Robert D. West

HANDS-ON DATA ENGINEERING LEADER · US/UK DUAL CITIZEN

☐ (+1) 646-694-1606 | ✉ robert.david.west@gmail.com | Brooklyn, NY

🏠 robertdavidwest.com | github.com/robertdavidwest | 🔗 linkedin.com/in/robertdavidwest | robertwest

"A complex system that works is invariably found to have evolved from a simple system that worked."

Summary

Experienced **Data Engineering Leader** who leads from the front with a hands-on approach to data pipeline architecture, platform engineering, and scalable system design. I maintain deep technical involvement while scaling high-performing teams, personally contributing to critical technical decisions and complex problem-solving. My leadership philosophy centers on leading by example—diving into code reviews, designing scalable data systems, and mentoring through direct technical collaboration. I excel at translating complex data engineering challenges into clear strategic outcomes for stakeholders while ensuring my team has the technical guidance and support needed to deliver robust, scalable solutions.

Technical Skills

Data Engineering: Airflow, DBT, Python, PostgreSQL, Docker
Cloud Platforms: AWS (EC2/S3/RDS/Redshift/MWAA/EventBridge/Batch/ECS/ECR/IAM), GCP: (Composer/Dataproc)
Data Platforms: Snowflake, Databricks
Languages: Python, SQL, Bash, Scala, Clojure, JavaScript, TypeScript
DevOps Tools: GitHub Actions, Docker, Terraform, AWS/GCP CLI
Web Technologies: React, Redux, Next.js, Node.js, Express, Flask
Eng Management: Lean Coffee, Agile/Scrum

Experience

Talkiatry
New York, NY
SENIOR ENGINEERING MANAGER, DATA ENGINEERING
Dec. 2023 - Present

- **Infrastructure Modernization**: Migrated critical data pipelines from AWS Batch to ECS/Fargate, implementing full CI/CD automation with GitHub Actions. Reduced job execution time and enabled dynamic cluster configuration through code, managing a system with 700K+ patient records.
- **System Reliability Engineering**: Implemented AWS MWAA for pipeline orchestration, reducing system outages by 50% and eliminating cascading failure scenarios. Built preventative monitoring and automated recovery processes across the data platform.
- **DevOps Transformation**: Led migration of legacy Databricks code from manual processes to automated CI/CD pipelines, eliminating deployment risks and ensuring code review standards. Extended automation to ECS and Lambda deployments.
- **Team Leadership**: Managed team of 4 engineers through significant personnel transitions, providing mentorship on Python best practices and establishing clear career development pathways for all direct reports.
- **Operational Excellence**: Redesigned alerting architecture with PagerDuty integration, reducing non-actionable alerts by at least 80% while maintaining critical issue visibility. Improved engineer work-life balance and response effectiveness.

Atlas Health
Remote
ENGINEERING MANAGER, DATA PLATFORM
Jun. 2023 - Nov. 2023

- **Project Leadership**: Spearheaded the greenfield Core Data Platform initiative. Defining its vision, goals, and key deliverables; to create a platform that will be responsible for the ingestion and storage of customer provided data making it discoverable, accessible, and consumable for information systems across Atlas. Successfully navigated the project from conception through initial implementation, leading a cross-functional team and facilitating alignment across multiple departments.
- **Stakeholder Management**: Actively coordinated with Implementation and Product teams to establish a new data-contract paradigm within the company. Educated and aligned stakeholders on how they would interact with the system, preparing the foundation for code-agnostic data ingestion and consolidation. Managed expectations by laying out a path to MVP within a single quarter. Facilitated knowledge sharing, and cross-team deliverables to bring the project to fruition.
- **System Architect**: Conceived and executed the project's logical architecture, initial proof-of-concept code using Spark, and a multi-tenant system architecture on Google Cloud Platform, utilizing Google Composer (Airflow) and Dataproc Serverless (Spark). Built a custom Python Flask app to simulate the Dataproc Serverless API, enabling offline development.

