Open Positions: PhD and MASc, Information Systems Security, Concordia University

Multiple PhD and MASc student positions are available at the Concordia University (Canada). The hired students will work on emerging topics of cybersecurity operations using artificial intelligence with the researchers from the <u>Security Research Centre</u> at Concordia.

Program

PhD in Information and Systems Engineering MASc in Information Systems Security

Department

Concordia Institute for Information Systems Engineering

Brief Description of Duties and Expertise

The Security Research Centre (SRC) at Concordia University is looking for strong candidates at the Master's and PhD levels to in the investigation of innovative and automated cybersecurity solutions for modern security operation centers and incident response teams. Upon mutual acceptance, the candidate will work with an outstanding R&D team – led by three research chairs at the Concordia Security Research Center – and a key partner to assist in designing, validating, and integrating the proposed solutions. The responsibilities also include attending regular R&D meetings, supporting knowledge transfers, and writing high-quality research articles.

Qualifications

- For Master's students: Bachelor's degree in Computer Science, Software Engineering, Computer Engineering, Information Systems Engineering, or equivalent.
- For PhD students: Master's degree in Computer Science, Software Engineering, Computer Engineering, Information Systems Engineering, or equivalent. Outstanding Bachelor's students with an exceptional background may also be considered.
- Current MEng students with a CGPA of 3.85/4.30 or higher are also encouraged to apply for the Master's and/or PhD positions. Successful applicants can be transferred to the thesis-based program under co-supervision of the Pls.
- Experience with AI/ML and software development (MLOps/MLDevOps).
- Knowledgeable in cyber security, cloud computing, and/or machine learning.
- Strong ability in problem-solving and critical thinking.
- Excellent communication skills. Proficiency in French will be an asset.

Principal Investigators (PIs)

Dr. Mourad Debbabi, Dr. Suryadipta Majumdar, and Dr. Jun Yan

Application Instructions

Interested applicants who meet the qualifications should submit their curriculum vitae by email to mourad.debbabi@concordia.ca and copy suryadipta.majumdar@concordia.ca and jun.yan@concordia.ca.

This posting will remain active until the successful applicant is selected. We thank all the applicants, but only the selected candidates will be contacted for an interview.

Concordia University is committed to Employment Equity and encourages applications from women, Aboriginal Peoples, visible minorities, ethnic minorities, and persons with disabilities.

All qualified candidates are encouraged to apply; however, Canadian and Permanent Residents will be given priority. To comply with the Government of Canada's reporting requirements, the University is obliged to gather information about applicants' status as either Permanent Residents of Canada or Canadian citizens. While applicants need not identify their country of origin or current citizenship, all applications must include one of the following statements:

Yes, I am a citizen or permanent resident of Canada.

or

No, I am not a citizen or permanent resident of Canada.

About Our Research Group

Our group is interested in solving important research problems and building practical security systems leveraging cutting edge AI/ML techniques. This group is part of the Security Research Center at Concordia. We mainly publish our research work at top-tier research conferences (e.g., NDSS, CCS, ESORICS) and journals (IEEE TDSC, IEEE TIFS, and ACM TOPS).

About the CIISE Department and Concordia University

The Concordia Institute for Information Systems Engineering (CIISE) has a faculty complement of 24 professors, including eight internal and external research chairs, active in various areas of Information Systems Engineering, Information Systems Security, and Quality Systems Engineering. The Institute is dedicated to multidisciplinary research and training of graduate students. For more information about the institute, please visit: concordia.ca/ciise. Concordia University is recognized as Canada's top university under the age of 50 and one of the most international universities in the world. Ambitious, innovative, research- and community-engaged, our university is celebrated for its commitments to transformative learning, convergent thinking and public impact. Concordia supports teaching, learning and research by its commitment to sustaining excellence, inclusion, and opportunity for the entire academic community. For more information about the university, please visit: concordia.ca.

About Montréal

Montréal, our home, is exceptional. It is a truly unique city — safe and clean, vibrant and diverse, with new things to discover around every corner. Another reason people flock to Montreal is because it is an affordable city. With a diverse population of 1.7 million, it is home to four major universities and several clinical research centres, and has been named the best student city in the world. The city is home to over 170,000 university students, a thriving multicultural scene and the most affordable tuition in Canada.