

Co-op and Summer Internship Opportunity

Social Media and Infectious Disease Transmission Data Retrieval and Analytics

A unique summer research program is being offered by the **Laboratory for Industrial and Applied Mathematics (LIAM)** at **York University**. This program supports the development and application of mathematical modeling and data analytics for **vector-borne diseases**, with a particular focus on understanding how **social media influences population behaviour and disease prevention strategies**.

In addition to postdoctoral fellows, the program is recruiting **research assistants (PhD and Master's students), co-op students, and summer interns (undergraduate students)** from Canadian universities. We aim to establish a multidisciplinary team of trainees with complementary expertise in **public health, software engineering, data science, and the mathematical sciences** (including mathematics, statistics, and computational science).

The **summer program will run from May 1 to August 30, 2026**.

The information below applies specifically to **co-op and summer internship opportunities for undergraduate students**.

Skills and Qualifications

Successful candidates should demonstrate the following:

1. Communication Skills

- Ability to communicate effectively with team members, academic supervisors, and external partners.

2. Analytical Skills

- Ability to extract relevant information from datasets and conduct analyses related to research and risk assessment.
- Completion of **at least three undergraduate courses in calculus, algebra, and/or computer science**.

3. Computing Skills

- Completion of **at least one computer science course**.
- Ability to run, modify, and test existing computational codes.

4. Teamwork Skills

- Ability to work collaboratively in a research team environment.
- Willingness to participate in virtual collaboration and communication.

Responsibilities

The successful candidate will:

- Contribute to team-based research activities and participate in group discussions;
- Undertake an **independent research component** involving data collection, processing, and analysis as part of a larger team project;
- Conduct **critical literature reviews** related to the research topic;
- Present literature review findings to the group and provide weekly updates;
- Design algorithms and analytical approaches relevant to the project;
- Develop, test, and validate computational codes;
- Demonstrate developed codes and algorithms and present results to the research team and industrial partners.

Application Process

Interested students should submit:

- **Curriculum Vitae (CV)**
- **Statement of Interest (maximum one page)** describing relevant background, skills, and preferred start and end dates for the program.

Applications should be sent to:

amyxiao@yorku.ca

Application deadline: March 30, 2026

Applications will be reviewed on a **rolling basis**, and only shortlisted candidates will be contacted.