Muralidhar Akurati

# Professional Summary

Enthusiastic Software Engineer with experience in developing and optimizing large-scale, complex SaaS applications. Adept at designing scalable microservices, implementing event-driven architectures, and mentoring junior engineers. Proven expertise in Java, Spring Boot, REST APIs, and cloud-based solutions, with a strong emphasis on collaboration, code quality, and customer-focused results.

# Technical Skills

* **Programming Languages:** Java, Python, Groovy, Kotlin
* **Frameworks:** Spring Boot, Spring MVC, Hibernate, JPA
* **Databases:** PostgreSQL, MySQL, Cassandra, DynamoDB, MongoDB, Firebase
* **Cloud & DevOps:** AWS, Docker, Kubernetes, Jenkins, Pulsar, Redis, GitHub Actions
* **Web Technologies:** Angular, React, JavaScript, HTML5, CSS3, Bootstrap 4, JSP
* **Methodologies:** Agile Scrum
* **Other Tools:** S3, ElasticSearch, GraphQL

# Professional Experience

**Software Developer, Overstock, UT Feb 2020 – Present**

* Designed and developed high-quality microservices capable of serving large-scale, high-traffic requests using **Java**, **Spring Boot**, and **Redis** to cache frequently accessed resources.
* Implemented **event-driven architectures** and asynchronous APIs using **Pulsar, SNS** and **SQS** messaging queues enabling publish-subscribe batch processing and reliable message queuing to facilitate seamless communication between distributed services.
* Worked extensively with NoSQL databases like **Cassandra** and **DynamoDB** to support scalable and distributed systems.
* Utilized **S3** for efficient data storage and retrieval, and leveraged CloudWatch for real-time log monitoring and performance insights to ensure system reliability.
* Integrated **EKS** for container orchestration, allowing scalable deployment and efficient management of microservices.
* Used Elasticsearch to build a search feature for the internal portal, enabling fast and accurate data retrieval.
* Migrated mission-critical applications from **AWS** to an on-premises data center, transitioning from

**DynamoDB** to **PostgreSQL**, improving performance and reducing costs.

* Utilized GCP Vision APIs to generate image metadata for website front-end integration.
* Developed a Python application to streamline audit data into BigQuery for analytics.
* Created isolated testing environments using **docker-containers**, ensuring reliable and consistent integration testing for microservices.
* Designed and fine-tuned **GraphQL endpoints** to handle complex queries efficiently, reducing latency by 50%.
* Played a pivotal role in **code reviews**, mentoring junior team members, and promoting best practices across the team.
* Participated in **architectural design** discussions, architecting efficient, customer-focused solutions.

**Technologies:** Java, Spring Boot, Redis, Pulsar, PostgreSQL, Oracle, DynamoDB, Cassandra, GraphQL, AWS, Docker, Jenkins, Kubernetes, GCP

**Software Developer, GSA, VA October 2018 – Feb 2020**

* Developed UI layers and respective Angular components based on wireframes and unit tests using

**Karma** and **Jasmine**.

* Built REST endpoints using **Spring Boot** and **Hibernate**.
* Developed unit tests in **JUnit** and **Mockito**.
* Deployed code to DEV/TEST environments using **Jenkins** at the end of every sprint.
* Communicated and integrated with other teams to manage the code base and deployment.
* Contributed to the open-source UI components library **sam-ui-elements**.
* Attended weekly grooming sessions to discuss future sprint stories.
* Delivered sprint demos to clients and supported application deployment to live servers after each PI.

**Technologies:** Spring Boot, Hibernate, Angular, Jenkins, PostgreSQL

**Web Developer, BMW, MD May 2017 – September 2018**

* Developed adaptive web applications that dynamically adjusted views based on device types.
* Conducted 508-compliance testing using **JAWS**, **AMP**, and **WAVE** tools, addressing corresponding bugs.
* Created and consumed REST APIs using **Spring Boot** to establish seamless interaction between users and the database.
* Developed complex SQL queries to retrieve data across multiple tables.
* Integrated caching mechanisms with **ECache** to reduce database query load.
* Converted XML files to HTML-rich content and delivered sprint demos to the team.

**Technologies:** Spring Boot, Hibernate, Angular, MySQL

**Intern, NCRC, NC May 2016 – May 2017**

* Designed wireframes through end-user interaction to enhance GUI usability.
* Collaborated with researchers to identify requirements and improve application user experience.
* Developed a **User Preferences Manager** window, enabling developers to add new functionalities easily.
* Designed and developed a **File Upload** window for specifying Genome data locations.
* Persisted user preferences using **Java Preferences**, improving workflow efficiency.
* Persisted user details into databases using **HQL**.
* Conducted pair programming to identify and fix defects, enhancing code efficiency.

**Technologies:** Spring Boot, POP 2.0, Hibernate

**Full-stack Developer, BCBSLA, Andhra Pradesh November 2014 – December 2015**

* Designed wireframes through end-user interaction to enhance GUI usability.
* Collaborated with researchers to identify requirements and improve application user experience.
* Developed a **User Preferences Manager** window, enabling developers to add new functionalities easily.
* Designed and developed a **File Upload** window for specifying Genome data locations.
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* Persisted user details into databases using **HQL**.
* Conducted pair programming to identify and fix defects, enhancing code efficiency.

**Technologies:** HTML, CSS, Javascript, Spring MVC

**UI Developer, Gallagher Bassett, Andhra Pradesh November 2013 – October 2014**

* Analyzed and prepared requirement documents by studying legacy systems.
* Designed UI pages using **HTML**, **CSS**, **JSP**, and **JavaScript**.
* Used **AJAX** to validate user information asynchronously.
* Collaborated with the testing team to ensure timely deliverables.
* Actively engaged in weekly scrum meetings to discuss issues and progress.

**Technologies:** HTML, CSS, Javascript, JSP, AJAX

# Education

* **Master of Science in Computer Science** | University of North Carolina, Charlotte | May 2017
* **Bachelor of Science in Computer Science** | Andhra University | May 2013

# Key Projects

* **Image Metadata Aggregator:** Built a core tool using Google Vision APIs for image classification and metadata generation, streamlining asset management.
* **Cloud Migration:** Spearheaded migration from AWS to an on-premises setup, achieving cost savings and operational improvements.