

Career Opportunities

Tenure Track Tier 2 Canada Research Chair (CRC) Faculty Position in Computer Engineering (Artificial Intelligence & Machine Learning for Cybersecurity)

FEAS, Elect., Comp. Biomed. Eng

Posted: September 12, 2018
Deadline to Apply: Friday, November 30, 2018

Tenure Track Tier 2 Canada Research Chair (CRC) Faculty Position in Computer Engineering (Artificial Intelligence & Machine Learning for Cybersecurity)

Located in the heart of downtown Toronto, the largest and most culturally diverse city in Canada, Ryerson University is known for innovative programs built on the integration of theoretical and practical learning. Our undergraduate and graduate programs are distinguished by a professionally focused curriculum with a strong emphasis on excellence in teaching, scholarly, research and creative activities. Ryerson is also a leader in adult learning, with the largest university-based continuing education school in Canada, and Ryerson engineering is ranked among the Top 10 engineering schools in Canada by *Maclean's* and *US News*.

CANADA RESEARCH CHAIR (CRC) NSERC Tier 2 in Computer Engineering (Cybersecurity)

Position Requirements:

The Department of Electrical, Computer, & Biomedical Engineering in the Faculty of Engineering and Architectural Science at Ryerson University invites applications for a full-time **tenure-track Canada Research Chair (Tier 2) position in Computer Engineering**, at the **Assistant Professor** level, subject to final budgetary approval and a successful nomination to the Canada Research Chairs Program. The successful candidate will develop, with Ryerson University, the CRC nomination package for the April 2019 deadline, with the goal of being awarded the Tier 2 CRC in October 2019 with start date at the university to follow.

Candidates **must** have a Ph.D. degree in Computer Engineering, Electrical Engineering, or related disciplines. In addition, to be eligible for strong consideration the successful candidate must:

- Demonstrate expertise in Cybersecurity with a strong emphasis on the intersection of Artificial Intelligence and Machine Learning as it applies to Cybersecurity;
- Demonstrate a research focus in areas such as cyber-attacks, authentication, fraud detection, power grid security, network monitoring and security among others;
- Propose an original innovative research program of high quality that has the potential to achieve international recognition in the field;
- Demonstrate experience in undergraduate course development and teaching and the ability to effectively teach key Computer Engineering program courses;
- Strong emerging research profile that demonstrates creativity and evidence of impact, such as peer reviewed publications/contributions, patents, public policy contributions, quick-print reports, book chapters and similar contributions;
- Demonstrate ability to establish and maintain an independent, externally funded research program, including participation in industry partnerships, group grants and/or ability to attract multi-center grants;
- Demonstrate commitment to equity, diversity and inclusion in teaching and research, including recruiting, mentoring and supporting diverse students and research trainees from underrepresented groups such as women, persons with disabilities and Indigenous and 2SLGBTQ+ people;
- Demonstrate the ability to participate in leadership activities in collegial internal and external service;
- Have the potential to attract diverse world class collaborators.

Ryerson recognizes that scholars have varying career paths and that career interruptions can be part of an excellent academic record. Candidates are encouraged to provide any relevant information about their experience and/or career interruptions to allow for a fair assessment of their application. Search committee members have been instructed to give careful consideration to diverse experiences and knowledges, and be sensitive to the impact of career interruptions in their assessments.

Tier 2 Canada Research Chairs are intended for exceptional emerging scholars (i.e., candidates must have been an active researcher in their field for fewer than 10 years at the time of nomination). Applicants who are more than 10 years from having earned their highest degree (and where career breaks exist, such as maternity, parental or extended sick leave, clinical training, etc.) may have their eligibility for a Tier 2 chair assessed through the program's [Tier 2 justification process](#). Please contact the research office by sending an email to ovpri@ryerson.ca with "Tier 2 Justification" in the title. To meet the criteria of the CRC program, candidates must demonstrate potential to achieve international recognition in their fields in the next five to ten years, as well as capacity as chair holders to attract, develop and retain excellent trainees, students and future researchers. Accordingly, candidates shall be assessed for excellent emerging world-class research of high quality that is original, innovative and particularly creative. All Chairs are subject to review and final approval by the CRC Secretariat. Please consult the [Canada Research Chairs website](#) for more information about the CRC program and eligibility.

Professional Engineering (P.Eng.) registration in the province of Ontario (or eligibility to register) is a necessary condition for appointment. Please clearly indicate your status or eligibility.

Department of Electrical, Computer, & Biomedical Engineering:

The Department currently has 43 full-time faculty members, 14 support staff members, over 1100 undergraduate students pursuing bachelor of engineering degrees in Electrical Engineering, Computer Engineering, and Biomedical Engineering, as well as over 300 graduate students enrolled in M.A.Sc., M.Eng., and Ph.D. programs. The faculty members of the Department are engaged in research over a broad spectrum of electrical, computer, and biomedical engineering that includes the following:

digital signal processing, multimedia, integrated circuits, microsystems, biomedical signal processing, bioinformatics, control systems, robotics, computer architecture, computer networks, digital communications, embedded systems, electromagnetics, wireless sensor networks, wireless and optical communications, power electronics and power systems. The 2017 Performance Ranking of Scientific Papers for World Universities (also known as NTU Ranking) ranked Ryerson's Electrical & Computer Engineering Department among the Top 10 in Canada and 148th in the world, with citation impact ranking 4th in Canada and 115th in the world. This is a testament to the caliber of our faculty. Specifically, the department is home to three fellows of the Canadian Academy of Engineering, two IEEE Fellows, one 3M Teaching Fellow, one NSERC Industrial Research Chair, one Canada Research Chair, and many other faculty members who have distinguished themselves with various prestigious awards including Premier Research Excellence awards, Ryerson Research Chair awards, FEAS research/teaching excellence awards and investments/grants from CFI, MRI, OCE, NSERC, CIHR, CHRP, and industry. More information can be found at: <http://www.ecb.ryerson.ca/crc>.

