

# MohanPrasad Naraganti

(856) 390-0225 | [mohanprasad10n@gmail.com](mailto:mohanprasad10n@gmail.com) | [LinkedIn](#)

## Professional Summary

Strategic software developer with over 7 years of experience in Java technologies, specializing in Analysis, Design, Coding, Testing, and implementation of Windows and Web applications. Proficient in Java SE, Java EE, Spring Boot, Hibernate, and SQL Server, with expertise in AWS and Azure cloud services. Skilled in web technologies like HTML5, CSS3, JavaScript, React, and Angular, and experienced in Test-Driven Development (TDD) and object-oriented design. Successfully contributed to projects in US Taxing and Accounting, Banking, E-Commerce, Insurance, and Health Care domains, along with excellent communication skills and teamwork abilities.

## Technical Skills

Programming Languages	Java, Node.js, JavaScript
Java Frameworks and Tools	Spring Boot, Spring MVC, Hibernate, JPA, JSP, Servlets
Messaging Systems	Apache Kafka
Web Development Frameworks and Technologies	React, HTML5, CSS3, Angular, jQuery, AJAX, Material UI, Web API, Bootstrap
Cloud Platforms	Azure, AWS
Database Management	MongoDB, PostgreSQL, SQL Server, MySQL
Containerization and Orchestration	Docker, Kubernetes
CI/CD and Build Tools	Jenkins, Azure DevOps, GitHub Actions, Maven, Gradle
Version Control Systems	GIT, GITHUB, Bitbucket,
Testing Frameworks	JUnit, Mockito, Cypress
Logging and Monitoring	ELK Stack, Log4j, Logging Monitoring Tools
Infrastructure as Code	Terraform, Ansible
Web Servers	Apache Tomcat, Nginx
Data Formats	JSON, XML, XSLT
Reporting	Jasper Reports, Crystal Reports, Reporting Analytics
Integrated Development Environments	Visual Studio (VS), IntelliJ IDEA, Eclipse
Project Management and Collaboration	JIRA, Scrum, Kanban, Bitbucket
Operating Systems	Windows, Linux, macOS

## Work Experience

**Sr. Full Stack Developer** | New Jersey Natural Gas – Monmouth, NJ | July 2022 – Present

**Project:** Energy Consumption Optimization System

Developed and enhanced a system for optimizing energy consumption across New Jersey’s state-operated buildings, aimed at reducing costs and promoting sustainability. The system provided real-time monitoring and insights into energy usage, helping government entities make informed decisions about energy efficiency.

**Roles and Responsibilities:**

### Backend Development:

- Led the design and development of the **REST APIs** to manage energy consumption data from various state-owned buildings, providing real-time updates on usage and consumption patterns.
- Implemented the **data processing** logic to aggregate energy usage statistics and generate weekly/monthly reports on energy efficiency for building administrators.
- Optimized the **SQL database** queries using **Stored Procedures** and **indexes**, ensuring high performance even with large datasets.
- Integrated **external weather APIs** to adjust building energy consumption recommendations based on climate factors.
- Ensured secure and scalable handling of sensitive data by implementing **role-based access control** and **encryption** protocols for data transmission.
- Developed and maintained **scheduled jobs** for generating energy consumption reports and sending them to building managers at set intervals.

### Frontend Development:

- Designed and developed an intuitive, interactive dashboard using **React.js** and **Redux** for real-time visualization of energy consumption data and trends.
- Created dynamic **charts** and **graphs** using libraries like **Chart.js** and **D3.js** to present energy consumption statistics and insights.
- Developed responsive UI components using **HTML5**, **CSS3**, and **Bootstrap**, ensuring accessibility across various devices and screen sizes.
- Integrated **real-time notifications** into the frontend to alert users about potential energy inefficiencies or when consumption thresholds were exceeded.

