

# Sowmya Wilson

Richmond, VA 23060 | +1 (512) 803-1507 | sowmyawilson.saripalli@gmail.com | GitHub: wilson688

## SUMMARY

Senior Software Engineer with 8 years building and owning high-throughput, event-driven backend systems in Java, Spring Boot, Kafka, and AWS. Owns a business-critical collections pipeline in a regulated financial environment, with a track record of large-scale data migrations, zero-downtime cutovers, and measurable gains in reliability and compute efficiency.

## SKILLS

|                       |                                                                                 |
|-----------------------|---------------------------------------------------------------------------------|
| Languages             | Java, Python, JavaScript, Lua, Bash, SQL                                        |
| Frameworks            | Spring Boot, Spring Batch, Spring Cloud, Spring Security, Spring AOP, Hibernate |
| Cloud & Data          | AWS (S3, Lambda, EMR, EC2, ECS, Secrets Manager), Snowflake, Databricks         |
| Streaming & Messaging | Kafka, RabbitMQ                                                                 |
| DevOps                | Docker, Kubernetes, Jenkins, Maven, Git, GitLab, CI/CD                          |
| Observability         | New Relic, Splunk, Datadog, Grafana                                             |
| Testing               | JUnit, Mockito, Cucumber, Postman                                               |
| Databases             | MySQL, PostgreSQL, MongoDB                                                      |

## EXPERIENCE

### Capital One — Senior Software Engineer

July 2024 – Present

- Own and maintain a business-critical, event-driven batch pipeline (S3 drop → Lambda → EMR → Spring Batch) that generates collections offers for customers in financial hardship; a single failed run triggers a Sev5, blocking offers and leaving agents with inaccurate customer data.
- Delivered feature development across the pipeline's EMR and Spring Batch stages, processing 16M+ records per run while preserving the data accuracy that downstream agent tooling depends on.
- Architected and delivered a high-throughput Kafka ingestion platform integrating Discover and Capital One collections systems, enabling real-time eligibility decisions and contributing to a reduction in delinquent accounts.
- Built a distributed Snowflake-to-Snowflake migration framework on Databricks, processing 90M+ records with high concurrency; increased compute efficiency by 125% and eliminated memory bottlenecks while ensuring post-merger data integrity.
- Operated as technical lead during a high-stakes merger integration, owning onboarding of Discover's email platform into Capital One with uninterrupted customer communications.
- Led a zero-downtime migration of secrets management from HashiCorp Vault to AWS Secrets Manager, improving security posture and accelerating credential rotation.
- Owned incident response across a portfolio of 9 backend applications triage, root cause analysis, hotfix deployment reducing MTTR; built proactive New Relic and Splunk alerting that shifted detection from reactive to preemptive.
- Mentored engineers and set code quality standards through design reviews and best practices in Java, Spring Boot, and distributed systems.

### Toshiba GCS — Software Developer II

July 2021 – March 2024

- Designed and built Point-of-Sale (POS) applications in Spring Boot, delivering 10+ production features spanning order management, manager overrides, and financial transactions (gift-card cash-out, cash reconciliation).
- Engineered an automated license-verification feature to enforce regulatory compliance during sales transactions.
- Architected a cash-management protocol reconciling cash flow between the main safe and individual registers, improving security and accuracy.
- Built and maintained microservices and CI/CD pipelines (Java, Spring Boot, Jenkins), with unit testing via JUnit/Mockito and message processing through RabbitMQ.
- Raised logging and debugging standards using Splunk, and mentored engineers and interns through knowledge-transfer sessions.

### Capital One — Software Developer

December 2018 – July 2021

- Developed and supported Spring Boot microservices and RESTful APIs on AWS (EC2, ECS, S3), owning build, deployment, and production support.
- Optimized API performance with custom Lua/Nginx modules and LRU caching (lua-resty-lrucache), reducing response times and improving throughput.
- Built internal developer tooling in Go (tdm-swipe, Bogie Infra Builder) and designed a GitHub pull-request validation pipeline in Jenkins to catch regressions before merge.
- Established observability with Datadog, Grafana, and Splunk, and defined infrastructure for QA, Performance, and Production environments.

## EARLIER EXPERIENCE

- Java Developer, Cogent InfoTech** (Sep 2018 – Nov 2018) — Built RESTful web services and microservices with Spring and Hibernate.
- Software Developer Intern, Cell-Gate** (Jun 2018 – Aug 2018) — Built web-based tooling for a security camera and video-surveillance product using Java EE, Spring Boot, and Hibernate.
- Research Assistant, University of Southern Mississippi** (Sep 2016 – May 2018) — Applied ML (K-Means, classification) to NASA LIDAR/RADAR data in Python; co-authored research.

## EDUCATION

|                                                                            |          |
|----------------------------------------------------------------------------|----------|
| M.S., Computer Science — University of Southern Mississippi, USA           | May 2018 |
| B.E., Electronics Engineering — Anurag Group of Institutions (JNTU), India | May 2016 |