

Rohun Gowda

github.com/rohungowda | gowdarohun@gmail.com | rohungowda.github.io | in/rohun-gowda-b5291317a | 248-763-2378

Education

University of Michigan, Ann Arbor

Bachelor of Science in Engineering, Computer Science

Graduation Date: May

GPA: 3.5

Technical Skills

Programming Languages: C++ , Java , Python , JavaScript , Ruby , SQL , C# , C , Typescript , HTML , CSS

Databases: MySQL , Snowflake , Elasticsearch , AWS OpenSearch DB , PostgreSQL , MongoDB , Oracle , Redis , Big Query , Dynamo DB

Technology: Spring Boot , React.js , Angular , Kafka , Django , Node.js , Express.js , Ruby on Rails , Next.js , Flask , FastAPI , Pytorch , Keras , OpenCV , Jenkins , Docker , Kubernetes , Amazon Web Services , Microsoft Azure , Salesforce , Google Cloud , Unity , Git , Linux , Tailwind CSS

Programming Concepts: Data Structures and Algorithms , Web Development , Distributed Systems , Database Systems , Computer Security , RESTful API , Microservices Architecture , Test Driven Development , Object Oriented Programming , Cloud computing , CI/CD Pipelines , Agile

Work Experience

Team Uncanny - Client Salesforce | Software Engineer

November 2024 – Current

- Designed and Implemented a modular ETL data pipeline using Java and OOP principles, leveraging AWS Lambda functions for processing, S3 Buckets for raw storage, and AWS SQS to scale and manage transforming documents for evolving data sources.
- Built a serverless backend using AWS API Gateway and AWS Lambda Functions to process real-time documents from Qdrant Cloud data lake and implemented MongoDB Atlas cache for session-critical data, enabling dynamic user interaction with application.
- Produced a scalable application that supports customizable data sources and AI -powered analytics, enabling seamless adaptation to evolving client needs while delivering actionable insights through robust data ingestion, processing, and analysis.

La-Z-Boy | Software Development Intern

May 2024 – August 2024

- Deployed a scalable Retrieval-Augmented Generation system by transforming structured data from Snowflake into vector databases, enabling semantic search and real-time LLM-driven analysis through AWS Knowledge Base and Titan AI.
- Orchestrated full-stack cloud migration of application using FastAPI for backend, Streamlit for frontend, and Docker with AWS Elastic Kubernetes Service to achieve high-availability, autoscaling, and enterprise grade resilience across backend and frontend services.
- Strengthened system performance and data integrity by leveraging AWS S3 for distributed storage and AWS OpenSearch as a vector index over the data buckets, ensuring on average 92.8% top-k accurate document retrieval and relevant, tailored LLM inferences.

Walmart | Software Engineer Intern

May 2023– August 2023

- Revamped a Warehouse Data Analytics Dashboard, improving live KPI metrics on Inventory Management and reducing dashboard latency caused by existing Big Query integration, empowering supply chain teams with faster, more reliable operational insights.
- Engineered high-performance Elasticsearch queries to aggregate large-scale data and restructured Spring Boot backend by developing secure Rest APIs, which connected to a React frontend with Redux-Saga for state management and real-time user experience.
- Led full deployment of dashboard on Kubernetes, reducing response time from 13 seconds to 3 seconds and achieving scalable, reliable system actively used in live warehouse environments to monitor and optimize operational flow and logistics.

Ongoing Project

OrbitStore NoSQL Database

December 2024 – Current

GitHub: github.com/rohungowda/OrbitStore

- Developing a Key-Value distributed NoSQL database in C++, leveraging Log-Structured Merge Trees and arena memory management to deliver low-latency, high-throughput storage with fine-grained locking and direct disk I/O through OS memory paging.
- Boosting concurrent performance by engineering thread-safe multithreading, complex data structures and algorithms, and dynamic read/write memory buffers, optimizing minimal contention and efficient memory use for large-scale workloads.
- Architecting horizontal scaling and real-time consistency by leveraging TCP/UDP socket layer, distributed sharding through consistent hashing, and a gossip rumor mongering protocol for fault tolerance, replication and synchronization across nodes.