

Ayo Mosanya

Analytics Engineer | mosanyaayo@gmail.com | (512) 568-8509 | Austin, TX

Summary

Analytics Engineer with expertise in architecting high-performance data solutions, driving business impact through advanced analytics, and enabling data democratization. Proven track record in enterprise risk analytics, regulatory reporting, and cloud infrastructure optimization. Passionate about continuous learning and delivering actionable insights.

PROFESSIONAL EXPERIENCE

Analytics Engineer | Charles Schwab & Co, Inc

Internal title: Data Analytics Manager

- **Architected high-performance analytics cli tool** processing 3M+ rows across 60+ dimensional attributes using modern columnar architecture (DuckDB + Parquet + Zstd compression), reducing query execution from 2-3 hours to 8-10 minutes through parallelized extraction patterns and optimized data modeling—enabling near-real-time business intelligence for 50+ stakeholders across various business entities and committees.
- **Designed and maintained core data models** for enterprise risk analytics using dimensional modeling and incremental transformation patterns inspired by dbt staging concepts—built extraction/transformation/validation pipeline (Oracle → DuckDB → Parquet) with full lineage tracking via Git/GitHub, reducing analysis time by 85% and enabling self-service analytics adoption.
- **Built custom Python CLI-based orchestration framework** for production ETL workflows, evaluating build vs. buy tradeoffs against commercial solutions (\$\$K+ licensing)—delivered concurrent worker pools (3-5 parallel processes), automated validation checkpoints, and audit trails in 2 weeks, coordinating 20+ interdependent SQL extractions with enterprise-grade reliability.
- **Drove measurable business impact through analytics** by designing anomaly detection dashboard that identified data quality issues in real-time, providing automated root cause analysis and remediation guidance—reduced data error rate from 17% to 0.5% within 12 months, preventing operational and regulatory exposure.
- **Shipped critical regulatory reporting under extreme time pressure** by independently scoping, designing, and delivering Federal Reserve horizontal reporting system in <2 weeks; Reverse-engineered complex business logic across disparate systems, designed intuitive data models for non-technical stakeholders, and automated formatted Excel delivery with embedded documentation and data profiling.
- **Established data governance and quality standards** across enterprise GRC systems (Collibra, Informatica), partnering with data engineering teams to implement automated validation frameworks with aggregate reconciliation and anomaly detection; Prevented data quality incidents through early detection and alerting.
- **Enabled data democratization** by building and deploying Tableau dashboards with comprehensive user training and documentation, reducing manual reporting requests by 60% and empowering non-technical customers/teams to independently explore KPIs and trends for decision-making.

Data Analyst | [2ndWatch \(AWS Premier Consulting Partner\)](#)

- **Optimized cloud data warehouse infrastructure** for Fortune 500 financial services clients on AWS Redshift, conducting cost-benefit analyses that identified multi-million dollar spend efficiencies through query optimization and workload management tuning.

M&A Analyst | [Salesforce](#)

- **Drove analytics integration** as technical SME for technology acquisitions, consolidating disparate data sources for due diligence and post-close tracking across Corporate Development, IT, and Operations teams.
- **Automated executive reporting pipelines** using Salesforce CRM, Tableau and Google Sheets, reducing manual effort 60% and enabling real-time integration status visibility for C-suite stakeholders.
- **Acquisitions:** Vlocity, ClickSoftware, Tableau & Slack

Technical Advisor | [Apple Inc.](#)

- Achieved top 5% global customer satisfaction ranking; analyzed support telemetry data to drive product improvement recommendations.

Sales Consultant | [Sprint Inc.](#)

- Top sales performance through data-driven customer analytics and pipeline optimization.

TECHNICAL PROFILE

Analytics Engineering & Data Modeling: dbt-inspired staging patterns, data quality frameworks and semantic layer design.

Data Platforms & Processing: DuckDB, AWS Redshift, Oracle Database, Parquet/columnar formats, parallel query optimization, compression strategies (Zstd).

Programming & Automation: Python (pandas, polars, concurrent.futures, multiprocessing), SQL (Oracle, DuckDB), custom ETL orchestration, Git/GitHub.

Visualization & BI: Tableau (dashboard design, calculated field optimization, XML parsing), Plotly, matplotlib, self-service analytics enablement.

Cloud & Infrastructure: AWS (S3, Redshift), Azure, GCP; cloud cost optimization and workload management.

Data Governance: Collibra, Informatica, IBM GRC; regulatory compliance (Federal Reserve/RCSA/CDE), data lineage, quality validation.

EDUCATION

B.S., Computer Information Systems | [University of Texas at Tyler](#)