

PAVAN KOTHURU

Senior Software Engineer

Mail: - pavankothuru37@gmail.com

Phone No: - 816-614-4555

LinkedIn: - www.linkedin.com/in/pavan12234-k



PROFESSIONAL SUMMARY

- Over **5+ years of professional experience** in the full **Software Development Life Cycle (SDLC)** including design, development, integration, testing, and maintenance of **web-based, enterprise, and distributed applications** using **Java/J2EE, Spring Boot, and Microservices architecture**.
- Experience with **ReactJS, Angular, JavaScript, jQuery, HTML5, CSS3, and Bootstrap** for building responsive, dynamic, and browser-compatible UIs; developed internal dashboards, SPAs, and admin portals.
- Proficient in **Microservices architecture**, implementing services using **Spring Boot**, with inter-service communication handled via **Eureka, Ribbon, Feign Clients, and Kafka** for asynchronous messaging.
- Applied **Spring Security and OAuth2** for secure authentication/authorization across microservices and web interfaces.
- Strong experience in **Hibernate ORM, JPA, and JDBC** for database access; proficient in **HQL, PL/SQL**, writing **joins, stored procedures, triggers, and cursors** across **Oracle, MySQL, Cassandra, and MongoDB**.
- Hands-on in building **RESTful and SOAP web services** using frameworks like **JAX-RS, JAX-WS, Jersey, Axis2**, and integrating **JSON/XML/WSDL/XSD** based communications.
- Built automated test cases using **JUnit, TestNG, Mockito, Selenium, Cypress, and Playwright**, covering both backend microservices and front-end UI functionality.
- Expertise in **CI/CD pipelines and DevOps practices**, using **Jenkins, Docker, Kubernetes, SonarQube, Jfrog Artifactory, Gradle, Maven**, and versioning strategies with **Git, SVN, and Bitbucket**.
- Experience with **AWS (EC2, S3, Lambda, IAM, VPC, SQS, SNS)** and **Azure (App Services, WCF)** for deploying cloud-native applications and managing secure infrastructure; implemented custom **IAM policies** and access control.
- Strong knowledge in **Shell scripting (Bash)** and **Perl**, used for automation tasks, deployment, and environment setup across Linux/Unix systems.
- Experience using **SOA, AOP, MVC, EJB, Multithreading, Concurrency, Collections**, and advanced Core Java features—including Java 8 features such as **Streams, Lambdas, Functional Interfaces, Optional**, and the **Date/Time API**—for building performant backends and handling complex business logic.
- Worked in **Agile/SCRUM** teams, actively participating in sprint planning, stand-ups, retrospectives, and using **JIRA** for task tracking and **Confluence** for documentation.

TECHNICAL SKILLS

PROGRAMMING LANGUAGES	: Java (8/11/17), Kotlin, C, J2EE, TypeScript, Python, JavaScript
Cloud Platforms	: AWS (EC2, RDS, S3, DynamoDB, Lambda, CloudFormation, CloudWatch, Code Pipeline, Code Build, Elastic Beanstalk, IAM, VPC, SQS, SNS), Azure (App Services, WCF)
Frontend Technologies	: HTML5, CSS3, JavaScript (ES6+), React.js, Angular, Vue.js, Bootstrap, jQuery 3, Ajax

Backend Technologies : Struts2, Spring, Spring Boot, Spring Cloud, Spring Security
Mark-up/XML Technologies : XML, XSD, JSON
Web/App Servers : Apache Tomcat, JBoss/Wild Fly, Jetty, WebLogic, Express.js
Databases : Oracle, MySQL, PostgreSQL, DB2, MongoDB, Cassandra
Webservices/API Services : **Rest** (jax-rs, spring rest), soap (jax-ws), GraphQL, OpenAPI/Swagger
Testing Tools : Selenium, TestNG, JUnit, Mockito, AssertJ, WireMock, Cucumber, JMeter, Postman, Karate
Logging/Others : Log4j/Log back, SLF4J, Micrometer, Prometheus, Grafana

Version Control Development : Git, GitHub, GitLab, Bitbucket, SVN, CVS
Tools/Environments

Middleware/Messaging System : Apache Kafka, RabbitMQ, ActiveMQ, Apache Camel, Spring JMS

CI/CD Tools : Jenkins, GitLab CI/CD, Docker Hub, AWS Code Pipeline, AWS Code Build, Bamboo

IDEs : Eclipse, NetBeans, IntelliJ IDEA, Visual Studio, Visual Studio Code

Other Tools and Technologies: UNIX, Apache Tomcat, Hibernate Search, Apache Cassandra-Spark Connector, Drop wizard, ELK Stack (Elasticsearch, Logstash, Kibana), Ansible, Kubernetes Helm, Perl, JMS (Java Messaging Service), Apache Maven, Shell) Docker, Kubernetes, Terraform, JIRA, Trello, Scrum, Kanban

Soft Skills : Problem Solving, Communication, Teamwork, Leadership, Adaptability

EXPERIENCE

Senior Software Engineer – Broadridge
Kansas City, Missouri, USA

July 2024 - Current

Project Description: Developed a cloud-native **Financial Data Distribution Platform** to process, secure, and deliver market and client data across internal systems using Spring Boot microservices, Kafka, and AWS services like S3, Lambda, and DynamoDB. Integrated Cassandra and MySQL for high-performance storage, and used Kubernetes and Docker for scalable deployment and service reliability.

