

Tier 1 Canada Research Chair in Applied Artificial Intelligence

Department of Electrical and Computer Engineering
Ingenuity Labs Research Institute
Faculty of Engineering and Applied Science
Queen's University at Kingston

October 2021

Queen's University is situated on traditional Anishinaabe and Haudenosaunee Territory.

The Department of Electrical and Computer Engineering in the Faculty of Engineering and Applied Science at Queen's University invites applications for a **Tenured faculty position at the rank of Associate Professor or Professor with specialization in applied AI for intelligent systems with expertise in the software and/or computer engineering domain.** Example research areas include smart infrastructure or devices for human computer interactions, AI for cyber-physical systems, AI for cybersecurity, or other relevant emerging applications. The successful candidate will be nominated and submit an application for a seven-year term position as a Tier 1 Canada Research Chair, eligible for renewal once, to a maximum of two seven year terms as a Tier 1 Canada Research Chair. The preferred start date for this faculty position is July 1, 2022.

This appointment is open only to qualified individuals who self-identify as women¹. We welcome and support applications from such candidates who also identify as members of other equity-deserving groups, i.e. Indigenous/Aboriginal peoples, persons with disabilities, racialized/visible minorities, and members of 2SLGBTQ+ communities.

Queen's University is committed to academic and research excellence while advancing inquiry to solve problems and promoting a more equitable, diverse and inclusive research enterprise. To fully realize this, we must ensure that we have diversity of perspective and experiences to boldly take on societal, cultural and environmental challenges. Queen's University has an employment equity program that meets the goals of the Canada Research Chairs program and the requirements of our collective agreement with the Faculty Association. Until such time as we have met our Canada Research Chairs Program equity targets (<http://queensu.ca/vpr/prizes-awards-chairs/canada-research-chairs-program-crcp>), preference will be given to members of the Four Designated Groups under the Canada Research Chairs program: women, Indigenous/Aboriginal peoples, persons with disabilities and racialized persons/visible minorities. **This appointment is open only to qualified individuals who self- identify as women.** All applicants will be invited to self-identify once they have applied. Self-identification information will be held in confidence by the Human Rights and Equity Office and one specially trained member of the selection committee. All qualified candidates are encouraged to apply;

¹ "Women" is used because the CRC Program currently employs the categories of the four federally designated groups (FDG) - Women, Indigenous Peoples, Persons with Disabilities, and Members of Visible Minorities - to monitor progress towards meeting equity goals. Queen's has an under-representation of women among Tier 1 Chairholders. The Tri-Agency Institutional Programs Secretariat (TIPS) has established targets for CRC representation, with staggered deadlines for meeting targets between the period of 2020 to 2029. This initiative follows the provisions for a special program as described by the Ontario Human Rights Commission.

however, in accordance with Canadian Immigration requirements, Canadian citizens and Permanent Residents of Canada will be given priority.

Canada Research Chairs were established as part of a national strategy to foster research excellence (www.chairs-chaieres.gc.ca). The successful candidate must submit an external application to the Tri-agency Institutional Program Secretariat that meets the requirements for the successful nomination of Tier 1 Chair as defined by the Canada Research Chairs Program:

- 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 trainees, students and future researchers; and
- be proposing an original, innovative research program of the highest quality.

Your Career with Queen's Engineering

Among our top priorities in the Faculty of Engineering and Applied Science is providing opportunities for early career academics to develop distinguished research and exceptional teaching contributions while fostering an environment where all faculty can thrive. To promote on-going success, there is support for course development and delivery that is provided by the Department, the Queen's Centre for Teaching and Learning, and the Faculty of Engineering and Applied Science. Faculty have access to a range of educational technologies including industry-leading instructional design support offered through the [Engineering Teaching and Learning Team](#). Support for faculty to develop strong research programs includes Special Research Grant opportunities, grant writing workshops and review services, and one-to-one mentorship from experienced colleagues. Queen's Engineering is also committed to increasing the proportion of women in engineering, supported by the recent establishment of [a Chair for Women in Engineering](#).

Queen's University is one of Canada's leading research-intensive universities with a global reputation and is a recognized leader in Canadian higher education. Queen's brings together and builds synergies among leading researchers, scholars and innovators making a real and measured impact. The interdisciplinary nature of our faculty's research expertise is exemplified through [seven innovative research centres, institutes, and major differentiating research facilities](#). These innovation hubs are designed to support collaborative discovery and mentoring, facilitating research innovation for FEAS faculty, students and colleagues across the university. The [Ingenuity Labs Research Institute](#), which brings together researchers from across the campus whose research programs span the fields of artificial intelligence and machine learning to robot control, smart sensors, and mechatronic devices.

The Department of Electrical and Computer Engineering has 32 full-time and 6 cross-appointed faculty, 852 undergraduate students, and 180 graduate students. The Department offers undergraduate, Master's, and Doctoral Programs in Electrical Engineering and Computer Engineering and it offers a unique entrepreneurial engineering program referred to as the ECE Innovation Stream, ECEi. The Department of Electrical and Computer Engineering is home to the [Queen's Centre for Energy and Power Electronics Research \(ePOWER\)](#) and it has connections to a number of multi-disciplinary Centres such as [CMC Microsystems](#), [Nanofabrication Kingston](#), [Human Mobility Research Centre](#), [Green Centre Canada](#), [Innovation Park](#), and the [Dunin-Deshpande Queen's Innovation Connector](#).

