

Position Identification			 MOVEMENT OF UNITED PROFESSIONALS
Position Title	Senior Data Engineer		
Position Replaces	Senior Data Engineering Architect		
Position Level	Employee	Position Code	1885
Pay Group	Group 12	Revision Date	Aug-26
Supervisor Title	Manager, Enterprise Data and Analytics	Sup. Position Code	1324
Additional Requirement	CRC	TMA	
Exclusion Rationale	N/A	On-Site Requirement	2 days/ month
Division	Information Technology		

Organizational Description

BC Transit is a provincial crown corporation responsible for the overall planning and delivery for all of the different municipal transportation systems within British Columbia, outside Greater Vancouver.

Our Mission: Delivering transportation services you can rely on

Department Summary

The Enterprise Data and Analytics team is responsible for ensuring that the use and management of data is carried out in a manner that is secure, sustainable, and benefits BC Transit on an enterprise scale. In this role the team takes a product-thinking approach to the creation and delivery of data artifacts and provides subject matter expertise and support in a variety of data practices including analytics, reporting, governance, architecture and engineering across the organization.

Job Overview

Reporting to the Manager, Enterprise Data & Analytics, the Senior Data Engineer operates as a connective layer within the organization, translating raw data, architectural direction, and governance standards into working data products. This is accomplished through the development of data pipelines and cleaned, curated datasets that support data interoperability, reporting, analytics, machine learning, and core operational processes across the organization. The Senior Data Engineer builds sustainable, scalable, and adaptable data solutions as new projects and requirements emerge and delivers using modern DataOps practices to ensure reliability and

repeatability. As a senior member of the team, the Senior Data Engineer mentors other Data Engineers and advises team leaders on best practices and opportunities for improvement.

Key Accountabilities and Expectations

Key Accountability	Expectation
Technology	• Design, build, and maintain automated data pipelines that ingest, transform, and deliver data from operational and vendor source systems to enterprise data stores. • Design and implement physical data models in the enterprise data warehouse and lakehouses, aligned with architectural direction. • Build and maintain feature and inference pipelines that support machine learning and advanced analytics workloads. • Work with Project teams to determine the best way to design data interfaces to load reporting data into consumable formats for business users. • Work with vendors to identify and correct source data issues and ensure that data is interpreted and integrated correctly into BC Transit reporting • Monitor and enhance data quality through automated testing and statistical process controls. • Collaborate with IT Enterprise Technology to design and maintain cloud architectures that support ETL/ELT pipelines and DataOps (CI/CD). • Apply storage and access policies to ensure information collected on the Enterprise Data Platform is being stored in a manner that complies with BCT IT Security, Privacy and information Management policies. • Participate in Agile work planning to align tasks with business needs.
Innovation	• Provide subject matter expertise on the growth and evolution of the data engineering practice and assist in developing roadmaps for future innovation
Leadership	• Mentor other data engineers on best practices and grow data capability within the team
Additional Duties	• Performs related duties in keeping with the purpose and accountabilities of the job

Summary of Qualifications and Job Specific Competencies	
Education	• Post secondary degree in Computer Science, Software Engineering or a related field • The following would be considered an asset: ○ Cloud Data Engineering certification (Azure, GCP, AWS, Meta) ○ dbt Labs Analytics Engineering Certification or equivalent
Experience	• Five (5) years of experience building production data pipelines to ingest, transform, and deliver data for analytics, reporting, and operations. • Three (3) years of hands-on experience with SQL and Python developing, deploying and orchestrating automated workflows using modern data stack tooling (e.g., Airflow, DBT, etc.). • Demonstrated experience working with cloud data platforms and Lakehouse architectures (e.g., Databricks, Microsoft Fabric, Snowflake), including open table formats such as Delta or Iceberg. • Experience implementing feature engineering, machine learning models, data quality testing, and observability to ensure the reliability of data products in production. • Experience mentoring & coaching data teammates and developing team capability in an agile product management environment. • An equivalent combination of education and experience may be considered
Key job-specific competencies	• Deep understanding of data engineering practices, challenges, and solutions including how implement data pipelines and datasets according to enterprise data models. • Expert level proficiency with Python and SQL • Demonstrated ability applying software engineering practices such as DataOps & MLOps, including version control, CI/CD and automated testing • Ability to translate business needs into technical data solutions • Demonstrated analytical and computational problem-solving skills • Demonstrated communication, interpersonal and negotiation skills for building working relationships with internal and external stakeholders • Demonstrated ability to exercise sound independent judgment