

# Catalyst Fellowship Program

Advancing the Catalyst's mission through original research and industry engagement



ROGERS  
cybersecure  
catalyst

# About the Program

The Catalyst Fellowship Program is a major initiative dedicated to advancing the Catalyst's mission — to empower Canadians and Canadian businesses to seize the opportunities and tackle the challenges of cybersecurity — through original research and industry engagement.

Selected from academics at Toronto Metropolitan University and professionals working in a wide variety of organizations and sectors, Catalyst Fellows undertake original research and other projects related to the Catalyst's work; engage closely with Catalyst program participants and staff; and share their expertise in an environment dedicated to innovation and collaboration in cybersecurity.

The Catalyst Fellowship Program offers two streams: the Industry Stream and the Research Stream.



# About the Industry Stream

The Industry Stream is open to professionals engaged in cybersecurity or related fields at any career stage and across all industry sectors, including private industry, government and government agencies, and not-for-profit organizations.

The Industry Stream will accept up to three fellows per year. Catalyst Fellows in this stream will advance projects of their own design in cybersecurity or related topics that align with the Catalyst’s work, while engaging with the Catalyst’s work, program participants, and staff.

Catalyst Fellows in this stream will have access to the academic resources, facilities, and community at Toronto Metropolitan University, and can take advantage of all the benefits of undertaking and publishing research in an environment of academic excellence.

Catalyst Fellows in this stream are required to submit a research project proposal outlining the work they intend to pursue over the course of their fellowship.

Eligible Applicants	Individuals engaged in cybersecurity or related fields, at any career stage, within private industry, government, or government agencies (including law enforcement), or not-for-profit organizations.
Fellowship Period	12 months (September 2024 – August 2025)
Application Deadline	April 30, 2024 – 23:59 (EDT/UTC-4)
Stipend	\$5,000 CAD (inclusive of HST)

*The Catalyst will hire and sponsor a student intern to support the fellow’s research project during the fall (October-December), winter (January-April) and summer (May-August) academic semesters.*





# About the Academic Stream

The Academic Stream is open to any faculty member currently employed at Toronto Metropolitan University. Catalyst Fellows in this stream will advance their academic research in cybersecurity or related topics, while engaging with the Catalyst’s work, program participants, and staff.

The Academic Stream will accept up to three fellows per year. Catalyst Fellows in this stream will undertake research in cybersecurity or related subjects that aligns with the Catalyst’s work while engaging closely with Catalyst program participants and staff in the spirit of innovation and collaboration.

Catalyst Fellows in this stream are expected to have a plan for the work they intend to pursue over the course of their fellowship.

Eligible Applicants	Faculty at Toronto Metropolitan University
Fellowship Period	12 months (September 2024 – August 2025)
Application Deadline	April 30, 2024 – 23:59 (EDT/UTC-4)
Stipend	\$10,000 CAD (inclusive of HST) for research-specific expenses and one course release (one semester) to be taken within the fellowship period.

*“Cyber attracts the mission-driven. You have to be on the side of defending somebody. That’s going to be the thing that keeps you going, the thing that keeps it interesting. In IT and technology, you can build things and you can run things, but nowhere else in any technology industry do you have a person on the other side trying to break it. It has a competitive angle. In cyber in general, everything you’re doing is competing against attackers. I think the motivation for me is the competitiveness, competing with threat actors.”*

Jordan Shaw-Young,  
Chief of Staff for Security Services, BlueVoyant  
Catalyst Fellow

# Meet the 2024/25 Catalyst Fellows

## Catherine Middleton

*Professor, Ted Rogers School of Information Technology Management at TMU*

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Catherine Middleton is a Professor at the Ted Rogers School of Information Technology Management. She will research how older Canadians navigate digital risks to enhance their cybersecurity awareness and practices through co-designed educational materials.



## Jasbir Kooner

*Director, Cybersecurity at Englobe Corp*

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Jasbir Kooner is the Director of Cybersecurity at Englobe Corp. She will leverage AI to address the underrepresentation of women in cybersecurity by developing strategies to improve recruitment, retention, and participation in North America.



## Jordan Melzer

*Senior Engineer, TELUS Communications*

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Jordan Melzer is a Senior Engineer at Telus Communications. He will develop a framework to protect IoT devices and enhance network resilience, focusing on 5G private networks and IoT behavior profiling.



# Meet the 2024/25 Catalyst Fellows

## Jordan Shaw-Young

*Chief of Staff for Security Services,  
BlueVoyant*

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Jordan Shaw-Young is Chief of Staff for Security Services at BlueVoyant. He will refine an analytical framework to help early-stage tech startups make informed cybersecurity investment decisions.



