

# GNANA SARATHY ALAGESAN

Data Engineer | Python Developer

☎ +91-9159454472 | ✉ gnanasarathy.alagesan@gmail.com | [in LinkedIn](#)

## SUMMARY

Data Engineer with strong backend engineering and technical leadership experience, specializing in enterprise data engineering, ELT architecture, cloud data migration, data governance, and unstructured data processing. Proven track record of designing scalable, metadata-driven data platforms, integrating complex enterprise systems, and leading engineering teams across Python, Snowflake, AWS, and Google Cloud environments.

## CORE COMPETENCIES

- **Data Engineering:** ETL/ELT, Warehousing, Modeling, Integration, Orchestration, CDC, Governance
- **Cloud & Distributed Systems:** AWS, Google Cloud (GCS, Functions, Workflows), Snowflake, Kafka
- **Programming & Backend:** Python, SQL, Java, C, JavaScript, FastAPI, Flask, GraphQL.
- **AI & Automation:** Snowflake Cortex AI, WatsonX, Gemini, Unstructured Data Extraction
- **Tools & Platforms:** Airflow, dbt, Matillion, Fivetran, ADF, Spark, Databricks, PostgreSQL, MySQL, Git, CI/CD

## PROFESSIONAL EXPERIENCE

### CDW | Consultant – Data

04/2024 – Present

- **Data Architecture & Cloud Migration:** Designed and built scalable, metadata-driven ETL/ELT pipelines and integration workflows, leading data migration initiatives across APIs, SQL Server, Snowflake, AWS, and Google Cloud environments.
- **Backend Team Leadership:** Led a 6-member backend team delivering FastAPI services and AWS Lambda workflows; conducted code reviews, mentored developers, and supported technical hiring.
- **Unstructured Data Processing:** Architected PDF data extraction using Snowflake Cortex AI and initiated a PoC for self-healing pipelines to automate failure remediation.
- **Data Governance & Security:** Implemented comprehensive data governance controls including PII anonymization, data masking policies, role-based grants, and data quality validation mechanisms.

### CDW | Associate Consultant – Data

04/2023 – 03/2024

- **ELT & Data Integration:** Utilized metadata-driven ELT pipelines and Snowflake data export workflows integrating with S3, SFTP, SQL Server, and Salesforce APIs.
- **Pipeline Orchestration:** Orchestrated data pipelines using Apache Airflow, improving pipeline throughput by approximately 30%.
- **Data Quality Assurance:** Developed Snowflake stored-procedure-based data quality checks to ensure accurate downstream data loading prior to integration.

### CDW | Consultant Trainee – Data

06/2022 – 03/2023

- **Streaming & Data Modeling:** Automated the ingestion of streaming/event data from Google Analytics and Azure App Insights into Snowflake using Snowpipe.
- **Application Foundations:** Designed data models and ER mappings for an internal hiring application using PostgreSQL, reducing manual HR effort by approximately 40% through Flask backend development.

- **Full-Stack Training:** Completed comprehensive full-stack development and cloud technology training, culminating in contributions to an internal social media platform.

## PROJECT EXPERIENCE

### *Global Fitness Franchise & Wellness Brand*

- **Netezza to Snowflake Migration:** Played a key role in migrating enterprise data from Netezza to Snowflake, enabling scalable cloud-based data processing.
- **Member Identity Resolution:** Integrated AWS Entity Resolution to identify and stitch member records across multiple systems, establishing a unified member identity.
- **Enterprise Data Integration:** Utilized Snowflake data export workflows to integrate with S3, SFTP, and Salesforce APIs, supporting downstream agency and business processes.

### *Energy & Infrastructure Solutions Company*

- **Google Cloud Architecture:** Migrated historical and incremental data from APIs and SQL Server into Google Cloud Storage (Delta format) using batching and partitioning strategies.
- **Serverless Workflows:** Converted notebook-based logic into scalable Google Cloud Functions, orchestrated via Google Workflows to handle both historical backfills and incremental ingestion.

### *Banking Institution*

- **Backend Microservices:** Led the offshore backend engineering team (6 members) delivering scalable backend APIs using FastAPI and RESTful endpoints.
- **Event-Driven Architecture:** Designed event-based triggers and serverless workflows utilizing AWS Lambda.

## HACKATHONS & ADDITIONAL PROJECTS

- **IBM TechXchange (2025):** Top 50 among 300+ teams. Developed a public-facing issue-ticketing platform for Sustainable Cities using Nest.js, FastAPI, and IBM WatsonX.
- **Sales Toolkit (2024):** Developed a unified sales toolkit on Microsoft Fabric integrating Excel data with Gemini LLM insights and a Flask-based chatbot.
- **RetailLens (2023):** Built an AI-driven retail solution utilizing Cisco Meraki Wi-Fi for personalized shopping experiences and operational optimization.

## EDUCATION

### **B.Tech – Information Technology**

2018 – 2022

Sri Ramakrishna Engineering College – Anna University, Coimbatore

## CERTIFICATIONS & AWARDS

- **Certifications:** Databricks Data Engineer Professional | Snowflake SnowPro Core | Fivetran Certified
- **Awards:** Above and Beyond Award (CDW) | Feather in the Cap Award (CDW)