Ummulkiram Rangwala – Senior Backend Developer

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Summary:

- Highly experienced in building Java-based complex microservices, architecture and design
- Expert on Core Java
- Also good with Typescript and Python.
- Skilled with SQL databases, MongoDB, Microservices, Elasticsearch, Kafka, Restful API design, Docker and Kubernetes
- Good experience with Amazon Web Services (AWS)
- Proficient in problem-solving and writing, debugging and testing quality software. Have excellent communication skills.
- Experienced in leading a team.

Soft Skills:

Leader, learner, collaborative, creative writer, articulate speaker, problem-solver, detail-oriented, dependable, adaptable, organized, resourceful, ethical, curious with a willingness to learn.

Technical Expertise:

Frameworks and Technologies:
Java, Spring Boot, JPA/Hibernate, Microservices, RESTful API design, Maven, Elasticsearch, Kubernetes, Docker, Jenkins, Linux, JUnit automation testing framework, GraphQL
Reactive Programming, Typescript, JavaScript, Node.js, Java Multithreading, Design Patterns, Object-Oriented Programming (OOP), System Architecture and Design.

- **Message Brokers:**
Kafka, Zookeeper, RabbitMQ
- **Cloud Services:**
Amazon Web Services (AWS)
- **Databases:**
Oracle, MongoDB (NoSQL), MySQL, MS SQL, PostgreSQL
- **Tools:**
IDEA IntelliJ, PLSQL Developer, Confluence, Jira, Studio 3T, Robot 3T, Postman, PyCharm,
- **Version Control:**
GIT/Bitbucket, GitHub
- **Methodologies:**
Agile SCRUM

Other Side-Projects:

- Built a custom ChatGPT-like LLM from scratch
- Password generators in Typescript and Python
- Fixed bugs in the Nextflow's open-source code

Work Experience:

- **Senior Developer - Ontario Institute of Cancer Research**
  2022 - 2024.

  - Designed, architected, and implemented the Workflow Execution system (WES), a distributed architecture microservices based event-driven data processing pipeline that executes Nextflow workflows to process Genomic data for research purposes. This system was built on Java, Spring Boot, Typescript, Python, MongoDB, PostgreSQL, Kafka, RabbitMQ and Elasticsearch.
  - Enhanced the WES to trigger workflows across multiple Kubernetes clusters and switch between clusters at runtime through extensive research on how Nextflow works with Kubernetes. This significantly increased the system's ability to process 18 years' worth of jobs in 6 months resulting in cost savings of over a million dollars for the research institute.
  - Built an automation system around the WES to execute a series of workflows in a pipeline with the help of specially designed configurations thereby fully automating the Genomic data processing.
  - Identified analyzed, and resolved a serious failure in the automation system caused due to the reactive multithreaded nature of the triggering process which led it to skip workflows in the pipeline unpredictably.
  - As a mentor to junior engineers in the team, delegated tasks and train them to ensure they perform at their best.
  - Performed code reviews and made sure coding standards are followed.

- **Technical Lead - Symbo SouthAsia Enterprise (Startup)**
  2018 – 2022

  - Led an entire Software Development Lifecycle (SDLC) of a PaaS project for an insurance client with a team of 6 members. Built the system from scratch following the best practices in software development and made the first phase live in 6 months. This system was built on Java, MongoDB, MySQL and Kafka.
  - Implemented the MongoDB Multi-Tenant Architecture, allowing one instance of the application to connect to multiple MongoDB instances at runtime. This enabled separate data repositories for clients from different countries.
  - Implemented field-wise encryption of data using Spring boot custom annotations and Java Reflection API that enabled saving sensitive data to Mongo and SQL databases after encryption.
  - Designed a dynamic UI rendering of the points page through a combination of a backend processing logic and a specially designed JSON structure. This enabled different views for different users based on the level they achieved in a campaign and the points they earned.
  - Collaborated with the product management, partners and clients to brainstorm innovative ideas for adding critical features and enhancements to the existing product to better suit partners' and clients' needs.

- **Consultant - Capgemini**
  2014 - 2018.

  - By conducting thorough analysis, identified solutions within SQL and Oracle PLSQL databases. Assigned tasks to team members and reviewed their code for quality assurance.
  - Optimized large database queries to improve the performance of reports based on them.
  - Simplified and improved the software development process for better tracking of deliverables.
  - Served as the PQL (Project Quality Lead) of the team which involved ensuring coding standards were followed and the delivered software consistently met the highest quality requirements.
  - Mentored juniors on Core Java.

- **Software Consultant - Oracle Financial Services Ltd.**
  2012 - 2014.

  - Developed end-to-end corporate banking transaction logic based on Oracle's FLEXCUBE product in Core Java with PLSQL Database programming.
  - Created the online account opening facility for Alpha Bank, Greece in Core Java that would enable the user to open an account with the bank
  - Implemented a new type of transaction in Core Java called 'TOM' wherein the pending transactions are executed on the immediate next business date.

Education:
- Bachelor of Engineering (B.E): - First Class Distinction, University of Mumbai
- Diploma in Engineering: - First Class Distinction, M.H. Saboo Siddik Polytechnic.

Certifications:
- Entrepreneurship Essentials, Harvard Business School.
- Leadership Principles, Harvard Business School
- Creative Writing, Xavier's Institute of Communication, Mumbai University