## Pamela Robinson

*Professor at the School of Urban & Regional Planning,  
Toronto Metropolitan University*

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Pamela Robinson is a Professor at Toronto Metropolitan University. She will integrate cybersecurity into urban planning by enhancing awareness and collaboration among planners to ensure secure and resilient urban technologies.



## Richard Wang

*Associate Professor of Computer Science,  
Toronto Metropolitan University*

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Richard Wang is an Associate Professor of Computer Science at Toronto Metropolitan University. In his project, he aims to advance cybersecurity in computer vision technologies by developing techniques for privacy preservation, data protection, and system resilience.



# Fellowship Expectations

## 1. Producing a project that contributes to public scholarship

Catalyst Fellows from both streams will conduct original research in cybersecurity or a related field, and produce at least one public output that impacts and informs the scholarly and public debates in the arenas in which they work. These outputs could take many forms, including:

- technical or design prototype(s);
- public writing, such as long form pieces, op-eds, blog posts, or interviews;
- convenings organized and led by the fellow;
- reports or white papers;
- a website or other online resource;
- academic writing, such as a research paper.

## 2. Contributing to the intellectual life of the fellowship cohort

In addition to each fellow's research agenda, fellows will work together to actively design and participate in bi-weekly all-fellows sessions in which research and ideas are presented and discussed. They will also participate in other cohort activities, such as skill-building sessions and workshops. While engaging in both substance and process is a baseline expectation, the fellows themselves create much of what makes the fellowship program rewarding each year to address their own interests and priorities. These entrepreneurial, collaborative ventures, which are at times goal-oriented and other times experimental, ensure the dynamism of the fellowship experience and program.

## 3. Contributing to the intellectual life of the Catalyst community

Fellows will collaborate with other members of the Catalyst community, including learners in the Catalyst's training and workforce development programs, TMU students who work with the Catalyst in different research capacities, and industry partners and collaborators at peer organizations. Fellows can engage with this far-reaching network through events, listserv dialogues, joint projects, and more.

#### 4. Supervise and guide the assigned student intern

Fellows will provide their student interns with opportunities to develop learning outcomes needed in today's employment market and to build their professional portfolios. Fellows will meet regularly with their student interns throughout the fellowship period.

#### 5. Development and delivery of the fellowship program webinars

Fellows will co-create and lead two webinars that will be open to the Catalyst community and prepare subsequent reports on key cybersecurity issues/policy topics. The objective of each hour-long webinar will be to examine a challenge facing the cybersecurity community and offer insight, knowledge, and perspective from researchers, business leaders, and government officials.

*“I knew that I could contribute in a different way to continuing the conversation about inequality in cyber. And so it still hurts, in all honesty because it goes to show how much there's still to be done. And it's not just cybersecurity, it's tech in general, I would say. It's really interesting to be a part of this fellowship and actually have the support. And I'm hoping that from my project on the fellowship, it will allow me to speak at other conferences and to continue saying, 'hey, we're moving, but we're not moving fast enough.'”*

Jasbir Kooner,  
Director, Cybersecurity at Englobe Corp  
Catalyst Fellow





# How to Apply

Please submit the following:

- ☐ **A current resume**
- ☐ **A proposal that responds to the following questions (should not exceed 1500 words)**
  - What is the research you propose to conduct during the fellowship year?
  - Please detail:
    - The rationale and goals for the proposed fellowship project in cybersecurity or a related field
    - How the public output of the project will advance cybersecurity in a way that can be leveraged by multiple stakeholders, an entire sector or the public at large
    - The research methodology you will use to reach those goals; and the research methodology you will use to reach those goals
    - The plan for dissemination of at least one research output to the public. These outputs could take many forms, including:
      - technical or design prototype(s);
      - public writing, such as long form pieces, op-eds, blog posts, or interviews;
      - convening organized and led by the fellow;
      - reports or white papers;
      - a website or other online resource;
      - academic writing, such as a research paper.
    - What particular contributions do you hope to make to Catalyst participants and staff, and the broader Catalyst community?
    - How will your particular skills position you to make the contributions you describe?
- ☐ **A job description for your student intern.**

The intern job description form can be downloaded [HERE](#)

# Next Cohort Details

**Next Cohort Intake**

September 2025

**Location**

Virtual & In-Person

**Program Duration**

One year

**Time Commitment**

Part-time

**Applications Open**

February 2, 2025

**Contact**

[cybersecurecatalyst@torontomu.ca](mailto:cybersecurecatalyst@torontomu.ca)



*Rogers Cybersecure Catalyst is committed to advancing diversity and inclusion in cybersecurity, across all of its programs. The Catalyst Fellowship Program encourages applications from members of groups that have been historically underrepresented in the technology and cybersecurity sectors, including First Nations, Métis and Inuit Peoples, racialized people, persons with disabilities, people who identify as women and/or 2SLGBTQ+.*