Gopi Raju Rajolu

 [gopiraju.rajolu@gmail.com](mailto:gopiraju.rajolu@gmail.com)  +19375160245  [LinkedIn](https://www.linkedin.com/in/gopi-raju-rajolu-aa1a17346/)

# PROFESSIONAL SUMMARY

Results-driven Senior Software Engineer with proven ability over 3+ years of full stack software engineering in systems design, developing, and deploying robust large scalable web applications. Expertise in Java, Spring Boot, and Microservices architecture. Proven ability in software development, complex systems performance tuning, streamline processes, and improve user experience through innovative solutions, and industry best practices.

# SKILLS

* **Programming Languages:** Java 17, SQL/NoSQL, Python, Algorithms, C, Core Java, C++, Data Structures
* **Enterprise Java**: JDBC Driver, JSP, Java Collections Framework, Generics in Java, Stream API, JVM, J2EE
* **Web Development:** HTML, CSS, Bootstrap, JavaScript, Asynchronous JavaScript, jQuery, Ajax, ReactJS, AngularJS, NodeJS, Redux, JSON, DOM, Progressive Web Apps, XML, YAML, TypeScript
* **LLM & AI technologies:** GPT-4/3.5, Claude, Llama 2, RAG, LangChain, Prompt Engineering), AI/ML frameworks (PyTorch, TensorFlow, Hugging Face, spaCy), and vector databases (Pinecone, Chroma)
* **Java Frameworks:** Hibernate, Spring MVC, Spring Web Flow, Spring IOC, Spring AOP, Spring Boot, Spring Batch, Spring Data JPA, Spring Core, Spring Security, Microservices, Maven, Test-Driven Development (TDD), Optimization, Object Relational Mapping, Elastic Search, Junit5, Mockito, OAuth, Architectural Patterns, Unix, Linux, Black Box Testing
* **Web Services:** RESTful Webservices, GraphQL, RabbitMQ, Kafka messaging
* **Database Systems:** SQL Server, MS SQL, PostgreSQL, MySQL, MongoDB, Oracle, DynamoDB, Apache Cassandra, MongoDB, Data Modeling, RDBMS, Snowflake DB
* **Version Control**: GIT, GitHub, Bitbucket, JIRA, Agile Methodologies, Kanban, Gitlab
* **Project Management:** Agile methodologies, JIRA, Documentation, Requirements gathering
* **Cloud Technologies / Cloud Services**: Amazon Web Services, Amazon S3, Amazon EBS, Amazon SQS, Amazon EC2, Amazon VPC, Amazon RDS, SNS, SES, Docker, Kubernetes, Continuous Integration/Continuous Delivery (CI/CD), ECS, DevOps, Jenkins, Azure, Saas, Software as Service, Google Cloud (Big Query, Cloud Functions)
* **Software Development Tools:** Eclipse, Spring Tool Suite, IntelliJ IDEA, Visual Studio, Microsoft Office Suite

# WORK EXPERIENCE

## Murphy Charitable Foundation Uganda, OH, US

**Volunteer Software Developer Jan 2024 – Present**

* Engineered a scalable backend infrastructure for a crowdfunding platform using Java, Spring Boot, REST APIs, and PostgreSQL, supporting 5,000+ concurrent users with sub-100ms response times.
* Designed and documented 15+ RESTful APIs with Swagger/OpenAPI, implementing JWT authentication with Auth0 integration and role-based access control that reduced unauthorized access attempts by 95%.
* Created an automated AWS and Azure resource provisioning system utilizing ARM templates, Terraform IaC, and Python scripts that reduced environment setup time from days to hours.
* Implemented a real-time notification system using WebSockets, Socket.IO, and Redis pub/sub patterns, increasing user engagement by 22% and improving platform stickiness.
* Built comprehensive CI/CD pipelines with GitHub Actions, Azure DevOps, Docker containerization, and cloud deployment, enabling zero-downtime deployments and reducing release cycles.
* Optimized database queries using indexing strategies, query execution plans, and connection pooling that reduced database load by 40% during peak periods.
* Integrated cloud storage solutions including Azure Blob Storage and AWS S3 for secure document management and media storage with appropriate access controls.

