

Job posting

N° 23019 February 16, 2023 to April 24th, 2023 Open to internal and external candidates

PROFESSOR IN THE INRS-UQO JOINT RESEARCH UNIT – CYBERSECURITY SECTOR ÉNERGIE MATÉRIAUX TÉLÉCOMMUNICATION RESEARCH CENTRE Tenure-track Position

Context and summary

The INRS Énergie Matériaux Télécommunications Research Centre (EMT) is seeking to fill one new tenure-track professor position as part of the Joint Research Unit between INRS and University of Québec in Outaouais (UQO), with a strong potential for transferring knowledge and technology to users in the cybersecurity sector.

The INRS is a graduate-level research university that has consistently ranked among the first in Canada for its research intensity. The Énergie Matériaux Télécommunications Research Centre brings together world-renowned telecommunications experts in digital technology development and other fields. EMT Centre hosts world-class facilities, unique in Canada, such as the Multimedia/Multimodal Signal Analysis and Enhancement Laboratory, Networks and Cyber Physical Systems Lab (NECPHY-Lab), the Wireless Lab, the Advanced Laser Light Source (ALLS) Laboratory, the Laboratory of Micro and Nanofabrication (LMN) and a state-of-the-art facility dedicated to time-resolved transmission electron microscopy. UQO has been active in cybersecurity for 20 years with its computer security research lab and cybersecurity graduate training, which is being expanded into a bachelor's program in cybersecurity.

The INRS-UQO Joint Research Unit in Cybersecurity is located on UQO's Gatineau campus, near the National Capital Region, and is part of Connexité, Gatineau's innovation zone project designed to spur technological and social innovation in the fields of cybersecurity, digital identity, and digital wellness.

The selected candidate that accepts the offer will be given the support to apply and compete internally for a Tier 2 Canada Research Chair as well as for Canada Foundation for Innovation (CFI) infrastructure support – John R. Evans Leaders Fund - to establish his/her research lab.

The successful applicant will join a staff of some 40 professor-researchers who undertake research and provide training (MSc, PhD, and postdoc) in various fields such as telecommunication systems, multimedia signal processing and analysis, artificial intelligence, ultrafast science and photonics, advanced materials, sustainable energy, environmental solutions, and nanobiotechnology.

Main duties and responsibilities

- Establish an independent and innovative research program in cybersecurity related topics;
- Secure funding for the research program through public and private grants and industry partnerships when required;
- Establish collaborations with existing research teams at the EMT Research Centre and UQO and develop or maintain partnerships with outside groups;
- Provide training and education, particularly in relation to graduate programs and the supervision of post-doctoral fellows and research staff;
- Willingness to develop and collaborate to interdisciplinary research projects on cybersecurity and its social impacts.



Requirements

- Candidates are anticipated to have a PhD in computer science, electrical engineering, computer engineering, or a related field;
- They will need to demonstrate their potential to build an original and funded research program in the field of cybersecurity;
- Candidates must also demonstrate how they can utilize their expertise to strengthen collaborative research with existing faculty at the EMT Research Centre and UQO;
- Experience and/or skills in teaching and supervising graduate students and postdoctoral fellows;
- Candidates with the following (non-exclusive) fields of expertise are being sought: privacy and data security; network security, cyber-physical systems and embedded systems security; IoT, blockchain, and cloud/fog computing security; cybersecurity, artificial intelligence, and autonomous cybersecurity systems; and quantum and post-quantum cryptography.
- Applicants in other fields of cybersecurity are strongly encouraged to apply.

Working language

French is the working language. Advanced knowledge of English is crucial. Applicants who are not fully fluent in French are strongly encouraged to apply. The necessary resources will be put at their disposal to help them learn French.

Workplace

UQO Gatineau Campus Pavillon Lucien-Brault 101, rue Saint-Jean-Bosco Gatineau (Québec) Canada J8Y 3G5

Salary and benefits

In accordance with the collective agreement in effect at INRS. Parental leaves are supported both institutionally and by government programs.

How to apply

Interested candidates should send their application from INRS Web Site before **April 24, 2023**, including:

- a brief letter of interest;
- a complete curriculum vitae;
- a copy of their three most significant publications;
- a description of their current and proposed research (maximum 4 pages including references);
- an overview describing their experience and their philosophy of supervision and teaching (maximum 1 page);
- the names and contact information of three references.

Incomplete applications will not be considered. Any additional documents that cannot be transmitted electronically but are necessary to complete your application should be sent by mail to the following address:



Director Institut national de la recherche scientifique Énergie Matériaux Télécommunications Research Centre 1650, boul. Lionel-Boulet Varennes (Québec) Canada J3X 1P7

INRS is committed to promote equity, diversity and inclusion and invites all qualified candidate to apply, including women, members of visible and ethnic minorities, Indigenous persons and persons with disabilities, in relation to the Equal access to employment programs. However, Canadian and Permanent Residents will be given priority.

Selection tools can be adapted to the needs of persons with disabilities throughout the recruitment process. If you anticipate requiring adaptive measures, or for any questions concerning equity, diversity and inclusion at INRS, please contact <u>edi@inrs.ca.</u>

INRS also asks its selection committees to take account of career interruptions and special circumstances when reviewing applications. Applicants are therefore invited to indicate the nature of these interruptions or special circumstances in their cover letter.