

Summary

Software Engineer with 2 years of experience delivering scalable backend systems, microservices, and data-driven solutions in fast-paced Agile environments. Proficient in Java, Python, Spring Boot, AWS, and CI/CD automation, with hands-on expertise in cloud architecture and data platforms like Snowflake and Spark. Passionate about writing clean, efficient code and collaborating across teams to solve real-world problems. Proven success in healthcare and fintech domains, with a strong foundation in system design, scalable API development, and performance-driven cloud applications.

Education

George Mason University
Master of Science, Computer Science

May 2025

Professional Experience

Tata 1mg May 2022 - Jun 2023
Software Engineer India

- Engaged in full Software Development Life Cycle (SDLC), actively contributing to requirement analysis, design, implementation, testing, and deployment within an Agile environment.
- Integrated Gradle with Jenkins CI/CD pipelines to automate build and deployment, cutting release cycles from 4 to 2.5 hours for the engineering team.
- Built RESTful APIs with Spring Boot and AWS Lambda to connect third-party lab services, processing 500+ daily test bookings for diagnostic partners.
- Designed a microservices architecture using Spring Cloud and Docker to decouple the patient records module, improving system uptime from 99.2% to 99.8%.
- Optimized SQL queries and Snowflake pipelines to reduce data processing time from 15 minutes to 8 minutes for analytics reports.
- Collaborated with 5 frontend engineers to refactor legacy JavaScript code, eliminating 200+ linting errors for better maintainability.
- Deployed Spark jobs on AWS EMR to process 10GB/day of patient interaction logs, enabling faster trend analysis for business teams.
- Implemented Kafka Connect for data integration, facilitating seamless data movement between Kafka and diverse data sources and sinks.
- Documented API contracts and deployment playbooks to streamline onboarding for new team members, cutting setup time by 3 hours.
- Mentored 2 junior developers in code reviews and debugging to accelerate feature delivery for the Agile team.
- Assisted in developing RESTful APIs using Java/Spring Boot for device trade-in workflows, cutting processing time by 20%.
- Improved data retrieval and storage capabilities by restructuring API design, while maintaining existing systems through code reviews, bug fixes, and a commitment to operational excellence.
- Proactively detected and addressed software risks by adding new approval steps to pipelines, ensuring healthy pipeline maintenance and minimizing failures.
- Identified and fixed 15+ critical bugs in payment gateway integrations, increasing transaction success rates by 10%.
- Assisted in migrating legacy monolithic code to modular microservices, improving code maintainability by 20%.
- Participated in Agile sprints, completing 90% of assigned tasks on time and contributing to team velocity improvements.

PhonePe Jun 2021 - Dec 2021
Software Developer Associate India

- Developed UPI/QR payment features using Java (Spring Boot), enhancing transaction processing for 10M+ users and supporting secure cloud-based payment applications.
- Optimized SQL queries (MySQL/PostgreSQL), reducing report generation time by 15% for financial analytics while maintaining reliability in cloud-hosted databases.
- Automated log analysis with Python scripts, saving over 5 hours per week in debugging efforts and assisting in proactive cloud performance monitoring.
- Resolved idempotency issues in payment APIs to reduce failed transactions by 12%, demonstrating effective technical issue resolution in a cloud environment.
- Authored unit tests (JUnit/Mockito) that increased code coverage to 85%, contributing to higher quality standards and consistency in cloud service deployments.
- Supported Selenium automation initiatives that cut critical payment flow testing time by 30%, ensuring smooth rollout and maintenance of cloud-based applications.

Technical Projects

LSTM-based Traffic Volume Prediction System

- Built an LSTM neural network using **Keras/TensorFlow** to predict traffic volumes based on time-series data from open transport datasets.
- Engineered features with **Pandas, NumPy**, and visualized insights via **Matplotlib** for temporal and trend-based patterns.
- Served predictions through a **Flask REST API**, containerized with **Docker**, and deployed on **AWS EC2** for scalable access.
- Integrated **Prometheus and Grafana** for real-time monitoring of prediction accuracy, latency, and API health.
- Leveraged **MLflow** for experiment tracking and model versioning, enabling reproducible results and seamless rollback testing.

Real-Time Task Collaboration Platform

- Built a live collaboration tool using **React** and **Django REST Framework** with **WebSocket** support for real-time task updates.
- Implemented **JWT-based authentication** and **Role-Based Access Control (RBAC)** for secure, team-specific workflows.
- Improved app performance by 40% using **Redis** for caching and **optimized SQL queries** with indexing and pagination strategies.
- Deployed fully on **AWS (EC2, S3, Lambda)** with version control and **CI/CD pipelines** using **GitHub Actions**.
- Designed the WebSocket architecture using **ASGI** and **Redis pub/sub**, handling over 500 concurrent live connections during load tests.

E-Commerce Platform for Local Businesses

- Developed a full-stack web application using **React, Node.js, and MySQL** with **JWT-secured REST APIs** for merchant and customer portals.
- Optimized SQL queries, reducing data retrieval time by 30% and improving checkout responsiveness.
- Deployed on **AWS EC2** with **Nginx reverse proxy and SSL** for high availability and HTTPS security.

Skills

- Soft Skills:** Problem-solving, Cross-team Collaboration, Technical Mentoring, Stakeholder Communication, Requirements Translation
- Programming Languages:** Python, Java, JavaScript (ES6+), TypeScript, SQL, Bash, Go
- Backend Development:** Spring Boot, Node.js, Express, Django/Flask, Hibernate, Microservices, RESTful APIs, GraphQL, Spring Cloud, API Gateway, Oracle SOA
- Frontend Development:** React.js, Angular, HTML5, CSS3, SASS, Bootstrap
- Cloud Platforms & Infrastructure:** AWS (EC2, Lambda, S3, ECS, RDS, CloudFormation, Cognito), Azure (App Services, AKS), GCP (Compute Engine, Cloud Functions)
- DevOps & Automation:** Docker, Kubernetes, Terraform, Jenkins, GitHub Actions, Bitbucket Pipelines, CI/CD, Ansible
- Testing & Monitoring:** JUnit, Pytest, Postman, Selenium, JMeter, Prometheus, Grafana, CloudWatch, ELK stack
- Security:** JWT, OAuth, HTTPS/TLS, IAM (AWS/Azure), AWS Cognito
- Databases:** PostgreSQL, MySQL, MongoDB, DynamoDB, Redis, SQL Server, Oracle, DB2, Snowflake
- Data Engineering & ML Ops:** Apache Kafka, Spark, PostgreSQL, MongoDB, Redis, Pandas, NumPy, Airflow, MLflow, TensorFlow/Keras (for LSTM)
- Methodologies:** Agile/Scrum, Kanban, Waterfall
- Tools:** IntelliJ, VS Code, Jira, Confluence, Azure DevOps, GitHub, Postman

Certifications

- AWS Certified Solutions Architect - Associate
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