### Cloud and Deployment:

- Utilized **AWS** services for hosting the application and managing energy data storage. Specifically, used **Amazon S3** for storing historical energy consumption data and **Amazon RDS** for database management.
- Implemented a **cloud-based microservices architecture** to scale the system and ensure high availability of data services across multiple regions.
- Deployed the system using **AWS Lambda** to handle event-driven functions like data processing and alerting based on specific energy consumption thresholds.
- Managed the infrastructure using **AWS CloudFormation** and integrated with **CI/CD pipelines** for automated deployment and testing.
- Developed unit tests for API endpoints using **Jest** and **Enzyme**, ensuring reliable data retrieval and consumption processing.
- Participated in **regression testing** cycles to validate new features, ensuring backward compatibility and stable performance.
- Implemented **error tracking** and **logging** with **Sentry** to monitor the health of the system and quickly address performance bottlenecks or failures.
- Collaborated with the DevOps team to fine-tune **AWS CloudWatch** for system monitoring and alerting.

### Miscellaneous:

- Collaborated closely with data scientists and energy consultants to define the KPIs and metrics for energy consumption, ensuring the dashboard met user needs.

- Assisted with user training and wrote documentation for system operation and troubleshooting.

**Environment:** JavaScript, React.js, Redux, Node.js, Express, HTML5, CSS3, Bootstrap, REST APIs, Amazon RDS, SQL Server, Stored Procedures, Indexing, Cloud Storage, AWS (Lambda, RDS, S3, CloudFormation, CloudWatch), Microservices, Jest, Enzyme, Sentry, Git, Jenkins, CI/CD Pipelines, D3.js, Chart.js, Data Visualization, Energy Usage Analytics, OAuth, Role-based Access Control (RBAC).

**Software Engineer** | HCL Tech – Whippany, NJ | Nov 2021 - Sep 2023

**Project:** Smart Energy – Smart Grid and Energy Management System

**Description:**

Developed an energy management platform that integrates smart grid technology to monitor, analyze, and optimize energy consumption across residential and commercial buildings. The system includes predictive analytics for energy usage and an IoT-based monitoring solution for real-time data acquisition.

**Roles and Responsibilities:**

- Led the design and implementation of **microservices** using **Spring Boot**, **Spring Cloud**, and **Docker**, ensuring modular and scalable architecture for energy consumption management.
- Developed a **real-time energy monitoring system** using **IoT sensors** integrated with **Apache Kafka** for data streaming and **AWS Kinesis** for real-time analytics.
- Created responsive, interactive dashboards with **React.js** and **Redux** to display energy consumption patterns, helping clients optimize their usage and reduce costs.
- Integrated **Google Charts** and **D3.js** for advanced data visualizations, including energy consumption trends, peak demand forecasting, and cost optimization.
- Designed and developed a **RESTful API** using **Spring MVC** to allow external systems to retrieve energy data and integrate with third-party smart devices and IoT systems.
- Optimized the backend database (MySQL and **Amazon RDS**) with advanced indexing and query optimization to handle high volumes of data from IoT devices.
- Implemented **JWT**-based security for user authentication and authorization, ensuring secure access to energy data and client information.
- Worked closely with the QA team to implement test-driven development (TDD) using **JUnit** and **Mockito**, achieving 95% test coverage.
- Deployed the solution on **AWS** using **Elastic Beanstalk** and **EKS**, enabling seamless scaling of the application for multiple clients.
- Set up a **CI/CD pipeline** using **Jenkins** and **GitLab** for automated deployment and testing, significantly reducing time-to-market for new features.
- Collaborated with the business team to define user stories and functional requirements in an **Agile** development environment, delivering incremental value in bi-weekly sprints.
- Implemented logging and monitoring using **AWS CloudWatch** and **Prometheus** to track system health, energy consumption metrics, and performance bottlenecks.
- Provided documentation for API endpoints, system architecture, and deployment processes to assist internal teams and clients in the long-term maintenance of the system.

**Environment:** Java, Spring Boot, Spring Cloud, React.js, Redux, IoT, Apache Kafka, AWS (Kinesis, RDS, Elastic Beanstalk, EKS, CloudWatch), MySQL, JWT, Docker, Jenkins, GitLab, JUnit, Mockito

**Software Developer** | MidFirst Bank | OklaHoma, OK | Jan 2020 - Oct 2021

**Project:** LoanTrackPro – A Loan Management System

**Description:**

Developed a comprehensive loan management platform to streamline the lifecycle of loan applications, including application processing, approval workflows, and repayment tracking.

