
Professional Summary

Senior Software Engineer / Data Engineer with 14+ years of experience designing cloud-native, distributed systems using Java, Python, Golang, AWS, Kubernetes, and Terraform. Proven expertise in ETL pipelines, microservices, CI/CD automation, and large-scale data processing. Strong background in cloud migration, platform engineering, and team leadership.

Technical Skills

- Languages: Java, Python, Golang, JavaScript, Shell, Groovy
- Cloud: AWS (Lambda, IAM, ECS, EC2, RDS, SQS, SNS, API Gateway, DynamoDB, Cloudwatch, EventBridge, Glue, Step Functions) etc
- DevOps: GitHub, GitLab CI, Jenkins, Terraform, Ansible, UCD, Kubernetes, OpenShift
- Databases: MySQL, PostgreSQL, Snowflake, DynamoDB, Couchbase, Oracle
- Frameworks/Tools: Spring Boot, NodeJS, GraphQL, VueJS, RabbitMQ, Apache Spark, Airflow, Tailwind CSS, Bootstrap, ServiceNow, HashiCorp Vault
- Testing: Unit testing, Integration testing, Smoke testing, Load testing, Behavior Driven Testing, TestNG, Pytest, Mockito, SoapUI.
- Observability: Splunk, Nagios, AppDynamics, CloudWatch, SonarQube
- OS and Containerization: Docker, Linux, Vagrant, Docker Compose, Podman, Portainer

Work Experience

Capital One Wilmington, DE

Jan 2025 - Present

Senior Software Developer (Data Engineering)

- Designed, developed and deployed Java, Spring Boot apps to create and manage large scale data pipelines of ETL jobs using Spark, AWS Glue and RDS.
- Wrote unit test cases for ETL jobs with Mockito and BDD test cases with Gherkin making sure the functionality is intact every iteration.
- Created CI/CD pipelines with GitHub and provisioned cloud infrastructure to automate application build, test, and deployment workflows.
- Created several UI productivity tools with VueJS & Python to monitor and minimize manual efforts during application troubleshooting.

TRowe Price Owings Mills, MA

Sep, 2023 – Dec 2024

Principal Software Engineer (Global Product Trust)

- Developed and deployed Java, Spring Boot, Python services to AWS ECS utilizing vault and Lambda using GitLab CI/CD and Terraform.
- Implemented ServiceNow business rules, integrate APIs, and written different DevOps utilities, thereby easing monitoring and troubleshooting.
- Improved financial data processing response time from 5 hours to 90 seconds using parallelization, query optimization, and lazy loading.
- Integrated enterprise change data log with Snowflake to keep history of transactions and monitor the process by means of dashboards and scripts.

Tmobile Atlanta, GA

Nov, 2021 – Sep, 2023

Senior Software Engineer (Cloud Security Domain)

- Designed security patterns for APIs, ensuring compliance with T-Mobile standards and OWASP. Developed microservices using Golang for API grading.
- Designed a data harvesting solution to intercept real-time Apigee transaction data for API security grading utilizing microservices in Java, RabbitMQ, AWS DynamoDB and NodeJS.
- Worked with DevOps pipelines with Gitlab CI/CD. Written terraform scripts to deploy infra and services. Managed on prem Kubernetes clusters.

Fannie Mae Reston, VA

May, 2021 – Nov, 2021

Principal Software Engineer (Cloud Migration & Platform Engineering)

- Led a 10 people team for migration efforts from Autosys to AWS(Rehosting), designing solutions with Python and AWS services.
- Built automation pipelines using Jenkins and UCD. Created scalable solutions leveraging AWS Lambda, Step Functions, and ECS.
- Designed and deployed cloud infrastructure for Airflow and Java-based job orchestration in AWS ensuring e2e visibility of the customer journey.
- Solved the SSO dilemma with AWS hosted Airflow and Fannie Mae SSO, onboarding consumers migrating from AutoSys to Airflow.
- Built a webapp using VueJS and Python in 2 weeks' time to sunset the old application that used to manage network devices.

Comcast Philadelphia, PA

Jun, 2014 – May, 2021

Senior Software Engineer (Video Entitlement & Site Reliability)

- Led development of a video entitlement distributed microservice using Java and Spring Boot, managing deployment, code quality, and reviews.
- Designed and implemented DataGrid, an event-driven caching solution using Hazelcast and Couchbase, reducing billing system call frequency.
- Built Genesis and GoldenEye, data orchestration solutions in Golang and GraphQL Federation, to proactively address customer issues.
- Developed the Spider UI in VueJS and Golang, improved system monitoring with Nagios and AppDynamics.

COMPUNNEL, NJ

May 2021 - Present

- Working full time as Principal Software Engineer for different client from May 2021 till present. Current client is Capital One.

TCS, India

Dec, 2010 – May, 2021

- Worked as a Assistant Consultant in this position in India and worked with several clients like SBI, TDC. Worked in Comcast from 2014 – 2021.
- Led the migration of the KVIKOC platform from JSF to AngularJS and executed a critical WebLogic server upgrade to version 10.3.2, resolving performance bottlenecks and enhancing stability.
- Developed cross-border web services using the JOLT protocol to interface with Amdocs billing systems across three countries.
- Designed a custom WebLogic monitoring portal to improve system oversight and deployed real-time financial reporting tools to deliver dynamic content to end-users.

Projects

<https://github.com/susamn/helpful-tools-v2> - Open source, privacy focused productivity tools for developers including JSON, regex, cron utilities built using modern web stack, actively maintained and used.

Certifications

Generative AI with Large Language Models • Introduction to Generative AI • AWS Certified Developer – Associate • Sun Certified Java 6 Developer

Education

Bachelor of Instrumentation & Electronics Engineering, Jadavpur University, Kolkata, India (2005 – 2009)
