KATHYAYANI SASALA

Cloud Data Engineer

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Summary

With **4 years** of hands-on experience in **designing and developing data pipelines**, performing **advanced analytics**, and building **cloud-native data workflows** on **GCP** and **AWS**. Proficient in leveraging **Python**, **SQL**, and modern data platforms to process **large-scale datasets** for **real-time** and **batch processing**. Experienced in collaborating with **cross-functional teams** to deliver **business insights** and **scalable data products**. Brings a balanced skill set of **engineering precision** and **analytical depth**, enabling both robust infrastructure and impactful decision-making.

- **Cloud Platforms (GCP & AWS):** Skilled in **Big Query**, **Dataflow**, **Pub/Sub**, **GCS** (**GCP**) and **Redshift**, **S3**, **Glue**, **Lambda** (**AWS**) to design **efficient** and **secure data workflows** across **hybrid cloud** environments.
- **ETL & Data Engineering:** Developed and maintained batch/streaming ETL pipelines using **Python, SQL, Apache Kafka, and Airflow**; focused on performance, fault tolerance, and schema validation.
- **Analytics & Business Intelligence:** Delivered **actionable insights** via **Looker**, **Tableau**, and **Google Data Studio**. Transformed **raw data** into **analytics-ready datasets** aligned with stakeholder needs.
- **DevOps & Automation:** Experience with **Docker**, basic **CI/CD pipelines**, **Git**, and **Terraform** for **automating deployments** and maintaining **environment consistency**.
- **Business Intelligence:** Delivered fraud and performance dashboards using **Looker, Tableau, and Google Data Studio**; designed fraud-monitoring datasets tailored to operational teams.
- **Team Collaboration:** Active contributor in **Agile teams**; participated in **sprint planning**, **code reviews**, and **collaborative problem solving** with **analysts**, **data scientists**, and **product owners**.

Education

Master's in **computer science** | **Florida Atlantic University** | Florida, USA	*Dec 2024* | GPA 3.9
Bachelor's in **computer science** | **Bharat Institute of Engineering and Technology, Hyderabad** | India	*May 2019* | GPA 2.7

Technical Skills

Languages & Programming: Python (Pandas, NumPy, Scikit-learn), SQL, Java, Shell Scripting

Data Engineering: ETL Pipeline Development, Real-time Data Streaming, Data Transformation, Query Optimization, Data Quality & Validation

Cloud Platforms: Google Cloud Platform (BigQuery, Dataflow, Pub/Sub, Google Cloud Storage, Composer), AWS (S3, Lambda, Redshift, Glue, Kinesis)

Databases: BigQuery, MongoDB, PostgreSQL, MySQL, Firestore, DynamoDB

Workflow Orchestration: Apache Airflow, GCP Composer

Streaming & Messaging: Apache Kafka, Google Pub/Sub

DevOps & CI/CD: Docker, Kubernetes, Jenkins, Git, GitHub Actions, Terraform

Monitoring & Observability: Google Stackdriver, AWS CloudWatch, Prometheus

Testing & Quality: Unit Testing, Integration Testing, Data Validation Scripts

Development Tools: VS Code, IntelliJ IDEA, Jupyter Notebook

Concepts & Practices: Distributed Systems, Agile Development, Data Governance, Secure & Scalable Data Architecture

Work Experience

Application Support Coordinator- Cloud & Data | [Florida Atlantic University](#)   Feb 2025 – Present

Played a central role in building data infrastructure and pipelines to support the university's research and academic analytics initiatives. Developed cloud-native solutions, CI/CD workflows, and secure access systems, improving performance, scalability, and data accessibility across departments.

Key Projects & Responsibilities:

- **Cloud-Based Data Tools:** Built and maintained web-based data solutions to support research and AI-driven academic systems, leading to a 30% improvement in performance and automation of routine reporting tasks.
- **ETL Automation & CI/CD:** Designed and deployed ETL pipelines using Python and SQL; integrated CI/CD workflows via GitHub Actions and Jenkins, reducing deployment cycles by 40%.
- **Cloud Infrastructure for Data Services:** Managed cloud-based analytics environments on AWS and Azure (S3, Lambda, Glue), ensuring 99.9% data service uptime and adherence to data security standards.
- **SSO & Identity Integration for Analytics Platforms:** Integrated Single Sign-On (SSO) to streamline secure access to internal data tools and dashboards, reducing manual access requests by 50%.
- **Data Documentation & Process Standardization:** Created documentation for pipeline lifecycles, ETL procedures, and cloud resources, enhancing team onboarding efficiency and cross-functional collaboration.
- **Modernization of Legacy Analytics Interfaces:** Integrated modern frameworks into internal reporting systems, improving query performance and responsiveness by 35%.
- **Data Incident Management:** Handled over 200 analytics and infrastructure-related tickets with a resolution time under 24 hours, ensuring data pipeline continuity for academic and research use cases.

