Robert D. West

TECHNICAL ENGINEERING LEADER · SENIOR DATA ENGINEER · US/UK DUAL CITIZEN

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

Summary

I am a dedicated and empathetic **Technical Engineering Manager**. I aim to inspire my team through genuine enthusiasm for our work. I am always ready to step in and help solve technical challenges directly when needed but will never miss a teaching opportunity. I will block and tackle for my team while building bridges with stakeholders and growing lasting cross-functional partnerships. I can easily and clearly articulate technical requirements and constraints to non technical stakeholders. If the developers on my team are not growing then I am not doing my job.

Technical Skills

Languages:	Python, SQL, Bash, Scala, Clojure, JavaScript, TypeScript
Data:	Python (pandas/statsmodels/scikit-learn/multiprocessing), Data Eng: Airflow/Spark, DB: PostgreSQL
Web:	Front End: React, Redux, NextJS, Back End: NodeJs (Express), Python (Flask)
OS/Cloud:	OS: *nix/Windows, AWS: EC2/S3/RDS/Redshift, GCP: Cloud Composer/Dataproc Serverless
DevOps/Iac:	Containerization: Docker, Kubernetes (Minikube), IaC: Terraform
Tools:	AWS/GCP CLI, Git/Github/Bitbucket, Atlassian Suite (confluence/Jira)
Eng Management:	Lean Coffee, Agile/Scrum

Experience

Atlas Health
Remote

ENGINEERING MANAGER, DATA PLATFORM
Jun. 2023 - Present

- **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).
- **Independent Innovation**: Developed a local development environment mimicking the cloud platform. Used Kubernetes Minikube for running Airflow with the Kubernetes executor and built a custom Python Flask app to simulate the Dataproc Serverless API, enabling offline development.
- **Infrastructure Automation**: Authored Infrastructure as Code using Terraform to establish the required infrastructure on Google Cloud.
- **Agile Execution**: Collaborated closely with Product Management to implement Agile methodologies, leveraging Jira for sprint planning, backlog refinement, and story-point estimation.

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.

Barclays Capital   *Singapore*
GLOBAL MARKETS INTERN, FX TRADING AND INVESTOR SOLUTIONS   *Summer 2010*
- **Forex Options Pricing Development**: Researched and identified the volatility premium for scheduled market events in foreign exchange options by computing realized volatility on historical data and identifying significant shocks during events.
- **Initiative**: Independently initiated the automation of sales data aggregation by developing a software solution and writing a usage protocol; saving the sales team at least an hour a day.

Sapient Global Markets   *London, U.K*
CONSULTANT   *Jun. 2007 - Sep. 2008*
- **Quality Control**: Confirmed trade bookings, resolved settlement breaks and negotiated changes to equity derivative confirmations in line with International Swaps and Derivatives Association (ISDA) regulations.
- **Market Knowledge**: Intermediary between counterparty and trading floor to ensure accurate execution of trade details. Products included equity swaps, equity options, and variance swaps.

Education

Carnegie Mellon University   *Pittsburgh, PA*
M.S. IN COMPUTATIONAL FINANCE (FINANCIAL ENGINEERING)   *Dec. 2010*
- Honours: MSCF Merit Scholarship · GRE Quant: 770/800
- The MSCF curriculum seamlessly integrates instruction in probability, statistical analysis, numerical methods, computation and simulation methods, stochastic processes, economics, and their application in today's 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
- Dissertation: Detailed enumeration of Latin Squares distinguishing characteristics and relationship to both combinatorial objects and group theory

Additional Information

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