## Client: Xerox, NY, US

**Graduate Software Engineer Jun 2022 - Dec 2022**

* Developed and deployed 15+ RESTful microservices using Java, Spring Boot, Spring Cloud, and cloud platforms, implementing blue-green deployment strategies with service discovery that ensured zero downtime.

## 

* Architected event-driven systems using Kafka message brokers with Avro schema registry, processing 10,000+ messages per second with fault-tolerant designs that improved system reliability by 85%.
* Optimized data models in SQL and NoSQL databases, achieving sub-5ms read performance and implementing efficient write patterns that increased throughput by 40%.
* Constructed robust CI/CD pipelines using GitLab CI, Jenkins, and Azure DevOps with automated testing frameworks, reducing deployment errors by 85% and accelerating feature delivery by 70%.
* Implemented Test-Driven Development practices and behavior-driven development with Cucumber, increasing test coverage from 40% to 90% and reducing production defect rates by 70%.
* Created reusable frontend components with TypeScript interfaces and RxJS observables that interfaced efficiently with RESTful APIs, reducing API calls by 65% and improving responsiveness by 45%.
* Mentored junior developers in best practices for API design, microservice architecture, and cloud-native applications, reducing onboarding time by 40% and improving overall code quality.

**Value Labs, TG, IN**

**Software Engineer Nov 2020 – Mar 2022**

* Spearheaded end-to-end SDLC involvement—technical design, development, testing, deployment, and maintenance—cutting development time by 20%. Engineered Spring MVC, Hibernate/JPA, and EJB-based modules, boosting application efficiency by 25%, and optimized PL/SQL databases with indexing, improving query speed by 20%.
* Led Agile-driven development with monthly sprints and daily scrums, enhancing team productivity by 30%. Developed microservices using Spring Boot, Spring Cloud, and Netflix Eureka, improving load balancing and security by 15%, and deployed via AWS, Docker, and multi-stage builds, slashing deployment time by 40%.
* Built scalable backend systems using REST APIs, RabbitMQ, Servlets, and JSP components, refining client-side functionality by 15%. Leveraged Elasticsearch for performance monitoring, increasing issue detection by 25%, and implemented Maven scripts, reducing build times by 30%.
* Optimized DevOps workflows by automating Docker image creation, reducing deployment errors by 20%, and streamlining containerization, cutting image size and build time by 15%. Ensured high availability with data migration, replication, and backup strategies.
* Enhanced business logic processing using stateless session beans and message-driven beans (EJB), accelerating asynchronous operations by 20%, while a robust validation framework improved data integrity by 20%.

**Value Labs, TG, IN**

**Software Engineer Intern May 2020 – Oct 2020**

* Architect and implement full-stack web applications using Java 11, Spring Boot 2.5, Hibernate ORM, and React 18 with Redux, resulting in a 30% increase in application responsiveness and 25% reduction in page load times.
* Design and develop RESTful microservices with Spring Boot following SOLID principles and Domain-Driven Design, implementing JWT/OAuth2 authentication with role-based access control, enhancing system security by 40%.
* Create efficient database schemas using PostgreSQL 13, implementing partition tables, materialized views, and query optimization techniques that improved data retrieval speeds by 35%.
* Implement Redis caching solutions with customized eviction policies for frequently accessed data, decreasing API response times by 70% and supporting 5,000+ concurrent users.
* Configure and maintain CI/CD pipelines using GitHub Actions, Docker, and Kubernetes, automating build, test, and deployment processes with rolling update strategies that reduced deployment time by 65%.
* Deploy and manage applications on AWS (EC2, S3, Lambda) and Azure (App Services, Functions), implementing cloud- native solutions that ensured high availability and scalability.
* Implement comprehensive testing strategies using JUnit 5, Mockito, and Jest, achieving 90% code coverage and reducing production defects by 75% through continuous integration pipelines.
* Optimize frontend-backend integrations by creating reusable React components with Redux Toolkit, improving mobile user experience by 35% and reducing code redundancy by 40%.

# EDUCATION

## Wright State University

Masters in Computer Science and Engineering - 3.5 GPA Jan 2023 - Dec 2024

## Seshadri Rao Gudlavalleru Engineering College

Bachelor of Technology in Electronics and Communication Engineering - 3.76 GPA June 2018 - May 2022