How to Apply:

All qualified candidates are invited to apply by **November 30, 2018**. The application must contain the following:

- letter of application discussing your interest in the position, and telling us what you would bring to our department and the Faculty of Engineering and Architectural Science; tell us briefly about the impact on the field of Computer Engineering (AI, Machine Learning for Cybersecurity) that you foresee for your research (your 3-page research statement can discuss that in more detail), and what makes you a strong candidate overall as a researcher, teacher, and community member to join Ryerson University;
- current curriculum vitae giving the committee a clear sense of your scholarly and professional development via your education and your research activities and outcomes; please also indicate all your contributions to making computer science a more equitable and inclusive discipline—through committee work, community engagement, social media, and advocacy;
- research statement discussing the significance, originality, and potential impacts of your current and developing research program (up to 3 pages);
- recent examples of research activities and outcomes including but not limited to: conference presentations, peer-reviewed publications, public talks, articles reaching specialist and non-specialist audiences, effective use of social media for research impact and networking;
- teaching statement (up to 3 pages), and a dossier of syllabi and other evidence, if available. These must demonstrate how you engage, encourage, and develop the learning capacity of students entering higher education from a diverse array of backgrounds. How do you embed practices and principles of equity, diversity and inclusion in your classroom, your assignments, and your classroom style;
- the names and email contact information for three academic referees who know you and your research well.

Please CLEARLY indicate in your application if you are a Canadian Citizen or a permanent resident of Canada.

Applicants can visit <http://hire.ecb.ryerson.ca/crc/> to apply.

Equity at Ryerson University:

At the intersection of mind and action, Ryerson is on a transformative path to become Canada's leading comprehensive innovation university. Integral to this path is the placement of equity, diversity and inclusion as fundamental to our institutional culture. Our current academic plan outlines each as core values and we work to embed them in all that we do.

It is critical to Ryerson's success to remove barriers and correct the conditions of disadvantage in Canada for under-represented groups. For this reason, by separate communication we will be inviting all applicants to voluntarily complete an online Diversity Self-ID questionnaire. The information collected will remain confidential. The communication will provide details on who will have access to the data and how it will be used.

Aboriginal candidates who would like to learn more about working at Ryerson University are welcome to contact Ms. Tracey King, M.Ed., Aboriginal HR Consultant, Aboriginal Recruitment and Retention Initiative, at t26king@ryerson.ca.

Ryerson is committed to accessibility for persons with disabilities. To find out more about our Access Ryerson initiative, and plans, policies and resources, please visit our Accessibility website - <https://www.ryerson.ca/accessibility/>. We want to ensure that all participants are able to engage fully in interviews and other activities that are part of the process. If you have any accommodation requests, please contact Melissa Rotundo, Sr. HR Consultant at mjrotund@ryerson.ca. All requests for accommodation will be treated confidentially.

Ryerson University welcomes those who have demonstrated a commitment to upholding the values of equity, diversity, and inclusion and will assist us to expand our capacity for diversity in the broadest sense. We encourage applications from First Nations, Metis and Inuit peoples, Indigenous peoples of North America, racialized persons, persons with disabilities, and those who identify as women and/or 2SLGBTQ+ people. It is critical to Ryerson's success to remove barriers and correct the conditions of disadvantage in Canada for under-represented groups. For this reason, by separate email communication we will be inviting all applicants to complete voluntarily an online Diversity Self-ID questionnaire. The information collected will remain confidential; the communication will provide details on who will have access to the data and how it will be used.

Please note that all qualified candidates are encouraged to apply; however, applications from Canadians and permanent residents will be given priority.

As an employer, we are working towards a people first culture and are proud to have been selected as one of Canada's Best Diversity Employers and a Greater Toronto's Top Employer for 2015, 2016 and 2017. To learn more about our work environment, colleagues, leaders, students and innovative educational environment, visit www.ryerson.ca, check out [@RyersonU](#), [@RyersonHR](#) and [@RyersonECI](#) on Twitter, and visit our [LinkedIn company page](#).

This position falls under the jurisdiction of the Ryerson Faculty Association (RFA) (www.rfanet.ca).

The RFA collective agreement can be viewed at: <http://bit.ly/2yRPeF6> and a full summary of RFA benefits can be found at: <http://bit.ly/2ha7X5j>

Ryerson University is strongly committed to fostering diversity within our community. We welcome those who would contribute to the further diversification of our staff, our faculty and its scholarship including, but not limited to, women, visible minorities, Aboriginal people, persons with disabilities, and persons of any sexual orientation or gender identity. Please note that all qualified candidates are encouraged to apply but applications from Canadians and permanent residents will be given priority.

[Faculty Job Postings](#)