Job Title: Senior Data Scientist

Department: Labour, Consumer Protection and Government Services

Location: Winnipeg, Manitoba

Classification: Statistical Analyst 3 (SS3)

Employment Type: Regular Full Time

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We are building a team of enthusiastic people to turn data into good policy and governance. Our ambitions are high and many of our strategies have never been attempted before. We are hiring a talented data scientist to join a fearless team working to make an outsized impact.

As the data scientist, you will act as the technical expert in the Data Science Program, completing specialized and complex data analytics projects. You will draw on your advanced knowledge of and experience with statistical methods, programming, data modelling and analytics to drive evidence-based decisions that have a positive impact on the lives of Manitobans. You will be a key player in the development of Manitoba's broader data analytics strategy.

What we offer:

- Be part of an unprecedented initiative to push the boundary of data use in government.
- Use data to inform policies that make a real and positive difference in the lives of Manitobans.
- Work within an innovative and supportive team.
- Work with diverse and unique data not available in any other sector.
- Have the freedom to suggest and pursue novel initiatives with a high degree of creativity.

Position Overview

The Data Scientist serves as the technical lead in the Data Science Program and works closely with the Director of Data Science to understand and realize the data needs and goals of client departments across government. The Data Scientist develops appropriate methodologies, aligning with available data and best research practices, and completes complex data analytics projects that address the questions and needs of client departments.

The Senior Data Scientist will:

- Act as project lead and senior technical expert in the Data Science Program, planning, coordinating and completing specialized and complex data driven projects and reports.
- Apply and innovate complex predictive models that fit the needs and assumptions of the questions posed by client departments.
- Collect, clean and code large amounts of data from multiple sources and databases. Administrative data often has a complex data structure. Advanced data manipulation skills are a key requirement.

- Tell a story with data; clearly communicating policy relevant findings from quantitative analyses in a non-technical fashion, with a focus on actionable implications.
- Build government's capacity for data analytics by working in partnership with government and outside of government partners to learn and apply emerging data analytics and data processing techniques to address the needs of departments.

Qualifications Overview:

The successful candidate will possess the following:
- Advanced graduate training in statistics, computer science, engineering, mathematics, physics, social sciences or related discipline (Master's degree or higher), or equivalent work experience.
- Extensive hands on experience working with large, complex datasets that require significant cleaning and management.
- Extensive hands on experience using structured and unstructured data to design and execute predictive analytics and other quantitative research projects, including linear and non-linear statistical models, machine learning, deep learning, and related methodologies.
- Extensive experience using statistical software and programming languages, specifically SQL and R or Python.
- Experience working with big data and high-performance computing platforms (e.g. Google BigQuery, Google Cloud, AWS, Microsoft Azure) and using Jupyter Notebook/Lab.
- Strong data visualization skills.
- Experience communicating scientific knowledge and research to diverse and non-technical audiences.
- Independent learner with excellent critical thinking skills, a commitment to research excellence and a meticulous eye for detail.
- Effective leadership skills with the ability to work collaboratively in a team setting.
- Excellent problem-solving skills with the ability to render technical decisions and recommendations.
- Proven ability to manage priorities in the context of changing or unstructured work environments.

Desired Qualifications:
- Experience with GIS analysis.
- Experience working with multiple statistical software and programming languages.
- Ability to use the outcomes of data analytics to tell stories with actionable implications by clearly answering the "so what" question.
- Knowledge of IT systems and structures, including industry best practices related to data storage, security, application deployment and development.

The Manitoba government recognizes the importance of building an exemplary civil service that is inclusive and reflective of the population it serves.

Your cover letter, resumé and/or application must clearly indicate how you meet the qualifications.

We encourage applicants to voluntarily self-declare in the cover letter, resumé or application if they are from any of the following employment equity groups: women, Indigenous people, visible minorities, and persons with disabilities.

Data Science in the Government of Manitoba

The Data Science Unit's mission is to leverage big data and cutting-edge analytics to push the boundary of data use in government. We draw on data resources not available in any other sector to drive evidence-based decision-making in the Government of Manitoba. The Data Science Unit is located within the Department of Central Services and works across the Government of Manitoba to support policy design, evaluation and decision-making in a range of areas. Data science is key to evidence-based decision-making and the Data Science Unit – as a first of its kind initiative – is in a unique position to make a positive difference in the lives of Manitobans.

About the Government of Manitoba

The Manitoba government offers rewarding careers to its employees who deliver hundreds of programs and services to the public. The government has a wide variety of departments, reflecting over 700 different types of jobs, located in communities across the province.

We are an employer that has a commitment to integrity, respect, diversity, inclusion and advancing reconciliation. In 2019, the Manitoba government has once again been selected as one of Manitoba's Top Employers, one of Canada's Top Employers for Young People and one of Canada's Best Diversity Employers. The Manitoba government has a committed, caring and creative workforce that is passionate about contributing to and improving services to our communities and the lives of Manitobans.

About Manitoba

The province of Manitoba is home to almost 1.3 million people who have a well-deserved reputation for being among the friendliest in Canada. No matter what your interests are, Manitoba offers everything from Polar Bear expeditions to gallery tours.

Our capital city, Winnipeg, has a population of over 700,000 and is located at the geographic centre of North America. Home to the world-renowned Royal Winnipeg Ballet, the Canadian Museum for Human Rights and the NHL's Winnipeg Jets, Winnipeg is one of Canada's most historic and beautiful cities.

Offering you four distinct seasons and the highest number of sunlight hours in Canada, you are guaranteed to find the life you're looking for in Manitoba.

Come see for yourself!