Ministry of the Environment, Conservation and Parks

Temporary Employment Opportunity

**Position:** Senior Data Scientist

**Location:** 40 St. Clair West, 4th Floor, Toronto, Ontario

**Duration:** Temporary assignment for up to 9 months

Are you looking for a great opportunity to showcase your data science expertise and statistical/analytical knowledge and skills? We are looking for a motivated professional to join our team to provide leadership and expertise in the field of Data Science to support Ontario’s Wastewater Surveillance Initiative.

**Opportunity**

As a Senior Data Scientist, you will:

- provide expertise in the application of statistical methods and techniques to the analysis of wastewater and epidemiological data from across the province to complement epidemiological evidence for informing public health decision making.
- apply advanced statistical techniques to support the aggregation of wastewater and epidemiological population-based data to support the reliability (e.g., quality control and assurance, statistical uncertainties, data validation and limitations) and trend analysis of the data, similar to the approaches applied by the Science Table.
- Analyze complex datasets created by some of Ontario’s top academic institutions, using genome sequencing and other analytical methods, to provide simple and effective communications on trends and analytics that support various audiences (e.g., senior government officials, medical professionals in public health).

**About Ontario’s Wastewater Surveillance Initiative**

Since Fall of 2020, Ontario has invested in the development of a wastewater surveillance initiative, and funded academic and research institutions across Ontario to conduct wastewater sampling research and analysis for the early detection of the SARS-CoV-2 virus in over 70 municipalities served by all 34 Public Health Units provincewide.

The Wastewater Surveillance Initiative is part of the province’s strategy to help the province respond to the COVID-19 pandemic, and to inform local public health decisions. Wastewater surveillance can provide an early warning of how COVID-19 is
spreading in local communities and is an efficient approach to identifying trends in communities compared to aggregating of clinical data.

Partnerships were developed with municipalities, public health units and academic institutions to build a surveillance network that samples regularly at municipal wastewater treatment plants. The initiative currently supports over 100 community sampling locations that are mostly municipal wastewater treatment plants covering over 75% of Ontario’s population.

Surveillance data is accessible to research and academic labs, as well as participating municipalities, Ontario’s public health units, Ministry of Health, Public Health Ontario, Ontario Health, Ontario’s Science Table and Public Health Agency of Canada.

Ontario’s Science Table conducts further analysis to aggregate and assess trends at the regional public health level and at the provincial level. Those trends can be found on the Science Table’s dashboard.

**How to apply**

If you are interested in this opportunity, please send your cover letter and resume via email, quoting “Senior Data Scientist” in the subject line, to Sherif.Hegazy@Ontario.ca

**OPS commitment to diversity, inclusion, accessibility, anti-racism**

The Ontario Public Service (OPS) is committed to building a workforce that reflects the communities we serve and to promote a diverse, anti-racist, inclusive, accessible, merit-based, respectful and equitable workplace.

We invite all interested individuals to apply and encourage applications from people with disabilities, Indigenous, Black, and racialized individuals, as well as people from a diversity of ethnic and cultural origins, sexual orientations, gender identities and expressions.

Visit the OPS Anti-Racism Policy and the OPS Diversity and Inclusion Blueprint pages to learn more about the OPS commitment to advance racial equity, accessibility, diversity and inclusion in the public service.

We offer employment accommodation across the recruitment process and all aspects of employment, consistent with the requirements of Ontario’s Human Rights Code.