

Job Posting:170110 - Position: S25 Data Science Co-op Student 170110B

Co-op Work Term Posted:	2025 - Summer
App Deadline	06/06/2025 09:00 AM
Application Method:	Through Employer Website
Posting Goes Live:	05/27/2025 11:20 AM
Job Posting Status:	Approved

ORGANIZATION INFORMATION

Organization	Ontario Securities Commission
Address Line 1	20 Queen Street West, 20th Floor
City	Toronto
Postal Code / Zip Code	M5H3S8
Province / State	ON
Country	Canada

JOB POSTING INFORMATION

Placement Term	2025 - Summer
 Job Title 	S25 Data Science Co-op Student 170110B
Position Type	Co-op Position
Job Location	Toronto, ON
Country	Canada
Duration	8 months
Work Mode	To be confirmed
Salary Currency	CAD
Salary	0.0 per hour for 0 Major List
Job Description	

Student (Fixed Term), Full time

Closing Date: June 6, 2025

The Ontario Securities Commission (OSC) is the statutory body responsible for regulating Ontario's capital markets in accordance with the mandate established in the provincial Securities Act and the Commodity Futures Act. The mandate of the OSC is to provide protection to investors from unfair, improper or fraudulent practices, to foster fair, efficient and competitive capital markets and confidence in the capital markets, to foster capital formation, and to contribute to the stability of the financial system and the reduction of systemic risk. This mandate is performed through policy, operational, and enforcement activities. The OSC also contributes to national and global securities regulation development.

We offer a diverse, fair, and flexible work environment and take pride in our challenging and rewarding work.

The Enforcement Division at the Ontario Securities Commission investigates and litigates breaches of securities laws in Ontario. Team members work closely with other securities regulators, self-regulatory organizations and law-enforcement agencies to enhance initiatives to fight misconduct. A strong visible enforcement presence assists in protecting investors from unfair, improper or fraudulent practices, fosters fair, efficient and competitive capital markets, fosters capital formation, and contributes to the stability of the financial system and the reduction of systemic risk.

The Enforcement Division is currently hiring for the position of a **Data Science Co-op Student** to be a part of the **eDiscovery and Analytics Team**. We are looking for a candidate to start as soon as possible with a contract term up to December 19, 2025.

This unique position will support the Division's core processes (i.e. detection, assessment, investigation and litigation of violations of the Securities Act) through the creation and implementation of technology solutions focused on advanced analytics to produce substantive enforcement cases. The successful applicant will have the opportunity to contribute to shaping investigatory analytics for the OSC Enforcement division and will be supported in developing and executing on an analytics roadmap. The role requires a working knowledge of building data products, statistical models and recommendation algorithms to identify potential violations of the Securities Act.

What's in it for you?

- Opportunity to support enforcement actions and assist with high profile and complex matters,
- Be part of a dynamic work environment with a collaborative, progressive, and professionally diverse team and,
- Make a difference and have a meaningful impact on investors and participants in Ontario's capital markets.

What will you do?

As part of the Data Science team, you will have the opportunity to assist and support with the following:

Data Analysis

- Gather requirements, design and implement technology solutions focused on advanced analytics and automation to meet the Enforcement Division's needs.
- Provide ad-hoc support to the Enforcement team when complex data analysis is required through an enforcement case life-cycle by identifying critical patterns and identifying entity relationships.
- Maintain complete audit trail of work performed by creating and updating procedure manuals as required.
- Write code in Python to support Ad-Hoc research projects, without solely relying on packages to generate and deliver relevant findings on both structured and unstructured data.
- Analyze financial market trading data with a focus on data mining to detect potentially manipulative and deceptive methods of trading activity and insider trading activities.
- Read and dissect research papers to understand key points and tailor analysis to suit.
- Assist with researching the use of generative AI for enhancing information detection and extraction, information restoration, as well as for potential nefarious tasks by others.
- Supporting the development of Enforcement solutions on Generative AI threats such as but not limited to: large number of perfectly worded, persuasive and clever phishing materials in multiple languages both in writing and AI generated speaking; AI generated malware; AI generated realistic photos and videos that clone specific appearance and facial expression.
- Supporting the deployment of local AI and LLM models through prompt engineering, fine-tuning, and scalable processing; enhancing efficiency by implementing batch processing and parallel inferencing.
- Build training modules and educate Enforcement team members on newly developed processes.
- Support Enforcement management with the identification and implementation of IT business requirements.

Investigations

- Identify potential enforcement cases through the creation of data mining and machine learning algorithms.
- Perform investigative analysis and present findings to the Enforcement team.
- Responsible for data quality and enforcement of governance rules for source data
- Provides support to case prosecution/legal actions, preparing and presenting analyses, interpretations and reports.
- Prepare recommendation memos/reports.

What do you need to be successful in this role?

- Pursuing a bachelor's degree of Mathematics or Computer Science with a specialization in Data Science, or Master of Quantitative Finance, or in a related undergraduate/master's program.
- Experience working with programming languages such as Python (preferred), R and SQL, including familiarity of data science/AI libraries, such as PyTorch, transformers.

- Working knowledge or solid understanding of the following:
 - manipulating, transforming, and analyzing complex, high-volume, high-dimensionality data from diverse sources and formats
 - building statistical models and machine learning algorithms
 - text mining and natural language processing
 - outlier detection modeling, regression analytics and other predictive modeling
 - computer software design and database administration, including complex database querying
- Academic research experience with the ability to comprehend and apply research papers and publications.
- Strong analytical skills with the ability to analyze large datasets including creating frameworks used by Staff to visualize data, patterns, and statistical relationships.
- Excellent problem solving and strategic thinking skills.
- Clear and concise verbal and written communication skills.
- Strong work ethic and organizational skills to meet aggressive deadlines in a fast-paced environment.
- Internally motivated, dynamic, able to work proficiently both independently and in a team environment.

Grow your career and make a difference working at the OSC.

* OSC Employees: please apply in Workday using the Browse Jobs feature within your Jobs Hub *

We thank all applicants for their interest in the Ontario Securities Commission. We will contact those selected for an interview.

The OSC is committed to diversity and providing an inclusive workplace and providing accommodation in accordance with the Accessibility for Ontarians with Disabilities Act and the Human Rights Code. It is our priority to ensure employment opportunities are visible and barrier-free to all under-represented groups including but not limited to, Indigenous, Black and racialized groups, people with disabilities, women and people from the 2SLGBTQI+ community, to achieve an employee demographic profile reflective of the demographic profile of Ontarians.

The OSC is a proud partner with the following organizations: [Ascend Canada](#), [BlackNorth Initiative](#), [Canadian Centre for Diversity and Inclusion](#), and [Pride at Work Canada](#)

If you require an accommodation during the recruitment process, please let us know by contacting our confidential inbox HRRecruitment@osc.gov.on.ca.

Visit [Accessibility at the OSC](#) to review the OSC's policies on accessibility and accommodation in the workplace.

Citizenship Requirement N/A

APPLICATION INFORMATION

Application Procedure Through Employer Website

Cover Letter Required? Optional

Special Application Instructions

Application Link: https://osc.wd3.myworkdayjobs.com/en-US/OSCCareers/job/CA-ON-Toronto/Data-Science-Co-op-Student_JR100614

Please click the "I intend to apply to this position" button on SCOPE and also submit your application via the employer's website.

Applications are accepted on a rolling basis and the posting may be expired at any time by the employer as submissions are received.

Students should submit their applications as soon as they are ready.