# Andrew Crawford

# Data Engineer

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## **Summary**

Azure Data Engineer with 2+ years of experience designing semantic models, building end-to-end data pipelines, and delivering analytics solutions that scale. Adept at turning raw operational data into governed, reusable datasets and business-friendly Power BI/Fabric models that power self-service BI and advanced analytics. Proven record of collaborating with cross-functional teams, optimizing SQL & Python code, and automating data operations in regulated environments (finance & manufacturing).

# **Core Strengths**

Azure & Microsoft Fabric: OneLake, Dataflow Gen2, Pipelines, LakeHouses, Synapse SQL & Spark, Power BI Semantic Model Design: Star & snowflake schema, dimensional modeling, DAX measures, row-level security Data Engineering: ETL/ELT in Python & SQL, Dataflow Gen2, Power Automate, CI/CD with GitHub Actions Programming & Databases: Python, SQL (T-SQL, PL/SQL), Oracle, Teradata, PostgreSQL, MSSQL DevOps & Cloud Ops: Docker, Git, Agile/Scrum

### **Experience**

Risk Analytics Consultant II

Wells Fargo - Minneapolis, MN (06/2024 - 011/2024)

- Developed Python scripts to validate language in legal governing documents against internal accounting data
- Wrote SQL queries to extract datasets for business partners and create recurring reports
- Utilized Power Automate to build forms for streamlining daily data collection tasks

#### Data Engineer

Neurocraft - Remote part-time (04/2024 - 01/2025)

- Developed a form application using Azure Static Sites to collect daily machinist log data
- Created a PowerBI dashboard to visualize the daily machinist log data
- Built a comprehensive dashboard leveraging Azure services, including Microsoft Fabric, OneLake, and PowerBI
- Implemented data tracking for machine operations, capturing key metrics such as production output by operator, setup and machining time, machine downtime
- Created a digital system for generating wear and tear reports during tool disassembly, with automated report generation and maintenance recommendations

Teaching Assistant - Columbia Engineering AI Boot Camp

2U, Inc. - Remote part-time (03/2024 - 01/2025)

- Provided instruction in programming for artificial intelligence covering Python programming, machine learning, deep learning with TensorFlow and Keras, and ethical AI practices to equip students with critical AI development skills
- Designed interactive learning experiences and assessments focused on data modeling, natural language processing, and emerging AI technologies, fostering innovation and critical thinking in AI applications
- Assist students in building weekly mini projects and larger group projects throughout the bootcamp, guiding them to apply prediction techniques, machine learning models, and data analysis skills.

Senior Analytics Consultant

Wells Fargo - Minneapolis, MN (02/2023 - 01/2024)

- Created a development cycle guide leveraging GitHub for effective code development and release management
- Developed a Python common code framework to simplify database connections to Oracle and Teradata systems, evolving the SAS legacy code
- Built a monthly dashboard connecting SQL databases to PowerBI to display enterprise customer risk ratings by location

Associate Software Engineer

Revature - Remote (10/2022 - 12/2022)

- Created an eCommerce website with React, Spring, and PostgreSQL where customers can register, log in, filter products by sales, search for products, and add products to a cart/checkout
- Architected and implemented a Java/Javalin-based Web API for submitting, viewing, and managing employee reimbursements

Teaching Assistant - University of Minnesota Fintech Boot Camp

2U, Inc. - Remote (09/2022 - 03/2023)

- Provided instruction in programming for financial technology covering Python programming, machine learning, algorithmic trading, and smart contracts on the Ethereum blockchain with Solidity
- Assisted students in configuration, troubleshooting, and building projects for their portfolios
- Taught data cleaning, data manipulation, analysis, and communication of results to non-technical audiences

Capital Markets Analyst I

Wells Fargo - Minneapolis, MN (01/2019 - 03/2021)

- Managed incoming margin calls for derivative trading, handling 25+ systems/software daily, and solving client problems
- Designed and generated Tableau reports to measure monthly personal and team metrics
- Implemented a pod structure to silo tasks into specific roles, enhancing efficiency, and tracked performance metrics
- Created training guides introducing new VBA, decision trees, flow charts, and step-by-step instructions

#### **Education**

Bachelor of Arts, Economics - 3.41

University of Minnesota Twin Cities - Minneapolis, MN (09/2014 - 05/2018)

Fintech Certificate

University of Minnesota - Remote (09/2021 - 03/2022)