

# Rano Joseph

| Austin, Texas |

## SUMMARY

Full-stack Software Engineer with **Active MBI clearance** and **6 years** building high-throughput distributed systems and cloud-native microservices in regulated federal tax and financial data environments. Expert in **Java 21**, **Spring Boot**, **WebFlux**, **Apache Kafka**, and **AWS**. Specialized in building production-grade AI backends integrating **LangChain4j**, **RAG** pipelines, and local **LLM** inference.

## WORK EXPERIENCE

### Software Engineer

March 2023 – Current

Deloitte - Austin, Texas

- Engineered fully reactive **Spring WebFlux** account management APIs for the **IRS Business Tax Account** — an Inflation Reduction Act-funded modernization platform serving **millions of U.S. business taxpayers** — handling **800+** daily requests comprising multipart **AWS S3** document uploads and orchestrating concurrent downstream validation via **Strategy pattern**, with meticulous edge case handling to preserve data integrity in the event of partial failure scenarios using **Saga pattern**.
- Engineered tax payment platform generating **\$6M+** annual revenue across **1,000+** daily requests, implementing a fully reactive **Spring WebFlux** pipeline and **React** multi-step form that guided users through payment completion — with zero P1 incidents.
- Architected, engineered, and led adoption of a shared **Java** authorization library that enforced role and attribute-based access controls on sensitive federal tax records across **14** microservices; devised its **Redis** caching layer with a domain-aware composite key schema that eliminated redundant outbound downstream API calls by **30%**.
- Developed retry-based **Spring Batch** fulfillment pipelines with **AWS S3** integration to process post-account-creation data and trigger downstream IRS correspondence workflows for BTA access provisioning, achieving a **99.5%** successful processing.
- Achieved **95%+** unit test coverage across **14** microservices for the **IRS Business Tax Account** using **JUnit 5** and **Mockito**, engineering parameterized and reusable test structures to ensure scalable test maintainability.
- Led **SiteMinder**-to-**Entra ID** authentication and authorization migration for **1,400+** API consumers of the **VA Lighthouse Public APIs** using **OAuth 2.0 + OIDC** and **JWT** — modernizing identity infrastructure and reducing operational costs by **40%**.
- Engineered a synthetic **OAuth 2.0** monitoring bot that continuously probes end-to-end auth flows at scheduled intervals to validate service availability — alongside CLI tooling updates to maintain CI/CD pipeline continuity via **Jenkins** and **Argo CD**.
- Mentored junior and mid-level engineers through Knowledge Exchange sessions on **Java**, **WebFlux**, and unit testing.

### Technical Lead / Software Developer

February 2021 – March 2023

AVPS Technologies Inc - Alpharetta, Georgia

- Architected and implemented **6** domain-scoped **XSLT** templates converting **190+** legacy XML event payloads to JSON across flight operations, aircraft, scheduling, gate, crew, and air traffic control — bridging existing systems to a microservices event-driven architecture and accelerating the client's modernization roadmap by one year.
- Implemented real-time **Kafka** event streaming distributed microservices processing flight, scheduling, and maintenance data across airline domains — architected for high-throughput event-driven consumption with **DynamoDB** as the persistence layer.
- Sole Technical Lead for a team of 20 developers — driving full **Agile** delivery lifecycle, collaborating with business analysts and product owners on backlog refinement, and mentoring peers on **XSLT** development to scale delivery capacity.

### Full Stack Intern

Jan 2020 – May 2020

Vendorspace - Atlanta, Georgia

- Engineered full-stack features for a location-based events discovery platform using **React** and **Node.js**, contributing to the end-to-end MVP.
- Collaborated directly with the business owner to design and deliver key UI experiences including a multi-modal tabbed search, event listings, and broker management dashboard — translating business vision into a fully digital customer-facing product.

## PROJECTS

### Movie Discovery —

- Built backend system using Spring WebFlux, React, and Redis caching for high-performance APIs.
- Implemented OAuth 2.0 + OIDC authentication, rate limiting, and external API optimization.
- Built automated summarization using Chat GPT API and email alerting features using SendGrid.

### LeetCode Assistant —

- Implemented **RAG** using **LangChain**, **TensorRT**, and **Python**, providing contextual feedback on LeetCode solutions, to retrieve relevant patterns and explanations to guide iterative problem-solving with caching to reduce token usage and latency.

## SKILLS

**Programming languages:** Java (versions 8, 11, 17, and 21), C, JavaScript, TypeScript, Python, Shell Script, and XSLT

**Backend development:** Spring Boot, WebFlux, Spring Batch, JUnit 5, PostgreSQL, AWS DynamoDB, AWS S3, MySQL, JPA, R2DBC, Docker, Kubernetes, Helm Charts, OAuth 2.0, Okta, Entra ID, JOSE + JWT, cron jobs, Apache Kafka, Redis, LangChain4j, and Node.js

**Frontend development:** HTML5, CSS, React, and Redux

**Tools:** GitHub, GitLab, Splunk, SonarQube, Argo CD, SoapUI, Postman, Visual Studio Code, Datadog, Kibana, and IntelliJ

## EDUCATION

**B.S. Computer Science — Georgia State University**

Atlanta, Georgia, May 2019

## CERTIFICATION

**AWS Certified Developer – Associate**

Valid until March 2027