

Alexandra Tew Analytics Engineer | SQL | Snowflake | Data Pipeline Validation

Charlotte, NC | alex.d.tew@gmail.com | 919-604-7541 | alexandratew.io | linkedin.com/in/alexandratew

Summary

Analytics Engineer with experience designing and maintaining SQL-driven data pipelines in Snowflake supporting operational analytics across enterprise-scale datasets. Skilled in debugging complex data systems, reconciling multi-source environments during platform migrations, and building transformation layers to convert raw data into reliable analytical models. Combines systems thinking, SQL engineering, and data validation expertise to improve reliability and transparency of production data workflows.

Technical Skills: Snowflake, SQL pipeline development, data modeling, query optimization and restructuring, large-scale dataset reconciliation, Python, Pandas, Bash, R, Git, DevOps

Tools & Platforms: Snowflake, Streamlit, Tableau, Power BI, Alteryx, SQL Server, Microsoft Azure

Experience

Coca-Cola Consolidated — Charlotte, NC | Analytics Engineer (BI Developer II) | Dec 2023 - Present

- Develop and maintain Snowflake data pipelines transforming large-scale transportation and telematics datasets into operational models used across logistics and RCT reporting.
- Build and maintain SQL transformation pipelines that structure raw operational data into production datasets supporting enterprise reporting and analytics. Author and modify Snowflake stored procedures and tasks used for automated incremental processing and dataset refreshes.
- Design and maintain SQL data models that support operational reporting and performance analysis across multiple business units. Troubleshoot pipeline failures and data discrepancies by investigating upstream source data, transformation logic, and downstream dependencies.
- Improve query performance through join restructuring, CTE refactoring, and early-stage filtering to reduce warehouse compute consumption.
- Supported a large-scale platform migration from Matillion-based ETL workflows to a Snowflake-centric architecture by validating data consistency across environments. Reconciled datasets spanning more than 40 base tables, ~200 views, and 20+ stored procedures and tasks, with dataset sizes ranging from thousands to over 100 million rows.
- Investigated cross-system discrepancies by isolating mismatched keys, tracing transformation logic, and collaborating with platform engineers to identify extraction or transformation issues. Identified timing issues in incremental extraction logic near high-water marks and contributed to a snapshot-based reconciliation strategy to capture late-arriving updates.
- Migrated selected transformation logic previously implemented in Matillion into Snowflake SQL procedures and rebuilt dependent views aligned with the new architecture. Build internal data tools using Streamlit and Python to support operational investigation and data validation workflows.

Dornburg Lab — UNC Charlotte | Statistical Data Analyst, Researcher | Jan 2021 - Dec 2023

- Built reproducible computational pipelines and statistical models for large-scale genomic datasets in high-performance computing environments. Developed data pipelines using Python, Bash, and R to process large genomic and RNA-seq datasets across HPC clusters. Built reproducible workflows for sequence alignment, transformation, and model testing across large biological datasets.
- Conducted large-scale data transformation, validation, and statistical analysis supporting evolutionary biology research. Developed comparative statistical models and phylogenetic analyses used to evaluate evolutionary hypotheses.

AvidXchange — Charlotte, NC | Business Intelligence Analyst Intern | Jun 2023 – Aug 2023

- Wrote advanced SQL queries to generate structured datasets supporting operational analytics initiatives, designed Power BI dashboards with drill-through and interactive filtering for internal reporting teams, and streamlined reporting workflows by automating data preparation steps used across multiple reports.

Trotter Finishes — Denver, NC | Founder & Business Manager | Jun 2017 – Dec 2020

- Founded and operated subcontracting construction business achieving 100–150% year-over-year revenue growth for two consecutive years.

Education

MS Bioinformatics University of North Carolina Charlotte 2023

BS Psychology Appalachian State University 2012