



Senior Data Analyst & Integrator

One permanent, full-time position and one temporary, full-time position (2 years) – Toronto, ON

Passionate about data analytics and adept at translating complex technical information into business insights and recommendations, you welcome this opportunity to join the City of Toronto and support data-driven decision-making at the Parks, Forestry & Recreation (PFR) Division.

Working in the Business Intelligence, Research and Analytics unit in the Policy and Strategic Planning Branch of PFR, you are a data engineering professional who works collaboratively on solving complex problems for a division that stewards public spaces and brings the public together. You'll be working directly with staff in data science, data engineering, and a variety of business functions, on building pipelines and optimization models. With access to a variety of data sources internally and externally to the City of Toronto, there's no shortage of data and problems to tackle. Most importantly, you can seamlessly distill very technical concepts to business users and vice versa; bringing colleagues and stakeholders along the journey of discovery and learning through data analytics is very important to you.

MAJOR RESPONSIBILITIES

Your primary responsibilities as a Senior Data Analyst & Integrator will be varied, but you'll be expected to:

Data Science, Research and Analytics

- Provide technical expertise in using data analysis techniques to City divisions to support of data-driven decision-making.
- Lead development and support the coordination of corporate analytical models.
- Implement industry best practices on machine learning, artificial intelligence, and digital twinning, resulting in operational improvements and project success.
- Use data science to formulate solutions and/or recommendations.
- Create and upload for dissemination and/or planned email reporting.
- Compile data/statistical reports based on data analysis, including formatting for aesthetics and structure.
- Produce data visualization on a range of different data sources, including structured, unstructured, real-time and geospatial.
- Troubleshoot and take actions to resolve issues associated with data, interpretation and reporting.

Data Engineering

- Build core Extract-Transform-Load (ETL) and Extract-Load-Transform (ELT), refactor queries and data models, and provide strong analytics to support the decision-making process.
- Support data pipelines, build queries and Extract-Transform-Load (ETL) and Extract-Load-Transform (ELT), and support statistical and inferential analysis. Integrate a variety of business data and analyze data to gain additional insights.
- Connect to, and transform data from, each source to match the format and schema of its destination.
- Coordinate and collaborate with the Corporate I&T BI team to ensure high performance of large amounts of ETL as well as ELT tasks, report building, analytics, and data visualization support.
- Make recommendations and implement improvements to the system to optimize computation and storage resources for data.

Data Quality and Governance

- Develop data quality evaluation processes.
 - Guide the creation and maintenance of data dictionaries and metadata.
 - Ensure data quality and perform data cleansing to ensure accuracy
 - Provide technical support to divisional teams in the development, use, and quality assurance of data collection methods (including geospatial) for business intelligence and analytics. Produce
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- technical documents pertaining to data analytic processes, analysis, methods and models.
- Participate in design and evaluation sessions of data analytics and machine learning processes with objectives to conduct testing, devise audits and support implementations.
- Prepare and evaluate information and technology proposals, requirements, analysis, and design documents, including detailed specifications of data, information and software architectures.

Stakeholder support and Communication

- Develop, foster and maintain effective working relationships and communication with internal and external stakeholders on project requirements and approaches related to data analysis, visualizations, data quality, and project delivery timelines.
- Participate in business requirement workshops and support the documentation of business requirements.
- Build relationships and liaise with key business users and decision-makers to understand their business analytics needs.
- Represent the team and give presentations at relevant learning networks, meetings and events related to data science. Deliver presentations based on findings.
- Maintain up-to-date knowledge of both the current and emerging data analytics technology and products.
- Provide direction to the Data Analyst & Integrator regarding data analysis as related to data structures and architecture.

KEY QUALIFICATIONS

Your application for the role of **Senior Data Analyst & Integrator** must describe your qualifications as they relate to:

1. Post-secondary education in Statistics, Computer Science, Engineering, or Mathematics, or an equivalent combination of education and/or experience, or a related field.
2. Considerable experience with predictive analytics and machine learning (scikit-learn, Tensorflow, MLlib, recommendation systems).
3. Considerable experience with data streaming using Kafka, Apache Spark and data ingestion frameworks: NiFi, Hive and Pig.
4. Considerable experience writing complex SQL and NoSQL jobs to analyze data in both traditional DBMS (MS-SQL, Oracle) and Big Data environments (i.e., HADOOP, SPARK, or similar open source and commercial technologies).
5. Experience using programming or scripting languages like Java, Linux, C++, Python, or R.
6. Experience with big data processing frameworks and techniques such as HDFS, MapReduce, Syncsort, Sqoop, Oozie, etc.

You must also have:

- A collaborative attitude, and a willingness to work with team members, with the ability to coach, participate in code reviews, and share skills and methods.
 - Exceptional oral, written and interpersonal communication skills, with the ability to simplify complex technical concepts into business & value-focused language.
 - Excellent organizational and time management skills, and a strong business presence, with the ability to multi-task and effectively deal with competing priorities.
 - Excellent critical thinking, problem-solving and conflict resolution skills.
 - Excellent political acuity.
 - Ability to structure and transform data to enable analysis.
 - Ability to communicate clearly and consistently, keeping stakeholders well-informed of progress and challenges.
 - Ability to develop and maintain inter-professional team relationships with multiple stakeholders, including City staff and the public.
 - Ability to create and effectively present information and facilitate discussions with various audiences.
 - Ability to travel to various locations in Toronto.
 - Ability to support the Toronto Public Service values to ensure a culture that champions equity, diversity and respectful workplaces.
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Wage Range: \$46.38 - \$50.82 per hour

Toronto is home to more than 2.9 million people whose diversity and experiences make this great city Canada's leading economic engine and one of the world's most diverse and livable cities. As the fourth largest city in North America, Toronto is a global leader in technology, finance, film, music, culture, and innovation, and consistently places at the top of international rankings due to investments championed by its government, residents and businesses. For more information, visit jobs.toronto.ca or follow us on Twitter at [Twitter.com/CityTOjobs](https://twitter.com/CityTOjobs), on LinkedIn at [Linkedin.com/company/city-of-toronto](https://linkedin.com/company/city-of-toronto) or on Facebook at [Facebook.com/CityTOjobs](https://facebook.com/CityTOjobs).

How to Apply:

For more information on these and other opportunities with the City of Toronto, visit us online at <https://jobs.toronto.ca/jobsatcity/>. To apply online, submit your resume, quoting **Job ID #15553**, by **Monday, August 30, 2021**.

Equity, Diversity and Inclusion

The City is an equal opportunity employer, dedicated to creating a workplace culture of inclusiveness that reflects the diverse residents that we serve. Learn more about the City's commitment to [employment equity](#).

Accommodation

The City of Toronto is committed to creating an accessible and inclusive organization. We are committed to providing barrier-free and accessible employment practices in compliance with the Accessibility for Ontarians with Disabilities Act (AODA). Should you require Code-protected accommodation through any stage of the recruitment process, please make them known when contacted and we will work with you to meet your needs. [Disability-related accommodation during the application process is available upon request](#). Learn more about the City's [Hiring Policies and Accommodation Process](#).
