Taylor Dickson

Data Engineer · IT & Systems Professional

Toronto, Canada

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Summary

Experienced Data Engineer with 7+ years of expertise building scalable data pipelines, optimizing data models, and implementing enterprise data solutions. Proven track record of leading cross-functional teams and delivering end-to-end data systems that drive business decisions across multiple departments. Technical background in Python, SQL, ETL processes, and modern data engineering frameworks.

Skills

Data	Python, DBT, Azure Data Factory, Databricks, SQL
Leadership	Team Management, Project Management, Stakeholder Communication, Vendor Relations
Front-end	JavaScript, Vue, HTML, CSS
Back-end	Python, Django, Flask, Go Lang, Node, Express, REST API
DevOps	Docker, Shell Scripting (BASH), Linux Administration

Experience

Data Engineer

Toronto, Canada

Ontario Public Service — Attorney General

2024 — Present

- Working in a high security environment with sensitive data, ensuring compliance with data protection standards.
- Led the implementation of Data Build Tool (DBT) for data transformation and modelling, enhancing data quality and consistency across multiple data sources.
- Designed and implemented dimensional model of data warehouse using Kimball methodology, improving data accessibility and reporting capabilities.
- Collaborated with cross-functional teams to define data requirements, ensuring alignment with business objectives and enhancing data-driven decision-making processes.
- Managed performance tuning and optimization of existing ETL processes, resulting in improved data processing times and reduced resource consumption.
- Developed comprehensive documentation for data models, ETL processes, and system architecture to facilitate knowledge transfer and ensure maintainability of solutions.
- Utilized Agile methodologies to manage project delivery, coordinating cross-team dependencies and ensuring timely delivery of data solutions.

Data Engineer/Team Lead

Toronto, Canada

Ontario Public Service — Treasury Board Secretariat

2019 — 2024

- Led the division's data overhaul project, modernizing digital infrastructure. Utilized Python and Pandas for processing, SQLAlchemy for data integration, and built robust data models supporting advanced analytics for business decision-making.
- Directed a team of 5 in data pipeline development, orchestrating ETL processes, data warehousing solutions, and real-time data streaming to improve data accessibility and analytics capabilities.
- Implemented CI/CD practices with GitHub for version control, managing pull requests and git repositories in an Agile environment, improving collaboration and development workflow efficiency.
- Coordinated with cross-functional teams to design scalable software architectures, define technical requirements, and ensure seamless integration of data engineering solutions across platforms.
- Conducted regular code reviews, provided technical guidance on data modelling, data integration, and pipeline optimization, promoting high-quality and maintainable code.
- Developed data transformation tools using RESTful API design with Flask/Django and Python, processing over 50 million records monthly while maintaining system performance.
- Tackled significant challenges in name entity recognition using Levenshtein distances and the NLTK library in Python, improving data accuracy and processing efficiency of large datasets.

Workforce Analyst

Toronto, Canada

Ontario Public Service — Ministry of Government & Consumer Services

2017 — 2019

- Utilized SQL, MS Access, Excel, VBA, and Python for data management, reporting, visualization, and process automation, supporting business operations with timely and accurate data insights.
- Automated the generation and distribution of over 7000 customized documents, significantly reducing manual labor and enabling directors to quickly access and analyze their staff information.
- Created and optimized reports comparing content across multiple documents, improving efficiency and accuracy in data reporting and reducing manual workload.
- Ensured data integrity across multiple systems through regular data quality checks and recommended enhancements to data management processes to improve overall data reliability.