

# Naga Venkata Sairam Yanamadala

## Full-Stack Developer

[nagavenkatasairam.yanamadala@gmail.com](mailto:nagavenkatasairam.yanamadala@gmail.com) | 913-667-9449 | [LinkedIn](#)

### PROFESSIONAL SUMMARY

Full-stack developer with 7+ years of hands-on experience designing and implementing scalable web applications using Java/J2EE technologies, Spring Boot framework, and modern JavaScript frameworks like React, Angular, and Vue.js. Passionate about delivering innovative, user-centric solutions through robust backend services, efficient RESTful APIs, and integration with cloud services (AWS, GCP). Proficient in building event-driven architectures with Apache Kafka, ensuring real-time data processing. Strong database skills in Oracle, MySQL, PostgreSQL, and NoSQL solutions like MongoDB. Experienced in CI/CD practices using Jenkins and Docker for streamlined deployment and infrastructure management. Skilled in implementing security measures like OAuth and JWT authentication with Spring Security. Experienced with the complete software development lifecycle, ensuring quality and efficiency from inception to deployment.

### TECHNICAL SKILLS

Programming Languages	Java 8/11/17, SQL, PL/SQL, JavaScript, Python, PHP, C, C++, C#
Java/J2EE Technologies	Servlets, JSP, JSTL, JDBC, JPA, EJB, JMS, JNDI, JavaBeans
Frameworks	Spring Boot, Spring MVC, Spring Security, Spring Data, Spring Batch, Spring AOP, Spring IOC, Hibernate, Struts
Databases	Oracle 9i/10g/11g/12c, SQL Server, MySQL, MongoDB, Apache Cassandra
Web Technologies	HTML5, CSS3, Bootstrap, Tailwind CSS, JavaScript, JSON, XML, RESTful APIs, SOAP
JavaScript Frameworks	Angular (12-16), React.js, Node.js, Vue.js, Next.js
Cloud Technologies	AWS (EC2, S3, RDS, VPC, IAM, ELB, Route53, SQS, SNS, ES, ECS, EKS), Docker, Azure, Google Cloud Platform (GCP)
Messaging Services	Apache Kafka, RabbitMQ
Architectural Patterns	Microservices, MVC, SOA, ORM
Scripting Languages	Shell Script, Bash
Application/Web Servers	Apache Tomcat, WebSphere, JBoss, WebLogic
IDEs	IntelliJ IDEA, Eclipse, NetBeans
Version Control	Git, GitHub, BitBucket
Build & CI/CD Tools	Maven, Jenkins
Testing Frameworks	JUnit, Selenium, Cucumber, Mockito, JMockit
Configuration Management	SVN, GitHub, Git, Jenkins
Additional Tools & Technologies	GraphQL, Kubernetes, Prometheus, Grafana, ELK Stack, Terraform, Postman, Log4J, Jasper Reports

### PROFESSIONAL EXPERIENCE

RxSS – Overland Park, KS

Mar 2023 – Present

Full-Stack Developer

**Project Description:** At Rx Savings Solutions, I contributed to pioneering technology that revolutionizes prescription savings through real-time claim analysis. Our patented system enhances member savings by seamlessly integrating

with existing PBMs and engagement solutions. Developed by pharmacists, our clinical pricing algorithm forms the core of this innovative platform, ensuring comprehensive savings without altering plan designs. This technology represents a transformative approach to prescription cost management, optimizing affordability and accessibility for healthcare consumers.

#### Frontend Development:

- Developed intuitive user interfaces with **React**, utilizing hooks, context API, and Redux for optimized user interaction in prescription drug management.
- Integrated **Java Spring Boot** backend with React front-ends, leveraging RESTful APIs and **WebSocket** for real-time updates, enhancing application performance.
- Implemented **Redux** for advanced state management in React, ensuring robust data consistency and scalability in complex prescription workflows.
- Ensured usability and accessibility compliance using responsive design principles with **Tailwind CSS**, including ARIA attributes for enhanced user experience across platforms.
- Optimized application performance with code splitting and lazy loading techniques in **React**, improving load times and user engagement.
- Utilized reactivity features to dynamically update interfaces based on real-time data changes, enhancing responsiveness in prescription drug management applications.

