

## SUMMARY

Backend Engineer with 3+ years of experience building high-performance distributed systems and scalable APIs in Java, Go, and Python. Skilled in concurrency, multithreading, and system-level optimization. Proven success at SentinelOne and Samsung R&D in optimizing throughput and reliability for large-scale cloud workloads using gRPC, Kafka, WebFlux, and CI/CD automation on AWS + Kubernetes.

## EXPERIENCE

- SentinelOne** Bangalore  
*Senior Software Engineer* July 2025 – Present
  - **Load Testing Platform:** Implemented a Gatling-based Load Testing Framework with **concurrent thread-pool** execution, simulating **10K+ concurrent requests** across **Java, Go, and Python** services.
  - **Automation with Jenkins:** Built a fully automated Jenkins CI/CD pipeline on **AWS + Kubernetes**, reducing manual setup time by 90% and enabling **50+ parallel pod** deployments for performance testing.
  - **Service Integration:** Streamlined the onboarding process for multiple service teams, reducing setup overhead by **81%** and standardizing performance testing across the organization.
  - **Monitoring & Observability:** Integrated **Grafana + Prometheus** dashboards and custom alerts for test environments, reducing incident detection time by **40%**.
- Samsung Research Institute (SRIN)** Noida, U.P.  
*Software Engineer* June 2022 – July 2025
  - **API Architecture:** Led the design of critical APIs for an **Internal Chat Service**, enabling seamless cross-team collaboration and enhancing communication efficiency. Engineered a robust **microservices architecture** using REST APIs and gRPC, resulting in a 35% reduction in latency.
  - **Spring Boot Development:** Crafted a high-performance file handling system for employee data management, minimizing processing time by **61%** through optimized upload/download with Multipart stream.
  - **OAuth and JWT Protocols:** Established **OAuth and JWT** protocols for inter-service authentication, reducing security breaches by **99%**.
  - **Encrypted Database Values:** Boosted data security by **76%** by encrypting sensitive values per environment.
  - **WebFlux Migration:** Migrated REST Templates to **WebFlux (non-blocking, multi-threaded reactive framework)**, increasing API throughput by **80%** and cutting thread contention incidents by **65%**.
  - **Feign Client + SSO:** Improved authentication security by **80%** and reduced attacks by **99%** by upgrading token auth to **SSO with thread-safe resolution**.

## PROJECTS

- **Multi-Tenant Bot Checker | *Spring Tenancy, Java*:** Improved scalability by **97%** by building a Spring Boot multi-tenant bot checker with thread-safe request routing via **concurrent interceptors/filters**.
- **Smart Inventory Management System | *Kafka, Prophet AI Model*:** Built **concurrent Kafka consumers** to enable real-time inventory sync across **5+ warehouses**, reducing stock latency by **70%** and improving demand forecasting accuracy by **35%** with **Prophet AI**.

## ACHIEVEMENTS

- Engineered **Innovative search algorithms** leveraging **Julia's** JIT compilation, achieving **2.3×** faster query execution on datasets over 1M records.
- Developed an **A1 Grade Patent** to enhance Call Continuity in **Multi-Device Environments** optimizing call handovers and network transitions via adaptive signaling and intelligent session management for seamless VoIP communication.

## PROGRAMMING SKILLS

- **Languages:** Java (with concurrency primitives), Go, SQL, Julia
- **Concurrency & Performance:** Thread Pools, Synchronization (mutex, condition variable, atomic), Lock-Free Queues, Reactive Streams (WebFlux), REST, gRPC, Kafka
- **Cloud and DevOps:** AWS (S3, Lambda, IAM), Kubernetes, Docker, ArgoCD, Jenkins CI/CD, GitHub Actions
- **Architecture and Design:** Microservices, Distributed Systems, System Design, RPC Architecture

## EDUCATION

- **University of Petroleum and Energy Studies** Dehradun, Uttarakhand  
*Bachelor of Technology in Computer Science* Aug. 2018 – May 2022