Cloud Operations Support Intern | [Florida Atlantic University](#)   **Aug 2023 – Dec 2024**

Contributed to the university's IT and analytics infrastructure by supporting cloud-based deployments, data system upgrades, and workflow automation initiatives. Focused on enhancing operational efficiency, cloud performance, and data accessibility across academic departments.

Key Projects & Responsibilities:

- **Data Ticketing & Workflow Optimization:** Streamlined IT support operations by enhancing the service ticketing system and integrating data logging improvements, reducing resolution time by 25%.
- **Cloud-Based Data Deployment (Trussed AI):** Deployed and configured Trussed AI's data platform on AWS, optimizing compute resource allocation and improving deployment speed by 30%.
- **System Modernization & Leadership:** Led a team of 5 student technicians to execute system upgrades and cloud infrastructure migrations, boosting operational efficiency by 15% and reduced downtime by 20%.
- **Platform Enhancement & Analytics Support:** Integrated user feedback into support system dashboards and workflows, improving platform usability and raising satisfaction metrics by 20%.
- **Cloud Infrastructure Exposure:** Gained hands-on experience with AWS services (EC2, S3, IAM) in the context of data deployment and monitoring for research and academic applications.

Data Engineer | [ATOS | SYNTEL](#)   **Oct 2019 – Dec 2022**

Joined as a campus hire and quickly progressed into a data engineering role within a major healthcare modernization program for a U.S.-based client. Contributed to the development of real-time data pipelines, SQL optimization, and cloud-based analytics infrastructure aimed at improving claims processing, provider insights, and regulatory reporting.

Project: Healthcare Data Modernization – U.S. Healthcare Client

Key Contributions:

- **ETL & Data Pipeline Development:** Built and maintained batch and real-time ETL pipelines using Python, SQL, Apache Kafka, and Airflow, ingesting millions of claims and provider records from distributed source systems into Google BigQuery.
- **Cloud Integration (GCP & AWS):** Designed cloud-based workflows leveraging Pub/Sub, Dataflow, and Google Cloud Storage to handle real-time data ingestion and transformation. Used AWS S3, Glue, and Redshift for structured data warehousing in hybrid environments.
- **Data Modeling & Optimization:** Created partitioned and clustered tables in BigQuery to support low-latency queries. Optimized Redshift SQL queries and schema structures, improving report performance by 50%.
- **Data Quality & Validation:** Built custom Python scripts for automated data validation, anomaly detection, and schema enforcement, resulting in 40% fewer downstream data issues.
- **Cross-Functional Collaboration:** Worked with data analysts, business SMEs, and QA engineers to define KPIs, build data marts, ensure traceable and reliable reporting outputs for billing, claims adjudication, and compliance tracking.
- **Growth & Impact:** Started as a fresher focused on QA support and manual SQL testing. Within one year, promoted into the core data engineering team, owning end-to-end pipelines and participating in client architecture discussions. Contributed to reducing the client's data processing SLA from 6 hours to under 2 hours.

Certifications, Honors & Awards

- **Data Analysis with Python – FreeCodeCamp**
  Certified in data analysis using Python, including NumPy, Pandas, Matplotlib, and SciPy. Demonstrated skills in data cleaning, visualization, exploratory data analysis (EDA), and building analytical models for insights generation.

- **AWS Certified Developer – Associate (DVA-C02) – LinkedIn Learning**
  Completed certification preparation for the AWS Developer Associate exam, gaining expertise in AWS services like Lambda, S3, DynamoDB, SNS, and IAM. Built and deployed cloud-native applications with best practices in security and serverless development.

- **AWS Cloud Quest: Cloud Practitioner – Amazon Web Services**
  Earned foundational AWS certification through a hands-on, gamified learning experience covering core cloud concepts in compute, networking, databases, and security.

- **ServiceNow Certified System Administrator – ServiceNow**
  Certified in ServiceNow administration, including platform navigation, form configuration, workflow automation, user/group management, and Service Catalog functionality.

- **Intermediate Technical Interview Prep – CodePath**
  Completed an intermediate-level program focusing on data structures, algorithms, and system design. Practiced LeetCode-style problems to strengthen real-world problem-solving and technical interview skills.

- **Docker Foundations Professional Certificate – Docker & LinkedIn Learning**
  Certified in Docker fundamentals, including containerization, Docker CLI, Dockerfiles, volumes, and image management. Demonstrated ability to build and run containerized applications in development and production environments.

- **Selenium WebDriver with Java for Beginners – Udemy**
  Completed practical training in Selenium automation using Java. Gained experience in writing test scripts, browser automation, TestNG integration, and testing real-time web applications.