#### Backend Development:

- Developed and maintained web applications using **Java EE** and **Spring framework**, specifically tailored to streamline prescription drug processes for consumers.
- Employed **Apache Kafka Streams** to enable real-time data processing, providing instant updates and insights into prescription drug services, leveraging expertise in **Java** and **Kafka**.
- Implemented **GraphQL** for flexible and efficient data querying, empowering consumers to access prescription information tailored to their specific needs, utilizing knowledge in **GraphQL** and Java web development.
- Implemented cost-saving features and medication adherence enhancements using Java technologies, directly contributing to the goal of reducing prescription drug costs and improving quality of life.
- Leveraged Java technologies such as **Hibernate** and **JPA** to optimize application performance and scalability, supporting the commitment to providing efficient and scalable prescription drug services.
- Worked with **RESTful APIs** to retrieve insurance coverage details and medication pricing information, enhancing the functionality of prescription drug services and ensuring consumers have access to accurate and relevant information.
- Conducted comprehensive testing using **JUnit** and **Mockito** to guarantee the reliability and accuracy of prescription drug data, directly contributing to ensuring consumer trust and satisfaction.
- Actively participated in code reviews, providing constructive feedback to peers and promoting code quality and best practices, ultimately supporting excellence in software development.

#### Cloud and Data Solutions:

- Integrated **Amazon DynamoDB** for scalable, low-latency **NoSQL storage**, optimizing prescription data access and showcasing proficiency in **AWS** and NoSQL databases.
- Implemented **Spring Cloud Sleuth** and **Zipkin** for distributed tracing, diagnosing, and resolving performance issues across **microservices**.
- Utilized Elasticsearch to enable rapid retrieval of relevant prescription information, improving user accessibility and query efficiency.
- Engineered microservices architecture with **Kubernetes** for scalable and resilient container orchestration in prescription drug services.
- Implemented event-driven architecture using **Apache Kafka** for real-time data streaming and processing, enhancing responsiveness and data integrity in prescription drug management.

- Implemented **IAM roles and policies** for AWS services (DynamoDB, Elasticsearch, Kubernetes, Kafka) to ensure secure access with least privilege principles.
- Configured cross-account IAM roles to facilitate secure integration and collaboration across AWS environments, optimizing scalability and operational flexibility.

**Environment:** Java EE, Spring framework, Apache Kafka Streams, Amazon DynamoDB, GraphQL, Java Spring Boot, React (utilizing hooks, context API, Redux), Hibernate, JPA, RESTful APIs, Tailwind CSS, JavaScript, JUnit, Mockito, Spring Cloud Sleuth, Zipkin, Elasticsearch, Kubernetes (for microservices orchestration), Apache Kafka (for event-driven architecture and real-time data processing).

**Kroger co –  
Full-Stack Developer**

**Dec 2021 – Feb 2023**

**Project description:** At Kroger, I developed a full-stack Java application for bill payment service. I designed and implemented scalable microservices using Spring Boot and Spring Cloud, and created dynamic, user-friendly web interfaces with Angular and Bootstrap. The application utilized AWS (EC2, S3, RDS) for cloud deployment and real-time messaging with Apache Kafka. CI/CD pipelines were managed with Jenkins and Maven, and Docker was used for containerization to ensure consistent environments. Implemented **Agile methodology** to foster collaboration, continuous improvement, and adaptive planning throughout the development lifecycle.

#### **Frontend Development:**

- Constructed dynamic, user-centric web interfaces for Money Services, utilizing **Angular's** two-way data binding and reactivity features to support bill payments.
- Developed responsive web pages using **Angular's** component-based architecture and **Bootstrap's** grid system to ensure seamless user experiences across various devices.
- Engineered high-performance, accessible UI components with **Angular's** Ahead-of-Time (AOT) compilation and **Bootstrap's** utility classes to optimize usability and adhere to accessibility standards.
- Implemented Angular Universal for server-side rendering to improve initial page load performance and enhance SEO.

