Career Opportunities

NSERC Canada Research Chair (CRC) in "Artificial Intelligence and Machine Learning" Tier 1 or Tier 2 according to experience and eligibility

Vice Pres., Research & Innov.

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Deadline to Apply: Monday, April 30, 2018

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. Ryerson is located in the downtown core of Toronto, Ontario, where research into Artificial Intelligence and Machine Learning has an immediate impact.

Artificial Intelligence is defined as the capability of a machine to imitate intelligent human behaviour, an artificial creation of human-like intelligence that can learn, reason, plan, perceive, or process natural language. Machine learning is a particular approach to Artificial Intelligence, which makes use of learning algorithms that make inferences from data to learn new tasks. Examples of applications of this approach are transportation and Smart Cities, Cyber Security, Biomedical applications such as imaging, logistics in supply chain management, virtual and augmented reality, and core engineering problems to produce better predictions.

The Opportunity

Ryerson University invites applications for a Natural Sciences and Engineering Research Council (NSERC) Tier 1 or Tier 2 Canada Research Chair (CRC) in "Artificial Intelligence and Machine Learning". Tier level will be determined according to the candidate's experience and eligibility.

The selected candidate will be nominated by Ryerson University to apply for the Government of Canada's CRC Program. Appointment with the University is conditional upon the successful award of a CRC to the candidate.

The successful candidate will be appointed at the Assistant, Associate or Full Professor level, and will develop, with Ryerson University, the CRC application for the October 2018 deadline, with the goal of being appointed as a CRC by July 2019. This position is subject to final budgetary approval. The successful nominee must be approved by CRC and will be offered a tenure track position in the appropriate academic unit(s) that will best fit their expertise.

To meet the criteria of the CRC Program, **Tier 1 nominees** must be outstanding and innovative world-class researchers whose accomplishments have made a major impact in their fields; be recognized internationally as leaders in their fields; have superior records of attracting and supervising graduate students and postdoctoral fellows (taking into account different practices in the relevant field or discipline) and, as chairholders, be expected to attract, develop and retain excellent diverse trainees, students and future researchers; and be proposing an original, innovative research program of the highest quality.

To meet the criteria of the CRC program, **Tier 2 nominees** must be excellent emerging worldclass researchers who have demonstrated particular research creativity; have demonstrated the potential to achieve international recognition in their fields in the next five to ten years; as chairholders, have the potential to attract, develop and retain excellent diverse trainees, students and future researchers; and be proposing an original, innovative research program of high quality.

Tier 2 Chairs are for emerging researchers (individuals who are no more than 10 years from having earned their highest degree). However, career interruptions (e.g. maternity or parental leave, extended sick leave, clinical training, family care, etc.) may be taken into consideration using the Tier 2 justification process to review the candidate's eligibility. Potential applicants who are more than 10 years from their highest degree with career interruptions may contact the institution to have their eligibility reviewed through the Tier 2 justification process. Please contact Ryerson's Research Office by sending an email to vpri@ryerson.ca with "Tier 2 Justification" in the title. The eligibility conditions for the CRC chairs are found at http://www.chairschaires.gc.ca/program-programme/nomination-mise_en_candidature-eng.aspx#s3.

Responsibilities

Responsibilities will include building a research program that develops a critical mass of excellent research in the area, shows potential for interdisciplinary and collaborative research and capacity for growth of Graduate Programs at Ryerson; teaching and supervising at the undergraduate and graduate levels; and engagement in collegial service.

Qualifications

Candidates must have a demonstrated commitment to upholding the values of Equity, Diversity, and Inclusion as it pertains to service, teaching, and scholarly, research or creative activities and will be expected to demonstrate their ability to work with a diverse student population. Candidates shall hold a strong research profile (e.g., evidence of an emerging scholarly record, ability to establish and maintain an independent, externally funded research program), evidence of highquality teaching and student training, and a capacity for collegial service.

The following are expectations of an ideal candidate for the position:

- A PhD in Computer Science, Computer and Electrical Engineering, Mechanical and
- Industrial Engineering, Mathematics, or a related field;
- Demonstrated expertise in Artificial Intelligence and Machine Learning and/or applications of Artificial Intelligence and Machine Learning;
- Strong research profile with evidence of peer reviewed publications/contributions and external grants (and/or participation in group grants and/or ability to attract multi-center grants) of an internationally competitive caliber; evidence of commitment to equity, diversity and inclusion in their research;

- Strong record of effective student research training which demonstrates how the candidate upholds the values of equity, diversity and inclusion in such training and team building;

- Demonstrated ability to establish and maintain an independent, externally funded research program;

- Evidence of research collaborations or strong potential/ability to attract industrial collaborative initiatives; demonstrated attention to equity, diversity and inclusion in those collaborations or initiatives; and

- Demonstrated experience in undergraduate course development and teaching. Demonstrated ability to effectively teach key fundamentals of Artificial Intelligence and Machine Learning.

Equity at Ryerson University
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. In addition, to correct the conditions of disadvantage in employment in Canada, we encourage applications from members of groups that have been historically disadvantaged and marginalized, including 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+. 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 @RyersonEDI on Twitter, and visit our LinkedIn company page.

How to apply?
All applicants are invited to apply by emailing ai@ryerson.ca The application must contain the following:
- A letter of application and curriculum vitae

- Three (3) recent research publications

- Teaching Dossier

- The names of at least 3 individuals who may be contacted for reference letters.

Ryerson recognizes the potential impact that legitimate career interruptions can have on a candidate's record of research achievement. Potential candidates are encouraged to explain within their application the impact that career interruptions have had on their record.

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

Applications and any confidential inquiries can be directed to ai@ryerson.ca The deadline to apply is April 23rd.

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. ai@ryerson.ca

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.

This position falls under the jurisdiction of the Ryerson Faculty Association (RFA).
- The RFA collective agreement can be viewed at:https://www.ryerson.ca/content/dam/faculty-affairs/rfa-collectiveagreement/RFA_CA_2015_to_2018.pdf

- The RFA's website can be found at: www.rfanet.ca.

- A summary of RFA benefits can be found at: https://www.ryerson.ca/hr/employeeresources/rfa/full-time-LTF/benefits/ *LI-JC1

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.