

Rohith Reddy Nama

(412) 953-3005 | namarohithreddy@ufl.edu | linkedin.com/in/rohithreddynama | github.com/rohith500

Summary

Backend software engineer specializing in Java and Python, with experience building distributed systems, REST APIs, event-driven services, and cloud infrastructure across AWS and GCP.

Experience

AI/ML Engineer Developer - IC3 Lab (iHeal Lab), UF College of Medicine *Aug 2025 - Present*

- Designed and deployed production Python REST APIs (Flask, MongoDB) with a resilient multi-model fallback architecture handling upstream service failures gracefully.
- Automated the deployment pipeline with Docker and GitHub Actions CI/CD to GCP Cloud Run, cutting deployment cycle time from 45 minutes to 8 minutes.

Software Engineer Intern - UF Innovate *May 2025 - Dec 2025*

- Designed and built backend subsystems across 174 REST API routes and 110 PostgreSQL migrations for a multi-tenant production platform, owning schema design and service boundaries end to end.
- Built a tenant-safe third-party API integration with OAuth authentication, durable background workers, and cross-entropy data projection across a distributed production system.
- Built delivery-health monitoring with automated alert thresholds, reducing time to detect service reliability issues across the production system.

Software Engineer - CyberGuard360 *Sep 2023 - Jun 2024*

- Built a distributed, event-driven microservice platform (Java, Spring Boot, Kafka, AWS ECS) handling 50,000+ events/day at 99.9% availability, with fault-isolated service boundaries preventing cascading failures.
- Optimized MySQL with composite indexing and query tuning, improving retrieval speed 20%; reduced production defects 17% through automated testing (JUnit, Mockito, Jest) and mandatory code review.
- Integrated gRPC for cross-service data serialization, reducing inter-service latency by 10 ms; containerized services with Docker and orchestrated deployments with Kubernetes.

Projects

Cal Recovery *Python, FastAPI, PostgreSQL, Docker*

Designed and independently built a production backend system end-to-end, architecting a staged, idempotent data-sync pipeline with atomic commits to prevent partial/corrupt writes on failure. Shipped with CI and 25 passing tests; documented 6 architecture decision records covering reliability and scalability tradeoffs.

Open Source: Weave Router *Distributed Systems, Production Debugging*

Diagnosed a production reliability bug in a 289-star open-source system from symptom to root cause (premature response-header writes silently disabling retry/failover on upstream errors); delivered a fix with 5 regression tests through a multi-round maintainer code review.

Open Source: HydraDB CLI *Security, Debugging*

Discovered and root-caused a CLI output-spoofing vulnerability across 4 injection sinks, confirmed exploitable before patching, with full regression test coverage as an external contributor.

Technical Skills

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

Backend: Spring Boot, FastAPI, Flask, Node.js, REST APIs, gRPC, Microservices

CS Fundamentals: Data Structures & Algorithms, OOP, distributed systems design, algorithmic complexity analysis

Databases: PostgreSQL, MySQL, MongoDB, Redis

Cloud & DevOps: AWS (ECS, S3, Lambda), GCP (Cloud Run), Docker, Kubernetes, GitHub Actions CI/CD

Testing & Quality: JUnit, Mockito, Jest, pytest, code review, automated testing

Education

M.S. Computer Engineering - University of Florida *2026*

GPA: 3.77/4.0

B.Tech, Computer Science - JNTU Hyderabad *2023*

GPA: 9.5/10.0