

VIGNESH APPANI

Java Developer

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SUMMARY

- Java Developer with 6+ years of experience delivering enterprise and government applications across banking, financial services, and public sector environments.
- Strong expertise in **Java, Spring Boot, Microservices**, with a proven track record of building secure, high-performance backend systems for high-traffic, mission-critical platforms.
- Skilled in building robust **REST APIs** and implementing event-driven or search-based systems utilizing **Apache Kafka** to support real-time **data processing** and search workflows.
- Strong experience with relational databases, including **MySQL** and **Oracle**, covering schema design, indexing strategies, query tuning, and large-dataset handling in across government and enterprise environments.
- Hands-on experience in deploying cloud-native applications using **Docker** and **Kubernetes** on **AWS (EC2, S3, Lambda)** with solid command over **CI/CD** pipelines (**Jenkins, GitHub**), automated builds, logging and deployments.
- Strong background in backend security, implementing **OAuth2**-based authentication, **ADFS Single Sign-On (SSO)**, and secure access controls across microservice ecosystems.
- Adept at building modular **microservice architectures** using **Spring Boot**, applying clean layered designs, reusable business components, and robust exception-handling strategies.
- Solid experience in **automated testing**, utilizing **JUnit, Mockito**, and **Selenium** to improve code quality, reduce regression defects, and maintain stable production systems.
- Experienced across the full **SDLC**, working in **Agile Scrum** and **TDD**-driven environments, collaborating closely with cross-functional teams to ensure consistent and timely project delivery.
- Additional hands-on skills in Node.js scripting, Python, API debugging, Docker containerization, and Git/GitHub version control, improving development efficiency and team productivity.

TECHNICAL SKILLS

Programming Languages	Java 8/11/17, Python
Backend & Frameworks	Spring MVC, Spring Boot, Microservices, RESTful APIs, Node.js, Apache Kafka
Databases	SQL Server, MySQL, PostgreSQL, Oracle, MongoDB
Cloud	AWS (EC2, S3, Lambda), GCP, Azure
DevOps & Build	Maven/Gradle, Docker, Jenkins, Git/GitHub, Jira, Kubernetes
Testing and Monitoring Tools	JUnit, Mockito, Selenium, Postman, Swagger UI, Splunk, SoapUI
Web & J2EE Technologies	HTML, CSS, JavaScript, Bootstrap, React.js, XML, JSP, JDBC
Methodologies	Agile Scrum, Waterfall, SDLC, TDD

EDUCATION

University at Albany, State University of New York
Master of Science in Computer Science

Albany, New York

Kalasalingam Academy of Research and Education
Bachelor of Science in Computer Science

Tamilnadu, India

CERTIFICATIONS

- AWS Certified Developer – Associate
- IBM Certified Professional Java Developer
- AWS Certified Cloud Practitioner
- Introduction to Amazon EC2 – AWS
- Apache Kafka Essential Training
- Spring Boot 3 Essential Training

PROFESSIONAL EXPERIENCE

New York State Office of Information Technology Services (ITS), USA.

Aug 2024 – Present

Role: Java Developer

Responsibilities:

- Designed, developed, and maintained **Java/J2EE-based Spring Boot** applications and batch processing solutions with **Microservices** architecture, optimizing secure **RESTful APIs** and implementing caching (**Spring Cache**) to reduce system latency by 30% for high-traffic government platforms.
- Modernized New York State tax websites by migrating legacy J2EE components to an in-house Spring-based framework, deployed on **AWS** (EC2, S3, Lambda, API Gateway) for improved performance, and cloud-native delivery.
- Built and optimized database schemas in **MySQL**, writing complex SQL queries and applying indexing strategies that reduced query execution times by 30% across large-scale government data workflows.
- Implemented event-driven messaging using **Apache Kafka** to support real-time data processing and asynchronous communication between microservices, improving system responsiveness across high-traffic government platforms.
- Developed dynamic full-stack components using **React** building reusable UI modules, responsive layouts that enhanced application performance and ensured cross-browser compatibility across government-facing platforms.
- Developed and maintained both **RESTful** and **SOAP-based** Web Services to support inter-system integrations and data exchange across government application ecosystems.
- Deployed and supported **containerized Spring Boot microservices** using **Docker and Kubernetes**, enabling **scalable and stable application** runtimes across development and lower production environments.
- Contributed to architecture discussions focused on performance, scalability, and maintainability, translating evolving business requirements into functional cloud-native solutions deployed on **AWS**.
- Automated and optimized **CI/CD** pipelines using **Jenkins**, integrating GitHub-based workflows to support build automation, validation stages, and multi-module deployments, improving delivery efficiency by **25%**.
- Implemented **unit and integration testing** using **JUnit and Mockito**, improving backend code quality and reducing regression defects by **15%**.
- Supported **end-to-end and UI-level testing** using **Selenium** and automated test jobs to validate critical user workflows and **batch data processing flows** across tax applications.
- Integrated Spring Security and **OAuth2** into REST APIs to enforce authentication and incorporating **OKTA** as the identity provider for centralized user authentication, token management, and secure API access.
- Configured **ADFS** single sign-on (**SSO**) authentication for secure user access, integrating with Active Directory to enable seamless login for 500+ employees using their corporate credentials.
- Worked across all phases of the Software Development Life Cycle (**SDLC**) using **Agile** Methodology. Collaborated with cross-functional teams using Jira and Git. Successfully delivered projects ahead of schedule.
- Applied Java multithreading and concurrency techniques including Executor Service and thread pooling to handle parallel processing tasks, improving application throughput and responsiveness across government platforms.
- Tracked and managed feature requests, incidents, and bugs using **JIRA and ServiceNow**, ensuring timely resolution and clear communication across teams.