Criteria:

The successful candidate must have a PhD in Computer Engineering, Electrical Engineering or a related discipline.

The main criteria for selection are:

- evidence of research and teaching excellence;
- ability to provide evidence of high quality scholarly output in their field as well as outstanding teaching contributions at both the undergraduate and graduate levels;
- an ongoing commitment to academic and pedagogical excellence in support of the Department's programs;
- Professional engineering licensure in Canada, or the eligibility to obtain licensure, is a requirement. Note that all forms of engineering licensure in Canada are considered acceptable (e.g. P.Eng., temporary engineering license, provisional engineering license, etc.).
- Demonstrated commitment to professional leadership and an ability to work collaboratively in an interdisciplinary environment.

The successful candidate will also be expected to make contributions through service to the Department, the Faculty, the University, and/or the broader community. Salary will be commensurate with qualifications and experience.

Queen's University Commitment to Equity, Diversity and Inclusion.

Within the Faculty of Engineering and Applied Science, innovation thrives with new perspectives and experiences, and the diversity of our workforce enhances our research and teaching excellence. People from across Canada and around the world come to learn, teach and carry out research at Queen's University. With foundational values of collaboration, respect and diversity, we are committed to embracing an inclusive environment and supporting each member of our community to reach their fullest potential. Ranking 1st in Canada and 5th in the World in the 2021 Times Higher Education Impact Rankings, Queen's is committed to advancing the United Nations Sustainable Development Goals. We encourage those who share our commitments to diversity and inclusion to join our Faculty.

The University is situated on the traditional territories of the Haudenosaunee and Anishinaabe, in historic Kingston on the shores of Lake Ontario. Kingston's residents enjoy an outstanding quality of life with a wide range of cultural, recreational, and creative opportunities. Visit [Inclusive Queen's](#) for information on equity, diversity and inclusion resources and initiatives.

Faculty and their dependents are eligible for an extensive benefits package including prescription drug coverage, vision care, dental care, long term disability insurance, life insurance and access to the Employee and Family Assistance Program. You will also participate in a pension plan. Tuition assistance is available for qualifying employees, their spouses and dependent children. Queen's values families and is pleased to provide a 'top up' to government parental leave benefits for eligible employees on maternity/parental leave. In addition, Queen's provides partial reimbursement for eligible daycare expenses for employees with dependent children in daycare. Details are set out in the Queen's-QUFA Collective Agreement. For more information on employee benefits, see [Queen's Human Resources](#).

Additional information about Queen's University can be found on the [Faculty Recruitment and Support](#) website.

To comply with federal laws, the University is obliged to gather statistical information as to how many applicants for each job vacancy are Canadian citizens / permanent residents of Canada. Applicants need not identify their country of origin or citizenship; however, all applications must include one of the following statements: "I am a Canadian citizen / permanent resident of

Canada”; OR, “I am not a Canadian citizen / permanent resident of Canada”. Applications that do not include this information will be deemed incomplete.

In addition, the impact of certain circumstances that may legitimately affect a nominee’s record of research achievement will be given careful consideration when assessing the nominee’s research productivity. Candidates are encouraged to provide any relevant information about their experience and/or [career interruptions](#).

A complete application consists of:

- a cover letter (including one of the two statements regarding Canadian citizenship / permanent resident status specified in the previous paragraph);
- a current Curriculum Vitae that includes a comprehensive list of publications (with supervised students on publications clearly identified), awards, and grants received;
- a statement of research interests and achievements;
- a statement of teaching interests and experience (including teaching outlines and evaluations if available); and,
- a statement identifying their strengths and experiences with respect to increasing equity, diversity, and inclusion in their institutional environment
- the contact information for three references.

The deadline for applications is **January 15, 2022**; however, applications will continue to be reviewed until the position is filled. Applicants are encouraged to send all documents in their application packages electronically as PDFs to the Department Head, Prof. Carlos Saavedra, at ece-search@queensu.ca, although hard copy applications may be submitted to:

Prof. Carlos Saavedra, Department Head
c/o Shelly Stilson
Electrical and Computer Engineering
Walter Light Hall, Room 416
19 Union Street
Kingston, ON K7L 3N6
Canada

The University will provide support in its recruitment processes to applicants with disabilities, including accommodation that takes into account an applicant’s accessibility needs. If you require accommodation during the interview process, please contact Shelly Stilson in the Department of Electrical and Computer Engineering, at ece-search@queensu.ca

Academic staff at Queen’s University are governed by a [Collective Agreement](#) between the University and the [Queen’s University Faculty Association \(QUFA\)](#), which is posted at <http://queensu.ca/facultyrelations/faculty-librarians-and-archivists/collective-agreement> and at <http://www.qufa.ca>.

Appointments are subject to review and final approval by the Provost. Only nominees external to Queen’s University will be considered. (Please note that, for the purposes of this competition, Queen’s Term Adjuncts and Adjunct-1s will be considered as external nominees).