Aravind Kumar

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Summary

Backend Engineer (3+ years) specializing in Spring Boot, React, and Nest.js. CKAD (91%) & Oracle certified with proven experience reducing system processing times from minutes to seconds through architectural optimization.

Relevant Experience

Founding Backend Engineer | Zentrais, USA   **Oct 2025 – Present**

○ Developed RESTful voting API in NestJS with JWT authentication and Prisma ORM for a real-time debate platform.
○ Implemented intelligent upvote/downvote toggle logic with soft-delete patterns for vote recovery.
○ Built GitHub Actions CI/CD pipeline gating production deployments, reducing build-related failures to zero.

Java Backend Developer | MetLife, USA   **Jan 2025 – Sept 2025**

○ Modernized PHP customer portal by rebuilding the frontend in React and Tailwind CSS using mobile-first design, developing reusable Material-UI components with client-side validation.
○ Reduced user wait times by 35% by engineering event-driven architecture with Spring Boot and RabbitMQ, decoupling monolithic services from synchronous external APIs into async background workers.
○ Achieved 99.9% service availability during API outages by implementing Circuit Breaker patterns with Resilience4j, preventing cascading failures across 3+ dependent microservices.
○ Actively participated in an Agile team & Owned notification microservice end-to-end from Spring Boot implementation to Kubernetes deployment on AWS EKS, creating Helm charts for reproducible deployments and configuring pod autoscaling.

Software Engineer | CERIAS, Purdue University, USA   **May 2024 – Aug 2024**

○ Reduced page-load latency from 5 sec to 1 sec by optimizing MySQL indexes and consolidating redundant REST endpoints.
○ Redesigned cybersecurity research portal with React and protected routing, achieving 90%+ test coverage with Jest.

Software Engineer | LTIMindtree | Client: Citi Bank, India   **Aug 2021 – May 2023**

○ Slashed document validation time from 30+ minutes to under 60 seconds by migrating legacy AbInitio pipeline to Spring Boot, implementing 35+ business rules with Java Streams and JPA.
○ Improved data processing throughput by 50% by implementing multithreading with Java Executor Service.
○ Achieved 80%+ code coverage with JUnit 5 and Mockito, reducing production defects by 30%.
○ Built an Internal React dashboard using OrientDB Graph APIs for interactive data lineage visualization, cut database cluster migration planning from 2 days to 15 minutes by revealing object dependencies.

Certifications

○ CKAD: Certified Kubernetes Application Developer | The Linux Foundation | *Score: 91%*
○ Oracle Certified Java SE 11 Developer | Oracle

Projects

Open Source | Bitnami Helm Charts | Kubernetes, Helm, YAML

○ Optimized PostgreSQL Chart to allow disabling redundant services in single-node clusters, reducing overhead. (PR #36431)
○ Updated Keycloak Chart to use official application-aware health probes, eliminating startup race conditions. (PR #36434)

GrindPal | AI-Powered Job Search Tracker | Next.js, MongoDB, Gemini AI

○ Built full-stack job tracker with Google OAuth, AI-powered outreach generation via Gemini API producing personalized LinkedIn messages and cold emails, plus real-time ATS resume scoring against job descriptions.

Education

Purdue University, West Lafayette, IN – *M.S. Computer Science*   Jun 2023 – May 2025
Anna University, Chennai, India – *B.E. Computer Science*   Jun 2017 – May 2021

Technical Skills

Languages: Java, Python, JavaScript, TypeScript, SQL, HTML/CSS.
Backend: Nest.Js, Spring Boot, Spring Security, Flask, REST APIs, JWT, OAuth, RabbitMQ, JUnit 5, Mockito, SonarQube.
Frontend : React, Next.js, Redux, Tailwind CSS, Jest.
Cloud & DevOps: Kubernetes (CKAD), Docker, Helm, AWS (EKS, Lambda, SQS,), PostgreSQL, MongoDB.