Signify Health
New York, NY

ENGINEERING MANAGER OF DATA WAREHOUSE *Apr. 2021 - Nov. 2022*
- **Noteworthy Achievements**: Lead the successful migration of Manual Data Pipelines from the Analytics team and into a Robust Data Orchestration system (using Apache Airflow). This included creating a Docker development environment for all Devs. Creating the project workflow leveraging Jira and assigning all dev tasks. I also deployed the Airflow application itself via AWS. I ***Reduced monthly data processing time from 10 days to 2 days.***
- **Leadership**: Ensured all of my direct reports had a path for growth in both their technical skills and their professionalism. I always make myself available for anything from technical problem solving through to personal issues. I adopt a front-line leadership approach to better understand the challenges my team faces. I want to understand the challenges my reports face and point them in the right direction to empower their problem solving skills.
- **Creative Problem Solver**: Built a Python/Flask Application to handle the deployment of code into the Apache Airflow system.
- **Communication & Collaboration**: Facilitated cross-team collaborations through clear and concise written and verbal communication, ensuring all stakeholders were aligned and informed.

LEAD ANALYTICS ENGINEER *Jan. 2019 - Apr 2021*
- **Noteworthy Achievements**: Successfully lead the migration of the Analytics PostgreSQL database from AWS single server to managed services (EC2 to RDS), including a Major Database Schema change. Provided ongoing management of both systems.
- **Mentorship**: Provided ongoing mentor-ship to junior analysts. Managed project work-flows leveraging Jira to create concise and logical project plan instructions for analysts. Lead periodic training sessions for analysts to improve their knowledge and competency in software development, using Python, Git, Conda.
- **Big Data Experience**: Built numerous ETL processes and data pipelines handling terabytes of data leveraging Python's multiprocessing library to process data quickly and efficiently. Familiarity with AWS EC2/S3 work environments.

ANALYTICS ENGINEER → SENIOR ANALYTICS ENGINEER *Dec. 2014 - Dec 2018*
- **Full Data Life-cycle expertise**: Extensive experience analyzing large volumes of Medicare claims data across the full data life-cycle ranging from raw data delivery to generating partner reports. Including: data analysis, data aggregation, munging and visualization.
- **Noteworthy Achievements**: Developed and Productionized the Analytics department's original prototype dashboard that was delivered to all partners nationwide (Python: Data Aggregation, D3/Javascript front end).

Ernst & Young
New York, NY

SENIOR ASSOCIATE, COMPLEX SECURITIES & QUANTITATIVE ADVISORY *Feb. 2011 - Dec. 2014*
- **Project Lead/ Model development**: Headed model development and programmatic implementation in numerous large scale analytics projects. Using Linear regression based pricing models. Working directly with clients to implement bespoke solutions.
- **Financial Modelling**: Expertise in modelling stock prices as Geometric Brownian Motion, leveraging Monte Carlo simulation, the use of lattice models and the development of analytical solutions to pricing problems.
- **Derivative Valuation**: Gained extensive experience in the valuation of complex derivative securities including institutional stock options, employee stock options (including suboptimal exercise behaviour), contingent considerations, restricted stock units, convertible bonds, callable bonds and other debt instruments.

Other Experience

Faim Crypto LLC (Fractal Artificial Intelligence Model)
New York, NY

ML PLATFORM ENGINEER *Aug. 2017 - Aug. 2018*
- **ML Platform Development**: Built production-ready machine learning platform in Python for cryptocurrency and equity price prediction, implementing concurrent programming paradigms for real-time model inference.
- **Model Operations & Monitoring**: Developed MLOps pipeline with model performance monitoring, backtesting framework, and Interactive Brokers API integration for live trading validation.

Education

Carnegie Mellon University
Pittsburgh, PA

M.S. IN COMPUTATIONAL FINANCE (FINANCIAL ENGINEERING) *Dec. 2010*
- Honours: MSCF Merit Scholarship · GRE Quant: 770/800
- Probability, statistics, simulation methods, stochastic processes, economics, and their application in quantitative financial markets.

University of Kent
Canterbury, U.K

B.S. IN MATHEMATICS *Jun. 2007*
- First Class (4.0 U.S. GPA equivalent) · Awarded Rotary Prize for graduating second in class

Additional Information

Volunteering: Volunteer Data Expert for DataKind.org
Interests: Guitar, Health & Fitness, Meditation & Yoga (KRI Certified Kundalini Yoga Instructor)