Responsibilities and Achievements:

- **Developed microservices using Spring Boot and Java 8**, with Netflix Eureka for service discovery and Ribbon for client-side load balancing to distribute financial data across services efficiently.
- **Implemented Kafka producers and consumers** for real-time data streaming and asynchronous communication between distributed services, ensuring low-latency delivery of market/client data.
- **Used AWS S3 for storing financial records, DynamoDB** for NoSQL operations, and **Lambda** for event-driven data processing workflows in the distribution pipeline.
- **Built and containerized microservices with Docker**, then deployed and orchestrated them using **Kubernetes**, enabling high availability, scaling, and failover for critical components.
- **Integrated Cassandra and MySQL** to handle hybrid storage requirements: Cassandra for high-speed distributed writes and MySQL for relational operations and legacy integration.
- **Utilized JPA, JDBC, and Hibernate** to manage object persistence and execute complex database operations for financial reporting and tracking transactions.
- **Designed REST APIs using Flask (Python)** for internal data services, leveraging SQL Alchemy for ORM, while supporting microservice-to-microservice communication.

- **Created and maintained REST endpoints using Spring MVC**, hosted microservices on **PCF**, and automated deployments via **Jenkins CI/CD pipelines**.
- **Applied Spring Security with OAuth2** for fine-grained access control and authentication across distributed APIs serving sensitive financial data.
- **Processed cross-domain API requests** using Node.js, integrating with external services like GitHub and Spotify for auxiliary tasks and metadata enrichment.
- **Utilized MongoDB and MySQL** for handling structured and unstructured financial content, and built queries and triggers for business rule execution.
- **Developed internal tools using ReactJS** for dashboard visualizations, data administration, and real-time monitoring of distribution pipelines.
- **Monitored system health using Splunk and Datadog**, ensuring performance tuning and early detection of data lag or process failures.
- **Used Maven for build management**, Selenium for automation testing, and Jenkins for orchestrating build-test-deploy workflows across multiple environments.
- **Managed AWS infrastructure**: configured EC2, IAM, S3, SQS, SNS, and VPCs via AWS Console and APIs, enabling secure and isolated environments for data transmission.

Environment: Angular, AOP, AWS, AWS Lambda, Cassandra, CI/CD, DB2, Docker, DynamoDB, EC2, EJB, Git, GitHub, Hibernate, Java, Java 8, JavaScript, JDBC, Jenkins, JMS, JSON, JUnit, Kafka, Kubernetes, Mongo DB, MongoDB, MVC, MySQL, NoSQL, PCF, RESTful, S3, SOA, Spring, Spring Boot, Spring Cloud, Spring IOC, Spring MVC, SQL, Web Services

Senior Software Engineer – HCA Healthcare

Oct 2023 - Jun 2024

Kansas City, Missouri, USA

Project Description: Worked on building a **Cloud-Based Patient Communication and Data Integration System** to automate the processing of clinical data and enhance real-time communication between healthcare systems. Leveraged Spring Boot microservices, Kafka messaging, and Azure-hosted WCF services to handle large-scale XML/JSON health records securely, while ensuring seamless front-end experience using ReactJS and Angular.

Responsibilities and Achievements:

- **Built RESTful microservices using Spring Boot**, implementing secure data exchange and authentication via **Spring Security** and **OAuth2**, critical for managing patient record access and authorization.
- **Developed and deployed WCF services on Microsoft Azure Cloud** to receive and process incoming **XML-based clinical files**, enabling cross-system communication between healthcare entities.
- **Used Kafka** to implement a **publish/subscribe messaging architecture** for asynchronously handling large-scale health data transmissions between services.
- Created the **persistence layer with Hibernate, JDBC, and Spring DAO templates**, ensuring efficient storage and retrieval of patient and communication metadata in relational databases.
- Designed and implemented **single-page applications (SPA)** using **ReactJS** for patient-facing user interfaces that support real-time interaction and data visualization.
- Wrote **unit and integration tests** using **JUnit 5, Spring Boot Test Starter**, and **Mockito** for backend services, and **Jest** and **React Testing Library** for React components, ensuring code reliability.
- Used **Node.js** for developing lightweight middleware services, including REST APIs for internal system communication and **JSON/XML processing** for interoperability.