Environment: Java, J2EE, Spring Boot, Node.js, React, Microservices, RESTful APIs, **Apache Kafka**, **MYSQL**, **AWS** (EC2, S3, Lambda), Docker, OAuth2, ADFS, Jenkins, Git/GitHub, Jira, ServiceNow, JUnit, Mockito, Selenium

ITC Infotech, India

Jun 2020 – Jul 2022

Role: Java Developer

Responsibilities:

- Contributed to a large-scale financial services client platform, developing scalable backend microservices and REST APIs supporting transaction processing, account management, and operational dashboards.
- Designed and implemented **Java Spring Boot** service-layer logic using microservices architecture, ensuring clear separation of concerns between controllers, services, and persistence layers.
- Built and implemented business-focused **REST APIs** to support data-intensive workflows including POS integrations, third-party system connections, and external API integrations.
- Implemented **Hibernate/JPA** for object-relational mapping, managing entity relationships, transactional consistency, and efficient persistence of financial and transactional data across Oracle databases.
- Optimized database interactions by tuning Hibernate queries, fetch strategies, **PL/SQL** stored procedures and indexing across **Oracle**, improving response times for high-volume financial data access.
- Developed and maintained data access objects (DAOs) and reusable persistence components to standardize database operations across multiple platform services.
- Containerized backend services using **Docker** and deployed on **AWS(EC2)**, enabling consistent builds and reducing environment-related deployment issues.
- Developed and maintained batch jobs using Spring Batch to process large-scale financial data, automating scheduled reporting and data reconciliation workflows across the platform.
- Collaborated with client-facing teams and stakeholders to translate financial business requirements into technical implementations, ensuring alignment with banking and financial domain expectations.

- Partnered with UI teams to integrate backend APIs with React and **Node.js** front ends, resolving API contract mismatches, optimizing data-mapping, and end-to-end feature delivery across financial workflows.
- Performed **root-cause analysis** on production issues related to data discrepancies and API failures, implementing durable fixes to reduce repeat incidents.
- Participated in structured **code reviews and quality checks**, ensuring compliance with enterprise coding standards and delivery timelines.

Environment: Java, Spring Boot, Node.js, React, Hibernate/JPA, RESTful APIs, Oracle, PL/SQL, Docker, AWS (EC2), Spring Batch, JavaScript, Git/GitHub, Agile, SDLC

Zensar Technologies, India

Feb 2018 – Dec 2019

Role: Java/J2EE Developer - Internship

Responsibilities:

- Developed and implemented **foundational REST APIs** using **Java** and the **Spring MVC** framework to support key application functionalities and data services.
- Integrated backend services with **NO SQL (MongoDB)** database to perform standard **CRUD** operations and manage application data flow.
- Actively contributed to the **Agile development** process, utilizing Jira to efficiently resolve, debug, and troubleshoot reported issues within the existing **Java backend services**.
- Successfully contributed to the deployment process by helping deploy backend services onto **AWS EC2** instances, gaining early, hands-on exposure to cloud-based deployment practices.
- Utilized **Git/GitHub** for source code management, adhering to version control best practices and collaborating effectively on shared code repositories.
- Supported maintenance and enhancement of **Java/J2EE-based applications**, working with **Spring MVC and JSP** to fix defects and improve application stability.
- Ensured code quality by writing and executing **basic JUnit test cases** for developed Java components.
- Gained early, hands-on experience in effective enterprise project collaboration and provided reliable backend troubleshooting support to the team.
- Assisted with production issue triage and priority fixes in coordination with operations teams to meet **SLA** and uptime requirements.
- Applied foundational knowledge of Core Java concepts (Collections, basic threading) and **J2EE principles** to develop and maintain service logic.

Environment: Java, J2EE, Spring MVC, AWS, RESTful API, MongoDB, SDLC, Jira, Git/GitHub, JUnit, Agile.

PROJECTS & ACHIEVEMENTS

- **Tax Website Modernization** – Contributed to the upgrade of New York State tax websites by refactoring legacy Java EE modules into a Spring Boot-based framework integrated with **MySQL** to improve application performance and maintainability
- **Legacy Application Stabilization** – Diagnosed and resolved critical bugs in Java EE applications caused by upstream service changes, strengthening system reliability and enhancing user experience.
- **Smart Document Processing & Notification System (Personal Project)** – Built a Spring Boot backend service to process and store documents in AWS S3, extract metadata, trigger Kafka-based asynchronous notifications, and optimize retrieval using Redis caching, resulting in **35% faster** lookups and smoother user updates.