# Stephen Wallace

Principal Cloud Data Engineer and Team Lead

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Slalom Consulting 2018 – Present

Principal - Data & Analytics

2022 - Present

#### Overview:

- Successfully planned and executed \$1M+ client engagements as an advisor, architect, and engineer.
- Developed and managed teams of data engineers

#### Project Highlights:

- CPG Client Built suite of data APIs to eliminate manual work, reduce infrastructure cost, and improve system stability
  - Used test-driven development to create automated ETL processes with Pyspark and AWS Glue
  - Designed efficient back-end data models in **DynamoDB**, converting from conventional relational schemas
  - Deployed and secured APIs using AWS Lambda and API Gateway
  - Configured and implemented IaC and CI/CD solution using Terraform Cloud and Bitbucket Pipelines
  - Conducted sessions with client to gain buy-in on vision for system architecture and team responsibilities
  - Oversaw 6 other engineers to ensure high-quality deliverables
- Biotech Client Created scalable processes for OLTP backfill and data validation with SQLAlchemy and Kubernetes
  - Process ran trillions of updates against high-performance production system (PostgreS on Cloud SQL)
     without requiring downtime or introducing performance degradation
  - Deployed on GKE with configurable parameters to modify parallelism and batch size on executors
  - Implemented queuing system that allowed for restartability and addition of additional executors without lock contention
- Insurance Client Architected and built Data Warehouse and ELT processes using Snowflake and dbt
  - Created CI/CD process for deploying system configuration, DB objects, and roles using **Terraform** and **Jenkins**
  - Built custom SCIM solution with **Python** and identity provider APIs to allow seamless management of permissions through active directory groups
  - Designed easy-to-use ingestion and export tools using AWS Lambda (event handling) and stored procedures
  - Migrated manual, undocumented data processes into dbt Cloud, and established dataops practices for the team
  - With the new platform, non-engineers were empowered to load, process, and share TB-sized datasets, and eliminate compute and storage costs from legacy systems
- Led data engineering teams formally, in and out of project work
  - In project work, defined feature roadmaps, drove requirements, and helped newer engineers with technical development
  - Internally, conducted performance reviews and created development plans, while providing mentorship around functional skills and company operations

- Credit Reporting Client Data Migration Initiatives
  - Leveraged Google Maps API, Pytorch embedding models, fuzzy matching, and data standardization to match customer entities across disparate systems - prevented weeks of manual review work and allowed team to meet deadline
  - Migrated legacy data processes from SSIS and SQL Server to Airflow and Google BigQuery
  - o Trained client team on Google Cloud tools and advised technical teams on data engineering best practices
- CRM Startup Client Serverless, real-time data replication
  - Built event-driven ETL process using AWS Lambda to process change data records from OLTP systems and sync them with Redshift - this allowed the customer to gain deeper analytical insights about their customers

Centene Corporation 2013 – 2018

Data Scientist I 2016 - 2018

- Built predictive models to automate claims processing and predict member behavior using XGBoost and R
- Created processes for deploying ML models into production

Data Analyst I/II 2013 - 2016

## SELECT SKILLS

Languages: Python, SQL, R, Shell

DevOps: Terraform, Jenkins, Docker

Data Warehouse: BigQuery, Snowflake, Redshift, Teradata

ETL/ELT: Airflow, dbt, Spark, AWS Glue

Cloud Platforms (General): AWS, Google Cloud

OLTP: DynamoDB, PostgreS

### **Education**

MBA

Washington University in St. Louis - Olin Business School 2021

B.S. Systems Science and Engineering

Washington University in St. Louis 2013