#### **Backend Development:**

- Designed and implemented scalable microservices architecture using **Spring Boot** and **Spring Cloud** for Money Services, enabling rapid development and resilient cloud-native solutions.
- Developed robust RESTful APIs with **Spring MVC** and integrated **Spring Security** for secure authentication and efficient data exchange across modules.
- Utilized **Hibernate** and **JPA** for ORM to optimize database interactions with **Oracle 12c** and **MySQL**, ensuring high performance and reliability.
- Implemented and optimized complex SQL queries and **PL/SQL** procedures to support business logic and generate detailed reports for financial transactions.
- Integrated **Spring Data JPA** to simplify data access and enhance transaction management across multiple databases.
- Implemented asynchronous processing using **Spring WebFlux** and **Reactive Programming** to handle concurrent requests and improve system responsiveness.
- Utilized **Spring Batch** for batch processing of large volumes of financial transactions, ensuring reliable and efficient data processing.
- Implemented caching strategies with **Ehcache** and **Redis** to optimize data retrieval and improve overall application performance.
- Developed and maintained comprehensive unit and integration tests using **JUnit** and **Mockito**, ensuring code quality and reliability in financial transaction processing.

## Cloud:

- Deployed and managed scalable microservices architecture on **AWS EC2, S3, and RDS**, utilizing auto-scaling and load balancing for efficient resource allocation.
- Set up real-time messaging and event-driven architecture with **Apache Kafka** on AWS, enabling seamless communication and coordination of financial transactions using topics, partitions, and consumer groups.
- Automated continuous integration and delivery (**CI/CD**) pipelines using **Jenkins** and **Maven**, streamlining build, test, and deployment processes.
- Containerized applications with **Docker** to standardize deployment across development, testing, and production environments.
- Monitored and optimized application performance using the **ELK Stack** (Elasticsearch, Logstash, Kibana) on AWS, analyzing data and visualizing insights to improve system efficiency.
- Implemented infrastructure as code (IaC) with **Terraform**, automating cloud resource provisioning and ensuring consistent environment configurations.

**Environment:** Java 11, Spring Boot, Spring Cloud, Hibernate, JPA, Oracle 12c, MySQL, Angular, Bootstrap, AWS (EC2, S3, RDS), Apache Kafka, Jenkins, Maven, Docker, ELK Stack (Elasticsearch, Logstash, Kibana), Terraform, IntelliJ IDEA, and Jasper Reports.

**First United Bank- Durant, OK**  
**Full-Stack Developer**

**Jan 2020 – Nov 2021**

---

**Project Description:** I developed a Java-based web application for Investment Management. The application provides personalized investment plans, evaluates portfolio performance, and adjusts strategies based on life events. It ensures optimal asset allocation and offers professional guidance tailored to users' financial goals and risk tolerances.

## Frontend Development:

- Developed responsive and dynamic user interfaces using **Vue.js**, ensuring cross-device compatibility and enhanced user engagement.
- Implemented interactive features and complex UI components with **Bootstrap** and **Vuetify**, optimizing usability and navigation for improved user experience.
- Utilized **Vuex** for state management, employing `async/await` and Promises to manage asynchronous operations effectively.
- Ensured code quality through rigorous unit testing with **Jest** and **Mocha**, participating in code reviews to maintain high standards of performance and reliability.

## Backend Development:

- Integrated front-end components seamlessly with RESTful APIs and GraphQL endpoints, ensuring efficient data flow and real-time updates.
- Designed and developed scalable backend systems using **Java** and **Spring Framework** (including **Spring Boot**), ensuring robust performance and reliability for handling complex financial transactions and data processing.
- Implemented **RESTful APIs** with **Spring MVC**, facilitating seamless data exchange with frontend technology **Vue.js**, enhancing user experience through efficient communication and real-time updates.
- Managed database schemas and optimized SQL queries in **MySQL** and **PostgreSQL**, employing indexing and query optimization techniques to ensure efficient data storage, retrieval, and manipulation for financial data management.
- Implemented **JWT authentication** and **OAuth** security measures with **Spring Security**, safeguarding sensitive user information and controlling access permissions in compliance with regulatory standards.

- Conducted comprehensive unit testing and integration testing using **JUnit** and **Mockito** within a **CI/CD** environment, ensuring high code quality and reliability through automated build, test, and deployment processes.

#### Cloud:

- Orchestrated deployment of Java backend applications with **Spring Boot** using **Maven/Gradle**, ensuring scalable and efficient deployment processes.
- Managed **MySQL** and **PostgreSQL** database deployments, optimizing schema changes and data migrations with **Flyway** or **Liquibase** for seamless updates and data consistency.
- Implemented **Docker** containerization for backend services, ensuring consistent deployment across environments and scalability of application resources.
- Automated deployment pipelines using **GitLab CI/CD**, streamlining build, test, and deployment workflows for efficient software delivery and continuous integration.

