Usha Vudatha

New York, NY

✉ ushavudatha@gmail.com | 🔗 ushavudatha.github.io
in usha-vudatha | ⊙ ushavudatha | ☐ 848-313-6483

EDUCATION

Master of Science in Computer Science, *SUNY - Stony Brook University; GPA: 3.8/4.0*	*Jan 2022 - May 2023*
Bachelor of Technology in Computer Science, *Vel Tech University; GPA: 4.0/4.0*	*Jul 2017 - Jun 2021*

TECHNICAL SKILLS/STRENGTHS

Languages:	**Python**, **Java/J2EE**, **Scala**, Spark, SQL, Shell Scripting
Tools:	**AWS**, Google GCP, Jira, IntelliJ IDE, Jupyter, VS Code, **Git/GitLab**, Grafana, Swagger, Postman
Frameworks:	Apache Spark, **Spring Boot**, Spring MVC, Hibernate, JQuery, REST, gRPC, Jenkins, JUnit

EXPERIENCE

Associate - Goldman Sachs, *New York City, NY* — *Jan 2026 - present*

- Designed and built a **Single Source of Truth (SSOT)** for multi-region transaction banking data by consolidating 5 fragmented systems into a governed, authoritative **Iceberg** data layer, improving consistency and downstream trust.
- Developed **SQL-based analytical layers** on top of Apache Iceberg tables using Spark SQL, enabling fast, consistent querying for analytics and compliance workflows, eliminating duplicate logic across consuming teams.
- Integrated **SonarQube into CI pipelines** for Spark/Scala and **Java** services, addressing 50% and more of critical issues flagged during analysis and improving code maintainability for production data workflows.
- Leveraged **Unix/Linux** environments to automate and support production data workflows, using **shell scripting** and core utilities (grep, awk, cron, ssh) for job orchestration, operational debugging, and root-cause analysis in long-running services.

Analyst - Goldman Sachs, *New York City, NY* — *May 2024 - Dec 2025*

- Developed and integrated validation mechanisms into **legacy Scala/Spark** pipelines, reducing data discrepancies by 80% and minimizing reconciliation errors across over **1 million records** processed daily, thereby strengthening data integrity.
- Owned end-to-end design and implementation of **high-volume ETL/ELT** workflows within the Actimize financial crime platform's **Service-Oriented Architecture (SOA)**, leveraging **Java** and Gradle to orchestrate the processing of over 200,000 daily transactions.
- Streamlined upstream reporting of intermediary-facilitated transactions by integrating it into a **Java**-based workflow, minimizing manual review for ~**2,500** payments/day, while enhancing data consistency across payment systems.
- Implemented automated unit tests with **JUnit/Mockito** across over 12 critical Java modules, enforced JaCoCo coverage and test quality gates in GitLab CI/CD pipelines, catching over 200 **untested edge cases** weekly and minimizing production downtime.
- Engineered Oracle SQL to manage custom attributes, and implement error handling for TBs of transactional data.
- Built Java-driven **data reconciliation** checks with SQL validations to ensure completeness and correctness across processing stages, safeguarding accuracy for **1+ million** of daily records

Software Developer, *Stony Brook University, NY* — *Jul 2023 - May 2024*

- Optimized multiple **REST API services** within a **microservices architecture**, resulting in a 20% improvement in shipping carrier availability across the United States, Europe, and Asia.
- Implemented **scalable data storage** on **Amazon S3** for efficient organization and tracking of diverse data sources. Realized a 50% improvement in data visualization capabilities, enabling more informed decision-making and insights into Selling patterns.
- Implemented **Amazon CloudWatch metrics and alerts**, cutting service downtime by 15% for Merchant Shipping while ensuring rapid issue detection.

Software Engineer, *Sperry Technologies, Hyderabad, IN* — *Aug 2020 - Dec 2021*

- Developed a comprehensive Course Information System (CIS) using **Java**, **Spring Boot**, **JavaScript** enabling efficient management of courses, users, registrations, communication, reporting through **high-quality, clean and reusable code**.
- Contributed to the enhancement of client's website backend, spearheading the creation, testing of over 15 RESTful microservices in a high throughput scalable workflow using **Spring Boot** and **Hibernate** to seamlessly map objects to relational database tables
- Orchestrated **MySQL** database design, leading to 30% increase in data management efficiency, empowering admins with advanced reporting on enrollments, user activity & system metrics. Practiced **test-driven development** throughout the project lifecycle.

PUBLICATIONS/ACCOMPLISHMENTS

- Published *Aspect Based Sentiment Analysis Using Rule Based Approach* in 2021 First International Conference on Advances in Computing and Future Communication Technologies. The findings were disruptive model in Information Technology age
- Published *Linear Attribute Distribution and Performance Assessment for Absenteeism at Work using Machine Learning* in 2019 International Journal of Recent Technology and Engineering. The findings led to the optimization of workforce management
- Recognized as a top performer in the HackWithINFY'20 Coding Competition [Hackathon] among 167,000 participants

CERTIFICATIONS

- Oracle Certified Associate, Java SE 8 Programmer
- AWS Certified Solutions Architect - Associate (Cloud)