AMEESHA PRIYA

Software Engineer – Backend, Distributed & FullStack Systems

apriya.gcp@gmail.com | (412) 499-6900 | linkedin.com/in/ameesha-priya-2a773a136 | github.com/apriya-gif

SUMMARY

Backend-focused Software Engineer with 4+ years architecting **high-throughput, low-latency, distributed systems and streaming pipelines** across finance, healthcare, and e-commerce. Expert in building scalable microservices and APIs using Java, Kafka, Spring Boot, and Kubernetes on AWS/GCP/Azure. Proven track record delivering production-grade solutions with measurable business impact.

TECHNICAL SKILLS

Languages: Java, Python, SQL, JavaScript, TypeScript, HTML, CSS, GraphQL
Data & Streaming: Kafka, Kinesis, Databricks, MongoDB, Redis, Cassandra, Neo4j, Spark, S3, Samza
Frameworks & Libraries: Spring Boot, ReactJS, Node.js, JUnit, Mockito
Cloud & DevOps: AWS, GCP, Azure, Docker, Kubernetes, Terraform, Helm, CloudFormation
Tools & Infrastructure: gRPC, Git, Postman, JIRA, VSCode, IntelliJ, Eclipse, SonarLint, Nginx, Jupyter

PROFESSIONAL EXPERIENCE

Software Development Engineer, Capstone Project *January 2024 - December 2024*

Sheetz (via Carnegie Mellon University)

- Built **real-time event streaming pipelines** with Databricks, **supporting doubling of Sheetz's store network from 700 to 1,400. Improved data processing speed by 85% and reduced critical system alerts by 40%,** ensuring operational reliability during rapid expansion**.**
- Identified optimal event streaming solution by evaluating **Kafka, Kinesis, and Pulsar** on AWS using Nginx & Apache JMeter, **processing 500,000+ events/second** and selecting Kafka for 40% superior performance.
- Reduced critical system alerts by 40% using SolarWinds monitoring, ensuring seamless expansion capacity for **1.5x future growth**.

Software Development Engineer *June 2022 - July 2023*

Bank of America

- Delivered automation tools for Merrill Lynch derivative trading, **eliminating 100% manual effort** weekly and reducing SLA breaches by 60%.
- Improved production batch stability by 85% through automated monitoring systems, **handling $50M+ daily trading volume**.
- Led technical liaison role between US-India teams, reducing outage resolution time by 45% and supervised 3 engineers.
- Architected scalable microservices for counterparty risk management, **processing 10K+ transactions daily**.

Software Development Engineer *July 2021 - June 2022*

Brillio

- **Configured and refined API infrastructure** by migrating SOAP based application to REST and adding JDBC for database-application connection.
- Improved code integration, and conducted extensive unit tests and **endpoint testing using Postman achieving 85% coverage**.
- Developed robust microservices using Spring Boot+ReactJS (**backend+frontend framework**).
- Enabled **seamless data integration and migratio**n in Verizon's 5G domain by developing APIs, establishing a multi-source data pipeline through automation scripts and comprehensive documentation (LLD, HLD, flow diagrams).
- **Developed APIs and multi-source data pipelines** enabling high-throughput backend services with minimal latency, supporting large-scale 5G data integration.

Associate Software Development Engineer *August 2020 - July 2021*

Accenture

- Delivered critical features and stability for AstraZeneca's VeevaCRM solutions as the key developer for iPatient, **managing feature implementations and bug fixes** under tight deadlines reducing system downtime by 20%.

ACADEMIC PROJECTS

Stream Processing with Kafka and Samza - Developed and analyzed a real-time data processing system by using Apache Kafka as the messaging system to handle large streams of incoming data and Apache Samza for processing these streams with minimal delay on AWS.
Containers: Docker and Kubernetes - **Containerized and orchestrated** microservices using Docker and Kubernetes on GCP and Azure, enabling scalable and reliable application deployment and management.
Machine Learning on the Cloud - Implemented and deployed an end-to-end machine learning pipeline on GCP, enhancing model accuracy through feature engineering and hyperparameter tuning.

EDUCATION

School of Computer Science, Carnegie Mellon University *December 2024*
Master of Software Engineering (Courses: Cloud Computing, Software Architecture, WebApp / **TA:** Engineering Data Intensive Scalable Systems,QA)

Kalinga Institute of Industrial Technology *July 2020*
Bachelor of Computer Science and Engineering