- **Managed CI/CD pipelines** using **Jenkins**, **Docker**, and **Maven**, automating build, test, and deployment workflows across multiple microservices.
- Deployed and maintained services on **Pivotal Cloud Foundry (PCF)**, utilizing auto-injected bindings and credentials from the platform.
- Participated in **Agile development cycles**, contributing to sprint planning, daily standups, code reviews, and backlog grooming via **JIRA**.
- Implemented **SQL queries, stored procedures, and triggers** for clinical data processing and used **Spring AOP** for logging and transaction management.
- Developed and executed **Linux shell scripts** to automate deployment and maintenance of service instances across environments.

Environment: AOP, Azure, CI/CD, Docker, Git, GitHub, Hibernate, HTML, Java, JavaScript, JDBC, Jenkins, JMS, JSON, JUnit, Kubernetes, Microservices, Microsoft Azure, MVC, React, Spring, Spring Boot, Spring MVC, SQL, Struts, SVN

Associated Software Engineer - WeWork India.

Jun 2021 - Jun 2023

Bangalore, India

Developed and migrated a legacy application into a cloud-native microservices-based **Facility Management System** to streamline building operations, automate maintenance workflows, and improve tenant service delivery. Utilized AWS Lambda for serverless automation, Spring Boot for REST APIs, and integrated CI/CD pipelines with Jenkins and Docker for seamless deployments.

Responsibilities and Achievements:

- Migrated legacy application to microservices architecture using **Spring Boot** and **REST APIs** for modular facility operations.
- Automated serverless tasks (e.g., maintenance scheduling, alerts) with **AWS Lambda** to boost operational efficiency.
- Designed **persistence layer** with **Hibernate** and Oracle SQL for managing facility, asset data, and reporting modules.
- Built responsive dashboards using **Angular**; implemented components, services, and reactive forms for real-time data handling and validation.
- Deployed and configured EC2 instances (Linux/Ubuntu) with environment-specific setups for reliable rollouts.
- Set up **CI/CD pipelines** with **Jenkins**, **Docker**, **Maven**, and **GitHub** for automated build, testing, and deployment across AWS.
- Secured modules using **Spring Security** and **OAuth2** for role-based access control.
- Integrated with third-party systems via **IBM DataPower for XML/JSON** transformation and message routing.
- Managed **Agile development lifecycle** using Jira, contributing across sprints from design to deployment.

Environment: Angular, AWS, AWS Lambda, Bitbucket, CI/CD, CVS, Eclipse, Git, GitHub, Hibernate, HTML, HTML5, Java, JavaScript, JDBC, Jenkins, JSON, Microservices, Oracle, Spring, Spring Boot, Spring Security, SQL, SVN, XML

Bangalore, India

Project Description: Developed a Regulatory Compliance Reporting System to automate validation and generation of audit reports using Spring Boot, JASPER, and JMS/RabbitMQ. Ensured secure access with OAuth2, deployed microservices to PCF via Jenkins, and managed environments across JBoss and WebLogic.

Responsibilities and Achievements:

- Involved across all **SDLC phases**—requirements gathering, design, implementation, testing, deployment, and support.
- Built dynamic, responsive web UIs using **HTML5, CSS3, Bootstrap, Ember.js, CodeMirror, and Brackets** for regulatory data entry and dashboards.
- Developed backend with **Java, Spring MVC, JSP, Servlets**, and frontend with **JavaScript, jQuery, HTML, and DHTML**.
- **Developed RESTful microservices** with **Spring Boot** to validate compliance data and generate reports.
- **Implemented JASPER Reports** for dynamic audit/compliance report generation based on validation rules.
- Secured application with **Spring Security** and **OAuth2** for role-based access control.
- **Used JMS and RabbitMQ** for asynchronous service communication in validation and reporting workflows.
- Deployed services to **Pivotal Cloud Foundry (PCF)** via **Jenkins pipelines** for consistent multi-environment deployment.
- **Managed application servers and environments on JBoss and WebLogic**, including installation, configuration, and failover testing.
- **Configured and monitored JMS queues** in WebLogic to ensure reliable message delivery under load.
- **Designed persistence layer** using **Spring JDBC Template, iBatis, Hibernate, and SQL** for secure, efficient data handling.
- **Integrated external/internal systems** using **SOAP and REST APIs**; utilized Axis2 for legacy support.
- **Migrated applications between JBoss and WebLogic**, resolving build and release issues throughout **SDLC stages**.
- Used Bitbucket for source control and Jira for defect tracking and Agile sprint management.

Environment: Bootstrap, CSS, CSS3, Ember.js, Git, HTML, HTML5, IntelliJ, Java, JavaScript, JDBC, Jenkins, Jira, JMS, jQuery, JSP, Kubernetes, Microservices, PCF, React, S3, SDLC, Servlets, SOA, SOAP, Spring, Spring Boot, Spring Security, SQL

EDUCATION

- **Bachelor of Technology in computer science and Engineering** – Vellore Institute of Technology, Tamil Nadu, India
- **Masters in computer science** – University of Central Missouri, MO, USA