

PAVAN KOTHURU

Software Developer

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Portfolio: <https://github.com/Pavankothuru/Portfolio>



PROFESSIONAL SUMMARY

- Over 5+ years of experience in full SDLC: **design, development, integration, testing, and maintenance of web, enterprise**, and distributed applications using **Java/J2EE, Spring Boot**, and **Microservices**.
- Proficient in **ReactJS, Angular, JavaScript, jQuery, HTML5, CSS3, Bootstrap** for building dynamic, responsive UIs, SPAs, dashboards, and admin portals.
- Hands-on with **Selenium, Cypress, Playwright** for UI automation testing.
- Strong in **Microservices architecture, Spring Boot, Eureka, Ribbon, Feign, Kafka** for asynchronous messaging.
- Skilled in **Spring Security, OAuth2** for secure authentication and authorization..
- Expertise in **Hibernate, JPA, JDBC, PL/SQL**, stored procedures, triggers, cursors; experienced with **Oracle, MySQL, Cassandra, MongoDB..**
- Built **RESTful** and **SOAP** services using **JAX-RS, JAX-WS, Jersey, Axis2**; integrated with **JSON, XML, WSDL, XSD**.
- Hands-on with **JUnit, TestNG, Mockito** for backend testing.
- Expertise in **Core Java** (SOA, AOP, MVC, EJB, multithreading, concurrency, collections) and **Java 8 features** (Streams, Lambdas, Functional Interfaces, Optional, Date/Time API)..
- Experience with **CI/CD pipelines** using **Jenkins, Docker, Kubernetes, SonarQube, Artifactory, Maven, Gradle, Git, SVN, Bitbucket**.
- Experience Worked on **AWS (EC2, S3, Lambda, IAM, VPC, SQS, SNS)** and **Azure (App Services, WCF)** for cloud-native applications and infrastructure.
- Strong in **Shell scripting (Bash)** and **Perl** for automation and deployments in **Linux/Unix** environments.
- **Agile/Scrum** team experience active in sprint planning, stand-ups, retrospectives, with **JIRA** and **Confluence** for tracking and documentation.

TECHNICAL SKILLS

Languages: Java (8/11/17), Kotlin, JavaScript (ES6+), TypeScript, Python, SQL, C

J2EE Technologies: Servlets, JSP, JSTL, EJB, JAXB, JMS, JNDI, JAXP, XML Parsers (SAX, DOM), JPA

Frameworks: Spring Core, Spring MVC, Spring Security, Struts, Hibernate

Frontend / UI Technologies:HTML5, CSS3, JavaScript (ES6+), TypeScript, ReactJS, Angular, Vue.js, Bootstrap, jQuery 3, Ajax, JSON, XSLT, XPath

Databases: Oracle, MySQL, PostgreSQL, DB2, MongoDB, Cassandra, DynamoDB

Web / App Servers: Apache Tomcat, JBoss/Wild Fly, WebLogic, WebSphere, Jetty, Express.js, Sun One

Web Services / API: REST (JAX-RS - Jersey, Spring REST), SOAP (JAX-WS -Apache CXF, Axis2), GraphQL, OpenAPI/Swagger, WSDL, XML-RPC

Cloud Platforms: AWS (EC2, RDS, S3, DynamoDB, Lambda, CloudFormation, CloudWatch, Code Pipeline, Code Build, Elastic Beanstalk, IAM, VPC, SQS, SNS, API Gateway, Autoscaling, Redshift)
Azure (App Services, WCF)

Build / CI-CD / DevOps: Maven, Gradle, Ant, Jenkins, GitLab CI/CD, Bamboo, AWS Code Pipeline, AWS Code Build, Docker, Kubernetes, Helm, Terraform, Ansible

Testing Tools: JUnit, TestNG, Mockito, AssertJ, Selenium, Cypress, Playwright, Wire Mock, Cucumber, JMeter, Postman, Karate

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

IDEs: Eclipse, IntelliJ IDEA, STS, NetBeans, Visual Studio, Visual Studio Code, IBM RAD

Other Tools & Environments: UNIX/Linux, Shell Scripting (Bash, Perl), Apache Cassandra-Spark Connector, drop wizard, Docker, JIRA, Trello, Scrum, Kanban, Problem Solving, Communication, Teamwork, Leadership, Adaptability

EXPERIENCE

Software Developer – Broadridge

July 2024 - Current

Kansas City, Missouri, USA

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.
- **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

Software Developer – 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.
- 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, React, Spring, Spring Boot, Spring MVC, SQL, Node.js

Software Developer - WeWork India.

Jun 2021 - Jun 2023

Bangalore, India

Project Description: 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

Junior Software Developer - Exxon Mobil

Jan 2020 - May 2021

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.
- **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

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