Skandana Gowda
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Summary:

- Detail-oriented Data Engineer with hands-on experience designing and scaling data architectures that support large-scale financial and transactional systems.
- Skilled in developing secure, high-performance ETL and ELT pipelines using AWS, Redshift, Glue, Airflow, and dbt, ensuring data integrity, scalability, and performance.
- Strong understanding of financial data ecosystems, including payments processing, risk analytics, fraud detection, chargeback management, and regulatory compliance.
- Experienced in implementing data governance and access control frameworks aligned with PCI DSS, GDPR, and enterprise data security standards.
- Proficient in data modeling, warehouse optimization, and real-time streaming for transaction analytics and operational dashboards.
- Collaborates cross-functionally with Data Science, Risk, and Compliance teams to enable machine learning–ready data pipelines and predictive financial analytics.
- Passionate about leveraging data engineering best practices to drive financial transparency, operational efficiency, and data-driven business decisions.

Technical Skills:

Programming & Scripting:	Python, SQL, Java, C++, JavaScript, Bash
Data Engineering & ETL:	Apache Airflow, AWS Glue, AWS Lambda, Snowflake, Redshift, dbt, Apache Spark, Kafka, Databricks
Machine Learning & AI:	Scikit-learn, TensorFlow, PyTorch, OpenCV, LangChain, FAISS, Retrieval-Augmented Generation (RAG)
Data Analysis & Visualization:	Pandas, NumPy, MySQL, Matplotlib, Tableau, Power BI
Web & API Development:	FastAPI, REST APIs, OpenAI API, Bootstrap, HTML, CSS
Cloud & DevOps:	AWS (S3, Glue, Redshift, Lambda, IAM, DynamoDB, CloudWatch, SES, EventBridge, EC2), Docker, Jenkins, Git, GitHub, Postman, Jira
Financial Tools & Frameworks:	Payment Data Pipelines, Risk Analytics, Fraud Scoring, PCI DSS Compliance, Credit Authorization Workflows

Experience:

Mastercard   **May 2024 – Present**
Data Engineer

- Developed real-time data pipelines for processing over 60M+ global payment transactions per day using AWS Glue, Lambda, and Redshift Spectrum.
- Automated and orchestrated data workflows using Airflow and dbt, improving SLA compliance and reducing refresh intervals by 40%.
- Partnered with the Financial Risk team to build fraud detection datasets integrated with machine learning models in Databricks and AWS Sagemaker.
- Applied LangChain and RAG-based AI search tools for Mastercard's internal data retrieval systems, enabling analysts to access transaction summaries conversationally.
- Collaborated with the Compliance and Security Engineering teams to implement strong data lineage, access control, and encryption policies aligned with PCI DSS standards.
- Supported real-time analytics dashboards in Tableau and Power BI for merchant risk insights, transaction anomaly detection, and consumer spending trends.

Telestream   **Jul 2022 – Jul 2023**
Data Engineer

- Designed ETL workflows in AWS Glue and Python to consolidate application usage, licensing, and telemetry data into centralized Redshift data warehouses.
- Created and maintained scheduled data ingestion jobs with Airflow for consistent synchronization between transactional and analytical systems.
- Supported Tableau dashboards for product performance, subscription trends, and customer retention analysis.
- Built data validation scripts in Python to ensure pipeline data integrity, automating quality checks and error alerts via AWS CloudWatch.
- Collaborated with Software Engineering teams to design REST API data endpoints, improving interoperability between microservices and analytics pipelines.
- Implemented Dockerized ETL environments for consistent development-to-production deployment through Jenkins-based CI/CD pipelines.

Education:

- M.S. in Computer Science (Data Engineering & AI) | SEAS Merit Award, George Washington University – Washington, D.C, GPA: 3.80/4.00