SHREEVALLABHADATTA G

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PROFESSIONAL SUMMARY

Software Engineer with 4+ years of applied experience designing and building efficient, unit-tested and reusable components across Data Lake, Snowflake, AWS Glue and S3. Experienced with Apache Kafka and event-driven architectures, developing and maintaining production code in a large corporate environment using Python, SQL and PySpark. Hands-on with enterprise-authorized AI-assisted development tools for code generation, test creation and documentation, with a disciplined approach to validating AI output for correctness, performance and security. Strong grounding in the full SDLC and agile practices including CI/CD and application resiliency.

PROFESSIONAL EXPERIENCE

Software Engineer II | **Carelon Global Solutions (formerly Legato Health Technologies)** 08/2022 – Present | Bengaluru, India

- Designed and built efficient, reusable and unit-tested components across a Data Lake architecture using Amazon S3, AWS Glue and Snowflake, standardising ingestion and transformation patterns reused by multiple teams.
- Developed and optimised Snowflake data models and SQL workloads supporting enterprise reporting, tuning queries and warehouse usage to reduce runtime and control compute cost.
- Implemented Kafka-based event streaming pipelines to ingest high-volume operational data into the data lake, enabling near real-time processing and reducing dependency on batch windows.
- Built automated, event-driven data workflows integrating AWS Glue, S3, Lambda and EventBridge, improving reliability and materially reducing manual intervention.
- Leveraged enterprise-authorized AI coding assistants for code generation, refactoring, unit test creation and documentation, critically reviewing and refining generated output for correctness, performance and security before merge.
- Engineered cross-cloud data solutions spanning AWS and Azure including Azure Functions and Synapse Analytics notebooks over Azure Storage — enabling seamless integration, high availability and cost optimisation.
- Designed and implemented Agentic AI and LLM-powered multi-agent systems using modern orchestration frameworks, enabling autonomous decision-making and dynamic tool execution for complex business processes.

TECHNICAL SKILLS

Core Data & Big Data:	Snowflake, Amazon S3, AWS Glue, Apache Kafka (Producers/Consumers), PySpark, ETL/ELT Pipelines, Data Lake Architecture, Performance Tuning
Programming & Databases:	Python, SQL, Node.js, PostgreSQL, MongoDB, Cosmos DB, REST APIs, FastAPI, Flask, Microservices
Cloud & DevOps:	AWS (Lambda, EventBridge, Glue, S3), Azure (Functions, Synapse Analytics, Azure Storage), Git, CI/CD, Agile/SDLC
AI & GenAI Systems:	LangChain, LangGraph, MCP (Model Context Protocol), RAG, Prompt Engineering, Vector Databases, Multi-Agent Systems, AI Development Tools
Engineering Practices:	Unit Testing (PyTest), Reusable Component Design, Code Review, Data Validation, Application Resiliency

PROJECTS

Data Lake & Snowflake Analytics Platform

- Architected and deployed a scalable Amazon S3 data lake integrated with AWS Glue ETL pipelines, automating data ingestion, cleansing, and transformation to populate curated Snowflake data models for enterprise reporting.
- Developed modular, unit-tested PySpark data processing components and standardized schema validation frameworks, significantly reducing code duplication and accelerating onboarding across multiple analytics teams.

Event-Driven Streaming Ingestion (Kafka)

- Engineered robust Apache Kafka event-streaming pipelines to capture and ingest high-volume real-time operational streams into the data lake and Snowflake, minimizing batch processing latency.
- Implemented sophisticated error-handling, retry mechanisms, and dead-letter queue (DLQ) replay patterns to ensure guaranteed message delivery, fault tolerance, and system resiliency.

Agentic AI Workflow Automation

- Designed and implemented advanced LLM-powered multi-agent automation workflows leveraging LangChain, LangGraph, and Model Context Protocol (MCP) to enable autonomous multi-step reasoning, dynamic tool execution, and seamless REST API integration.

CERTIFICATIONS

- **Model Context Protocol: Advanced Topics** — Anthropic Academy / Coursera (Oct 2026) — Advanced exploration of Model Context Protocols, tool use architectures, and context management patterns for LLM agent integrations.
- **Retrieval-Augmented Generation (RAG) with Embeddings & Vector Databases** — Scrimba / Coursera (Oct 2026) — Implemented vector database architectures, embedding models, and similarity search pipelines for accurate knowledge retrieval.
- **Generative AI and LLMs: Architecture and Data Preparation** — IBM / Coursera (Oct 2026) — Engineered data pipelines and preprocessing workflows specifically tuned for foundation model training and fine-tuning.
- **Responsible AI for Developers: Privacy & Safety** — Google Cloud Training / Coursera (Oct 2026) — Applied safety frameworks, data privacy controls, and bias mitigation strategies in enterprise AI development.
- **Introduction to Model Context Protocol** — Anthropic Academy / Coursera (Oct 2026) — Core principles and implementation patterns for integrating external context and tools via MCP standards.

EDUCATION

Global Academy of Technology | B.E. in Computer Science 2018 – 2022 | Bengaluru, India