**Environment:** Vue.js, Bootstrap, Material-UI, Vuex, Jest, Mocha, Java 11, Spring Framework (including Spring Boot), Spring MVC, MySQL, PostgreSQL, Hibernate, JUnit, Mockito, Docker, GitLab CI/CD, Agile (Scrum)

**Tachasoft Pvt Ltd**  
**Full-Stack Developer**

**Oct 2017 – Dec 2019**

---

**Project Description:** The project involved the development of a comprehensive bus ticket booking application that allows users to search for bus routes, view schedules, book tickets, and receive real-time notifications. The application was designed to provide a user-friendly interface, secure transactions, and efficient performance across various devices.

#### Frontend Development:

- Designed and implemented a highly responsive and interactive user interface using **React.js** and **Bootstrap**, delivering an intuitive and visually appealing experience.
- Ensured cross-browser compatibility and mobile responsiveness to provide a seamless booking experience across desktops, tablets, and mobile devices.
- Enhanced user input accuracy and application reliability through robust validation techniques and comprehensive error handling mechanisms.
- Integrated real-time notifications to keep users updated on booking status and schedule changes, improving overall user engagement and satisfaction.
- Implemented secure transaction protocols to safeguard user data and payment information, ensuring a trustworthy booking process.
- Conducted performance optimization to ensure efficient operation and quick response times across different platforms and devices.

#### Backend Development:

- Developed **RESTful APIs** using **Java Spring Boot** to handle business logic, user management, and ticket booking processes.
- Implemented secure authentication and authorization using **Spring Security** to protect user data and application resources.
- Integrated OAuth for third-party authentication, allowing users to sign in using their Google or Facebook accounts.
- Utilized **Hibernate** and **Spring Data JPA** to interact with **MySQL** databases.
- Implemented **CRUD operations** for managing bus schedules, routes, user accounts, and booking history.
- Optimized database queries to ensure efficient data retrieval and storage.

- Implemented validation and error handling to protect against security vulnerabilities like **SQL injection** and cross-site scripting (**XSS**).
- Integrated with payment gateways like Razorpay, Paytm, BillDesk and PayPal to facilitate secure transactions.
- Integrated with third-party services to provide real-time bus schedule updates and notifications.
- Implemented asynchronous processing for tasks like booking confirmations and email notifications using **Redis**.
- Utilized caching mechanisms with **Memcached** to improve application performance and reduce load times.
- Ensured compliance with GDPR and CCPA regulations by implementing encryption techniques such as **SSL/TLS**.

#### Cloud and DevOps:

- Used **Git** for **version control**, managing code changes with branching and merging strategies.
- Collaborated with team members through pull requests and code reviews to maintain code quality.
- Conducted unit and integration tests using **JUnit** and **Mockito** to ensure the reliability of individual components and overall system functionality.
- Set up continuous integration/continuous deployment (**CI/CD**) pipelines using **Travis CI** to automate testing and deployment processes.
- Implemented logging and monitoring solutions with **Log4j** and **SLF4J** to track application performance and troubleshoot issues.
- Utilized Google Cloud Platform's Firebase Cloud Messaging (**FCM**) for push notifications, enabling real-time alerts and updates based on application events and critical system notifications.
- Deployed scalable infrastructure on Google Cloud Platform (**GCP**), utilizing services such as **Google Compute Engine** for virtual machine management and Google Kubernetes Engine (**GKE**) for container orchestration.
- Utilized Google Cloud Storage (**GCS**) for efficient data storage and management, ensuring high availability and durability of stored data.

**Environment:** React.js, Bootstrap, Java Spring Boot, Spring Security, OAuth, Hibernate, Spring Data JPA, MySQL, Redis, Memcached, WebSocket, SSL/TLS, Git, JUnit, Mockito, Travis CI, Log4j, SLF4J, GDPR, CCPA, FCM, GCP, GKE, GCS

## EDUCATION

**Master's in computer science** - University of Missouri Kansas City

**Bachelor of Technology in Computer Science and Engineering** – JNT University, Kakindada