

Rithvik Nakirikanti

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Technical Skills

Languages: Java, Python, Go, TypeScript, SQL, Bash

Backend: Spring Boot, Kafka, REST APIs, Microservices, PostgreSQL, Redis

Frontend: React, TypeScript, Tailwind CSS, Vite

Infrastructure: Docker, Kubernetes, Terraform, Jenkins, Argo CD, CI/CD

Testing: JUnit, Testcontainers, Vitest, Playwright

Experience

Oracle Cloud Infrastructure | *Java, Dropwizard, OpenAPI, Kubernetes, Terraform*

Seattle, WA

Software Engineer 2

Jul 2025 – Present

- Shipped PDB create and rename features for Oracle Database@Google, a platform serving 500+ enterprise customers, by building the **Java/Dropwizard** endpoints and **OpenAPI** specs end-to-end.
- Cut Sev2 triage time by ~50% across 100+ weekly tickets by building an AI on-call assistant in **Codex** with **MCP** servers that pulls ticket context, service logs, and **Grafana** dashboards to draft incident recaps and severity assessments.
- Cut new-region rollout time for Oracle Database@Google from ~2 weeks to ~1 week by contributing **Terraform** modules that automate **Kubernetes** cluster provisioning and control plane deployment in the regional rollout pipeline.
- Tightened access controls on customer database operations in the Oracle Database@Google control plane by implementing scoped Resource Principal Session Tokens with **JWT** claim-based least-privilege checks.

Verizon | *Java, Spring Boot, Spring Batch, Docker, Helm, Kubernetes, OpenShift, Jenkins, Argo CD*

Basking Ridge, NJ

Software Engineer Intern

Jun 2024 – Aug 2024

- Enabled same-day KPI refresh across Verizon network metrics by building a **Spring Boot** + **Spring Batch** ingestion service that normalizes raw data sources into a canonical schema.
- Exposed normalized KPI data to internal dashboards by designing **REST** endpoints in **Spring Boot** consumed by multiple downstream teams.

Software Engineer Intern

Jun 2023 – Aug 2023

- Improved deployment cadence on PlatformZero by containerizing services with **Docker/Helm** for **Kubernetes** and migrating releases from **Jenkins** to **Argo CD** under a **GitOps** model.
- Caught regressions pre-merge on PlatformZero APIs by writing **JUnit** and integration test suites reaching ~90% code coverage on core endpoints.

Avis Budget Group | *Kotlin, Android, Python, Tableau*

Parsippany, NJ

Software Engineer Intern

Jun 2022 – Aug 2022

- Eliminated manual environment-switching setup for the QA team by building an internal **Android** tool in **Kotlin** that automated configuration updates across test environments.

Projects

Boston Public Library: Retrieval-Augmented Search | *Python, PostgreSQL, pgvector, OpenAI, Streamlit*

- Built a **RAG** pipeline over 1.2M+ Boston Public Library records using **PostgreSQL** with **pgvector**, enabling semantic search across 5M+ embedded text chunks with 2–5 second query latency.
- Designed chunking and embedding strategies for archival text, balancing chunk size and overlap to preserve context across paragraph boundaries and improve semantic match quality.
- Added LLM-based query expansion and **BM25** reranking with **OpenAI GPT-4o-mini** on top of vector search to handle historical natural language queries that pure keyword matching missed.

LedgerLite: Full-Stack Ledger | *Java, Spring Boot, Kafka, React, TypeScript, PostgreSQL*

- Built a **Spring Boot** microservices ledger (auth, account, transaction, analytics) behind a Spring Cloud Gateway with **JWT** validation, using Eureka discovery and Redpanda (**Kafka** API) events feeding the analytics read model.
- Built a **React** + **TypeScript** SPA on Vite with TanStack Query and Tailwind over the analytics API, and instrumented both layers with **Resilience4j**, Prometheus/Grafana, and **JUnit**/Testcontainers + Vitest/**Playwright** tests.

Education

Boston University

Boston, MA

Masters of Science in Computer Science & Bachelor of Arts in Computer Science

May 2025

- **GPA:** 3.80/4.00 (MS), 3.76/4.00 (BA)
- **Relevant Coursework:** Distributed Systems, Database Systems, Machine Learning, Computer Networks, Cloud Computing, Operating Systems
- **Leadership:** Teaching Assistant (Database Systems), Course Assistant (Comp. Systems)