# Thomas McDermott
## Data Analyst / Data Engineer / Software Developer
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## Summary

- Data Analyst/Engineer and Software Developer with over 10 years of project experience
- MBA with presentation and reporting skills
- Technical experience includes:
  - Data Engineering; ETL/ETL pipelines, data lakehouses, db and schema creation, data transformations
  - Data Analytics:  Queries, derived and synthetic data, advanced analytical tools
  - Reporting/Visualizations:  Automation, scheduled and ad-hoc reporting, visualizations
- Technical experience:

| | | | |
|---|---|---|---|
| • Linux | • Mongo | • Apache Airflow | • db Connections |
| • AWS | • Neo4j/Neptune | • Python | • API's |
| • Snowflake | • Splunk | • Pandas | • JSON |
| • PostgreSQL | • Qlik | • Directory parsing | • Tableau |
| • Azure | • dbt | • File ingestion | • ChatGPT |

## Professional Experience:

**Data Engineer**
**Open Technology Solutions, Denver CO**
**March 2023 – Present**

Senior Python Developer, Snowflake Project:

- Work in conjunction with PMO and Business Stakeholders to develop reporting and analytics capabilities by moving data from on-premises Oracle-based servers to Snowflake instances
  - Cards Data Project:  Ingest and process flat text files from Fiserv using Python, load to Snowflake
  - Member CRM Project:  Create API polling service using Python, load audit/history data to Snowflake
  - Qlik Alerting:  Create API polling service for non-recoverable errors, integrate with PagerDuty
  - dbt Alerting:  Create webhook listener for non-recoverable errors, integrate with PagerDuty

**Data Analyst**
**Charter Communications (Spectrum), Denver CO**
**December 2022 – February 2023** (Contract - Hybrid)

Senior Analyst, Reporting and Automation Team:

- Work with wifi modem/router testing team to develop a suite of automated reports
  - Vendor Data Normalization Project:  Parse directory structure on local servers, normalize json data across vendor/device/test type using Python/Pandas, load csv results to Amazon S3.
  - PySpark/Mongo Project:  Develop POC for storing records as json/bson using PySpark for rapid retrieval
  - Visualizations Project:  Work with stakeholders to develop automated reports and dashboards using Tableau

**Data Analyst / Data Engineer**
**Nike, Portland OR**
**April 2022 – November 2022** (Contract - Remote)

Lead Analyst, Data Services Team:

- Work with stakeholder groups to transform raw product data into curated data objects
  - Use Linux command-line tools including ssh and scp to securely access AWS Virtual Machines (EC2 Instances)
  - Download raw data from application servers
  - Use SQL in conjunction with Python/Pandas to create sample data sets and json objects, capture source to target mapping/transformation rules
  - Turn over to API team for production integrations

– Work with product owner to reverse engineer and document existing data pipelines:

- Create algorithms to identify source to target mappings based on naming conventions
- Validate results using data element value comparisons
- Identify logical errors for remediation by the offshore development team

## Data Analyst / Senior Engineer
## Guardian Insurance / Reed Group, Westminster CO
## June 2019 – March 2022 (FTE – On-Site/Remote)

IT Metrics Program Lead:

– Engage organizational stakeholders to build a new customer-focused data analytics reporting suite:

- Access APIs for Service Now, JIRA, TFS, and Splunk to download raw operational data
- Use Python/Pandas/Excel to normalize data, generate performance metrics, and perform analysis
- Maintain a local database using Python/SQL Alchemy/SQLite
- Automate and publish reports using Tableau, SharePoint, PowerPoint, and Excel

– Accomplishments:

- Developed normalized customer scorecard combining JIRA feature delivery data, ServiceNow defect data, and TFS defect resolution data across three different product lines
- Developed demand/capacity management model for new customer implementations and feature requests
- Automated compliance reporting for performance guarantees
- Published C-Level weekly and monthly IT operations reports

## Systems Analyst
## Transamerica, Denver CO
## September 2018 – June 2019 (Contract)

– Support development of new advisor and customer web portals as part of digital transformation strategy

- Create data-flow source to target mappings for existing portals, capture transformation logic
- Create development db / test layer in PostgreSQL
- Implement logic / test and validate results
- Provide results to API team for microservice implementation

## Product Manager
## University of Colorado Office of Data Analytics, Boulder, CO
## February 2018 – September 2018 (Contract)

– Help develop data lake and analytics platform product vision, features, and system integrations.  Develop and groom the product backlog

- Planned and supervised the execution of a successful initial production deployment, including a new UI and accompanying features supporting 3 business/product reporting lines
- Worked with admissions team to develop BI/demographic profiles in support of student success

## Technical Project Manager
## Charles Schwab Central Project Management Office, Denver CO
## July 2015 – February 2018 (Contract)

– Trading Infrastructure Program, Advanced Credit and Risk Application, Personal Trust Services

- Tested/validated trading rules engine following migration from mainframe to distributed environment and integration of options trading capabilities
- Helped improve application performance by re-threading trade validation logic (ACAR)
- Performed technical analysis for integration of automated trading platform and cashiering functions in support of new Personal Trust Services product

## Education / Certifications

– MBA, MIS/Finance, Auburn University, May 2016

– BA, BS, University of Colorado, May 1990

– Project Management Professional (PMP), Certified Scrum Master (CSM)