

Arun Nalla

🏠 Hyderabad, India | 📞 +91 9491280080

✉ hello@arunnalla.com | 🌐 arunnalla.com | 🔗 linkedin.com/in/arunnalla | 🐙 github.com/arunnalla

Lead Software Engineer with 10+ years of experience architecting and scaling resilient distributed systems for SaaS platforms serving millions of weekly active users. Specialized in low-latency backend architecture, zero-downtime migrations, and performance optimization. Led organization-wide engineering initiatives and delivered complex, high-scale systems from concept to production.

EXPERIENCE

Notion

February 2023 – Present

Software Engineer (Enterprise Search & Agents)

Hyderabad, India

- Architected ingestion pipelines processing millions of external documents daily; designed strict source-level security controls that accelerated infosec approvals and unblocked deployments for multiple tier-1 enterprises.
- Developed permission-aware agent tools enabling reliable retrieval of enterprise knowledge through semantic and lexical search and execution of actions on third-party systems.
- Built a standardized webhook ingestion platform processing millions of daily events with at-least-once delivery guarantees, unifying event-driven ingestion across third-party connectors to accelerate development while providing consistent reliability guarantees.
- Defined indexing consistency guarantees and freshness expectations for enterprise search, balancing customer requirements with system performance to deliver a predictable search experience.
- Drove cross-functional alignment across product, design, security, and GTM to shape enterprise platform capabilities, navigating customer requirements, security policies, and third-party API limitations to deliver scalable, high-performance integrations.

Zenius Education

May 2022 – February 2023

Staff Software Engineer (Payments Infrastructure)

Bangalore, India

- Led a team of 6 engineers to rebuild the payments infrastructure from the ground up, adding support for subscriptions, installment plans, and coupons while designing automated failover mechanisms that improved payment success rates from 91% to 99.9%.
- Built a high-performance SKU entitlement check service processing entitlement queries in under 5ms, enabling real-time access control across subscription tiers and promotional SKUs.
- Designed and implemented monitoring, alerting, and automated fallback mechanisms to quickly detect and resolve failures, ensuring continuity of payments operations under real-world conditions.
- Drove engineering excellence by establishing best practices, code quality standards, and processes for reliable delivery, while mentoring junior engineers and setting a foundation for high-performance development.

Locus.sh

December 2017 – April 2022

Technical Lead (Optimization Products)

Bangalore, India

- Revamped the end-to-end user experience for Dispatcher, a dispatch planning logistics product, translating customer feedback into a redesigned UI, modernized APIs, and a re-architected dashboard backend that improved performance, simplified workflows, and addressed customer pain points.
- Led architecture and delivery of two greenfield B2B SaaS products (Permanent Journey Planning and Network Optimization) from scratch as tech lead working with teams of 3 engineers and 2 data scientists, closing working with customers. Owned end-to-end product architecture and delivery, balancing mathematical rigor, system scalability.
- Partnered with product, design, and customer success to translate enterprise customer requirements into technical roadmaps, driving feature prioritization and engineering trade-offs across multiple releases.
- Supported the engineering organization's 5x growth by conducting technical interviews, designing interview problem statements, and helping define standardized hiring criteria to improve consistency and quality of candidate evaluation.

Oracle

June 2016 – December 2017

Associate Software Engineer (ISV Engineering)

Bangalore, India

- Advised external ISVs on tuning application performance for SPARC architectures; simulated high-concurrency workloads via OATS and diagnosed JVM and database contention using JFR/AWR telemetry to drive resolutions.
- Worked on porting Redis from x86 to SPARC architecture, ensuring compatibility on Solaris systems.
- Developed a source code scanner module of the Oracle Preflight checker application that allowed independent software vendors (ISVs) to identify necessary code changes for porting applications between Solaris versions, improving migration efficiency and reducing errors.

TECHNICAL SKILLS

Architecture & Design: System Design, API Design, Optimization Algorithms, Zero-Downtime Migrations

AI & Retrieval: Vector Databases (Weaviate, Pinecone, Turbopuffer), Embeddings, Semantic Search, Hybrid Search, RAG, Agentic Retrieval Pipelines, Tool-Use / Function Calling, Query Planning, Progressive Tool Discovery

Leadership & Mentoring: Engineering Excellence, Technical Strategy, Cross-Functional Collaboration, Team Mentoring

Languages & Frameworks: Java, Spring Boot, Python, Flask, TypeScript, Node.js, Nest.js, React, SQL

Data & Databases: PostgreSQL, DynamoDB, Redis, Elasticsearch, Apache Airflow, Spark

Cloud & Infrastructure: AWS, Docker, Monitoring, Observability

EDUCATION

Vellore Institute of Technology

B.Tech. in Computer Science and Engineering (GPA: 8.82/10.0)

June 2012 – May 2016

Tamil Nadu, India