**Roles and Responsibilities:**

- Designed and implemented backend services using Spring Boot and Hibernate, ensuring efficient loan application processing and data storage.
- Developed responsive web interfaces with Angular and Bootstrap, resulting in a 30% increase in user engagement.
- Created and consumed RESTful APIs for seamless communication between the frontend and backend systems.
- Integrated third-party APIs to retrieve credit scores and loan history, enhancing decision-making accuracy.
- Built a secure authentication and authorization system using JWT and Spring Security, adhering to financial compliance standards.
- Enhanced loan processing speed by optimizing SQL Server queries and indexing, achieving a 50% reduction in processing time.
- Developed automated batch jobs to process loan repayments and generate monthly account statements.
- Designed a dashboard with real-time analytics using Highcharts.js, allowing stakeholders to monitor loan portfolios and default rates.
- Conducted unit testing with JUnit and Mockito, achieving 90% test coverage and minimizing production issues.
- Collaborated with DevOps teams to deploy the application on AWS, using Docker containers and Jenkins pipelines for CI/CD.
- Provided post-deployment support, including monitoring performance, fixing bugs, and implementing feedback from end-users.
- Conducted code reviews and mentored junior developers, promoting best practices and coding standards.
- Documented technical specifications, API contracts, and user manuals for internal teams and stakeholders.
- Implemented logging and monitoring using ELK Stack (Elasticsearch, Logstash, Kibana) to track system health and error logs.
- Ensured compliance with banking regulations such as PCI-DSS by implementing encryption for sensitive customer data.

**Environment:** Java, Spring Boot, Hibernate, Angular, Bootstrap, REST APIs, JWT, SQL Server, AWS, Docker, Jenkins, ELK Stack, JUnit, Mockito

**Associate Software Developer** | Kognivera Solutions Pvt Ltd | Aug 2016 - Dec 2019

**Project:** HealthCareLink – A Patient Management System

**Description:**

Developed a healthcare platform that streamlines patient appointments, record-keeping, and doctor-patient communication.

**Roles and Responsibilities:**

- Designed and developed REST APIs using Spring MVC and Hibernate to manage patient and appointment data.
- Created a user-friendly interface using HTML5, CSS3, JavaScript, and Bootstrap, improving usability by 40%.
- Implemented a secure login system with role-based access control for patients, doctors, and administrators.
- Optimized MySQL database queries, ensuring high performance and scalability.
- Conducted unit and integration testing to achieve a defect-free system before deployment.
- Provided technical documentation and training to end-users for system adoption.
- Implemented a notification module using Java-Mail API to send automated appointment reminders and updates.
- Developed a reporting module that allowed administrators to generate reports on appointment trends, patient demographics, and system usage.
- Integrated third-party APIs for payment processing, enabling secure and seamless online transactions for patients.
- Collaborated with cross-functional teams, including UI/UX designers and QA engineers, to ensure timely delivery of project milestones.
- Performed load and stress testing to identify bottlenecks and improve system reliability under high user traffic.
- Designed and implemented database migration scripts for seamless upgrades without data loss.
- Enhanced platform security by implementing encryption for sensitive patient data and adhering to healthcare compliance standards (e.g., HIPAA).
- Created a multi-language support feature to cater to a diverse patient demographic, improving accessibility.
- Monitored and resolved application performance issues post-deployment, ensuring high uptime and availability.

**Environment:** Java, Spring MVC, Hibernate, MySQL, HTML5, CSS3, JavaScript, Bootstrap, REST APIs, Java, Mail API, JUnit, Maven

## Certifications

---

**HackerRank -- Frontend** Certification ( <https://www.hackerrank.com/certificates/238c62cd3fbe> )

**HackerRank -- React JS** Certification ( <https://www.hackerrank.com/certificates/30168aa3e385> )

**HackerRank -- CSS** Certification ( <https://www.hackerrank.com/certificates/09a17285264c> )

## Education

---

**Rowan University**

*Master of Science in Computer Science*

**Jawaharlal Nehru Technological University**

*B. Tech in Electronics & Communication Engineering*