Griffin Rush

LinkedIn • rush.grif@gmail.com • (267) 471-8066

Experienced Data Engineer specializing in scalable cloud data solutions and AI-powered analytics platforms. Proven track record developing production data pipelines, intelligent agents, and automated workflows that drive business value and enable self-service analytics. Skilled in Python, SQL, PySpark, Azure Databricks, Unity Catalog, MLflow, and LangGraph with deep expertise in modern data engineering practices.

Professional Experience

General Motors

Data Engineer - **L6**   July 2021 - Present

- Develop and maintain production data pipelines using PySpark, SQL, and Python to aggregate and transform data stored in Databrick Unity Catalog, supporting business intelligence and advanced analytics initiatives across marketing and business units
- Architect scalable data solutions on Azure Databricks leveraging Delta Lake, Unity Catalog, and Spark to process and curate large-scale transactional and event data from disparate 1st and 3rd party sources
- Collaborate with cross-functional analytics, data science, and business teams in a matrixed environment to translate requirements into robust data products that enable self-service analytics and ML modeling
- Champion continuous learning and knowledge sharing within the data engineering team by documenting best practices, conducting technical sessions, and staying current with emerging technologies and industry trends

Projects

Agentic Analytics Platform

- Designed and deployed a multi-agent analytics platform integrating Databricks Genie, Unity Catalog, and custom LangGraph agents to enable governed natural-language querying of marketing datasets, campaign performance metrics, and experimentation results
- Architected a custom LangGraph supervisor agent to orchestrate multiple specialized sub-agents including vector search for semantic retrieval, externally-served agents (Genie) for structured experiment data, and in-code agents for dynamic code execution and programming assistance
- Engineered robust prompt orchestration with system prompts and policy guardrails to ensure concise, grounded, and compliant responses while managing tool routing, SQL generation, and policy filters to map business questions to correct Delta tables and metrics
- Deployed agent as an MLflow ResponsesAgent for seamless integration, version control, and end-to-end tracing of agent interactions and model performance

Automated Template Processing & Dynamic Content Generation

- Automated end to end deck generation that reads governed PowerPoint templates from Volumes, populates text and image placeholders from source tables, and writes polished outputs, eliminating manual deck assembly
- Preserved brand-consistent formatting by copying font attributes during text replacement, ensure professional visuals without rework
- Built a reusable parameterized workflow including widgets for template, table, filters, output that lets teams generate tailored presentations without code changes
- Improved reliability with exception-safe image handling and text/table fallbacks, keeping runs/paragraphs valid and reducing failed outputs

Areas of Expertise

- Data Engineering Tools: SQL, Spark, Databricks, Hadoop, Hive, PowerBI
- AI/ML Frameworks: MLflow, LangGraph, Vector Search/RAG
- Programming Languages: Python, Unix Shell Scripting
- Cloud/Big Data Technologies: Azure

Education

Indiana University - Bloomington

Bachelor of Science, *Informatics*

Minor, *Business and Financial Literacy*