAL SKILLS

Languages: Java, Python, C#, C, C++, SQL, R, Bash, Shell

Backend & Architecture: .NET / .NET Core, ASP.NET, REST APIs, API Design, Distributed Systems, Microservices, SOLID Principles, Concurrency & Multithreading, Idempotency, Caching, High Availability

Cloud & DevOps: AWS, Azure, Docker, Kubernetes, Terraform (IaC), CI/CD, Serverless, Jenkins, GitHub Actions, GitLab CI, Elastic Autopilot, Linux, Git, Agile, Scrum

Databases & Data: Cosmos DB, DynamoDB, Redshift, Kusto (Azure Data Explorer), PostgreSQL, S3

Observability & Reliability: OpenTelemetry, Grafana, Distributed Tracing, SLOs, SLIs, On-call / Incident Response

AI & ML: LLM / AI Agents & Automation, Pi Agent Harness, GitHub Copilot, Claude, OpenClaw, TensorFlow, Keras, scikit-learn, Computer Vision

Spoken Languages: English, Chinese, Spanish (Conversational)

REFERENCES

Paul Wiens, Principal Architect, Microsoft • **Scott Fu**, Senior Software Development Manager, AWS • **Clark Hyde**, Senior Data Scientist, UChicago Booth • **Shawn Wang**, Senior Machine Learning Engineer, Midea Group

Emails and full contact details available upon request.