Hemanth Kumar Guvvala

+91-7416390289 | hemanthkumarguvala@gmail.com | Bangalore, India
LinkedIn: https://linkedin.com/in/hemanthkumarguvvala | GitHub: https://github.com/hemanthkumarguvvala

PROFESSIONAL SUMMARY

Results-driven Backend & Platform Engineer with 4+ years of experience architecting and delivering high-throughput, distributed microservices and event-driven systems at scale. Core expertise in Java, Spring Boot, Apache Kafka, PostgreSQL, Redis, and AWS cloud services. Led teams of up to 5 engineers, driving monolith-to-microservices migrations that improved deployment velocity by 300%. Track record of engineering solutions handling 10,000+ requests per minute with 99.9% uptime, reducing latency by 40%, and cutting infrastructure costs by 30%. Skilled in Domain-Driven Design, CQRS, Event Sourcing, and CI/CD automation. Seeking a Senior Software Engineer / Lead Backend Engineer role to build resilient, cloud-native platforms at scale.

TECHNICAL SKILLS

Languages & Core: Java | Java 17 | SQL | TypeScript | Python

Frameworks & Libraries: Spring Boot | Spring Cloud | Spring Security | Spring Data JPA | Spring Batch | Spring WebFlux | Hibernate

Messaging & Streaming: Apache Kafka | RabbitMQ

Databases & Caching: PostgreSQL | MySQL | MongoDB | Redis

Cloud & Infrastructure: AWS (EC2, S3, SQS, Lambda, RDS, CloudWatch) | Docker | Kubernetes | Jenkins | CI/CD Pipelines | Terraform

Architecture & Design: Microservices | Event-Driven Architecture | REST API Design | Domain-Driven Design (DDD) | CQRS | Event Sourcing | System Design

Testing & Quality: JUnit 5 | Mockito | Integration Testing

Tools & Practices: Git | Maven | Gradle | Grafana | Prometheus | Swagger/OpenAPI | JIRA | Agile/Scrum

PROFESSIONAL EXPERIENCE

Lead Product Engineer

IBS Software, Bangalore, India | Oct 2022 – Present

- Architected and led development of 5+ production microservices processing 10,000+ RPM using Java 17, Spring Boot 3, Apache Kafka, and PostgreSQL, maintaining 99.9% uptime SLA across all services
- Designed event-driven architecture with Apache Kafka (15+ topics, 50+ partitions), reducing inter-service latency by 40% and enabling real-time data synchronization across 3 business domains
- Spearheaded monolith-to-microservices migration for legacy booking platform, decomposing 500K+ LOC into 6 bounded contexts, improving deployment frequency from monthly to daily (300% increase)
- Engineered distributed caching layer with Redis (cluster mode), reducing PostgreSQL query load by 60% and cutting average API response times from 450ms to 180ms (45% improvement)
- Built end-to-end CI/CD pipelines using Jenkins, Docker, and Kubernetes, automating build-test-deploy workflows and reducing release cycle from 2 weeks to 2 days
- Implemented CQRS and Event Sourcing patterns for order management domain, handling 500K+ events/day with guaranteed exactly-once processing via Kafka consumer group management
- Mentored 4 junior engineers through structured code reviews, pair programming, and architectural decision records (ADRs), reducing production bug rate by 35%
- Integrated AWS services (SQS, S3, Lambda, CloudWatch) for asynchronous file processing pipeline handling 100K+ documents/month with automatic retry and dead-letter queue mechanisms
- Built real-time observability platform using Grafana, Prometheus, and custom metrics, enabling proactive alerting that reduced mean time to detection (MTTD) by 60%

Software Engineer

Marlabs, Bangalore, India | Jan 2022 – Oct 2022

- Developed and maintained 15+ RESTful APIs for enterprise banking application serving 50,000+ daily active users using Spring Boot, Spring Data JPA, and MySQL, achieving sub-200ms p95 latency
- Implemented OAuth 2.0 and JWT-based authentication/authorization framework with Spring Security, securing 20+ API endpoints across 4 microservices with role-based access control
- Optimized critical SQL queries through strategic indexing, query refactoring, and Hibernate N+1 resolution, improving database query performance by 55% and reducing page load times
- Engineered batch processing system using Spring Batch with partitioned steps, handling 1M+ daily financial transactions with fault-tolerant restart and retry mechanisms
- Designed and published comprehensive API documentation with Swagger/OpenAPI 3.0 (40+ endpoints), reducing new developer onboarding time by 40%
- Delivered 12+ sprint features with zero production rollbacks through rigorous unit testing (JUnit 5, Mockito) achieving 85%+ code coverage, completing deliverables 20% ahead of schedule

PROJECTS

Enterprise Microservices Platform

Designed and built a production-grade microservices platform with 6 services (Employee, Payroll, Notification, API Gateway, Service Discovery, Config Server). Implemented CQRS, Event Sourcing, and Saga patterns for distributed transaction management. Achieved sub-100ms inter-service communication via Kafka and 99.95% availability.

Technologies: Java 17, Spring Boot 3.2, Spring Cloud, Apache Kafka, PostgreSQL, Docker, Kubernetes, Redis

Real-time Event-Driven Notification System

Architected a high-throughput notification engine supporting Email, SMS, and Push channels with Kafka consumers processing 50K+ messages/hour. Implemented retry mechanisms with exponential backoff, dead-letter queues, and WebSocket for real-time delivery tracking.

Technologies: Spring Boot, Apache Kafka, Redis, WebSocket, AWS SES, AWS SNS

EDUCATION

Bachelor of Engineering in Electronics and Communication Engineering

Jawaharlal Nehru Technological University Anantapur (JNTUA) | 2015 – 2019 | GPA: 7.5/10