

Academic Unit:	Systems and Computer Engineering
Category of Appointment:	Preliminary (Tenure-Track), CRC Tier II
Field of Specialization:	Model-driven System and Software Engineering
Rank/Position Title:	Assistant or Associate Professor
Start Date:	July 1, 2018
Closing Date:	Until Filled

About the Position:

The Department of Systems and Computer Engineering invites applications from qualified candidates for a Canada Research Chair (CRC) Tier 2 appointment in the field of model-driven system and software engineering at the rank of Assistant or Associate Professor beginning on July 1, 2018.

The candidate must have a demonstrated strong research capability in the field of model-driven system and software engineering, which offers the benefit of managing complexity by working at a higher level of abstraction and automatically generating code or other software artifacts from models. Their research record must include expertise in one or more fundamental issues defining the field, such as languages and techniques for model specification and interchange, model-driven development, model transformation, model quality, verification and validation, model management, model evolution, modeling in the large, using one or more of the following technologies : UML, SysML, AADL, Autosar, Block diagrams, Simulink, Lustre, etc. The successful candidate will have the opportunity to establish collaborative research associated with other academic units on campus that are interested in applying model-driven techniques to systems and software in different application domains, such as avionics and aerospace, automotive, robotics, cyber-physical systems, transportation systems, telecommunications, internet of things, data analytics.

We encourage applicants possessing leadership qualities and strong interpersonal skills who are eager to develop and lead a strong, externally funded, visible, innovative, and internationally recognized research program to apply. The chair is expected to attract significant funding from government and industrial partners as well as have a strong ability to supervise graduate students at the doctoral and masters level.

Candidates with a demonstrated commitment to excellence in teaching at both undergraduate and graduate levels are invited to apply. In addition to supervising students at the Master's and Doctoral levels, successful candidates will deliver courses on model-driven system and software engineering, mentoring undergraduate students and supervising capstone projects, as well as delivering graduate courses.

The candidate is expected to contribute to efforts in program improvement, including curriculum development, accreditation, and quality assurance reviews. In our quest to provide the best possible training opportunities for both our undergraduate and graduate students, we will consider favorably candidates with an interest in innovative teaching methods, in collaborative and interdisciplinary approaches to scientific research, with aptitudes for building bridges with community, industry, and government agencies.

In fulfilling the position's obligations towards teaching, research, and University service, the successful candidate is expected to play an active role in continuing to grow Carleton University's reputation and

capacity for teaching and research in model-driven system and software engineering. The candidate is expected to have a desire to promote interest in young people, particularly those in underrepresented groups, in a technical, engineering career

Tier 2 Chairs are intended for exceptional emerging researchers (i.e. candidate will typically be less than 10 years from their highest degree at the time of nomination, or more than 10 years and has experienced legitimate career interruptions), acknowledged by their peers as having potential to lead in their field. Applicants who are more than 10 years from their highest degree may have their eligibility for a Tier 2 Canada Research Chair assessed through the program's Tier 2 justification process. Please see the CRC website at <http://www.chairs-chaire.gc.ca/> for details and consult the website for full program information, including further details on eligibility criteria.

About the Academic Unit:

The Department of Systems and Computer Engineering is a research-intensive department and hosts a large and active community of faculty members, instructors, and undergraduate and graduate students. The Department participates in a broad range of undergraduate and graduate programs covering the Electrical and Computer Engineering spectrum, including accredited Bachelor of Engineering degrees in Software Engineering, Computer Systems Engineering, Communication Engineering, Biomedical and Electrical Engineering, Electrical Engineering, and Ph.D., M.A.Sc. (Masters of Applied Science) and M.Eng. (Master of Engineering) degrees in Electrical and Computer Engineering and in Biomedical Engineering. The graduate programs are part of the Ottawa-Carleton Institutes for Electrical and Computer Engineering and Biomedical Engineering. Full advantage is taken of the high concentration of industry, government, and university technology organizations in the Ottawa area. For more information about the Department, please visit: <http://carleton.ca/sce/>.

Qualifications:

The candidate must have a Ph.D. degree in Electrical and Computer Engineering, in Computer Science or the equivalent. The candidate must show membership in a Canadian professional engineering association, or evidence that membership in such an association can be secured according to the accreditation criteria and procedures set by the Canadian Engineering Accreditation Board.

The successful candidate will be expected to demonstrate excellence in research and teaching of Computer and Software Engineering courses at both the undergraduate and graduate levels.

Application Instructions:

Applicants should send one PDF document that includes: a cover letter, a curriculum vitae (including a list of publications), a five-year research plan, a teaching dossier, and the names of three referees. The statement should describe how the applicant's experience will contribute to the department's mission, including, their research record, teaching philosophy, pedagogical approaches, teaching content, mentoring and recruiting activities, community engagement, and experience working with diverse communities. Applications should be sent electronically to hiringmde@sce.carleton.ca.

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

As a part of your application, we invite you to complete a short anonymous and voluntary equity census to help us understand the diversity of applicants and further develop our equity program <https://oirp-secure.carleton.ca:443/opinio/s?s=6556>.

About Carleton University:

Carleton University is a dynamic and innovative research and teaching institution with a national and international reputation as a leader in collaborative teaching and learning, research and governance. With over 29,000 students, 950 academic faculty, and 2,000 staff and more than 100 programs of study, we encourage creative risk-taking enabling minds to connect, discover and generate transformative knowledge. We are proud to be one of the most accessible campuses in North America. Carleton's Paul Menton Centre for Students with Disabilities has been heralded as the gold standard for disability support services in Canada.

Located in Ottawa, Ontario, Canada's capital city has a population of almost one million and reflects the country's bilingual and multicultural character. Carleton's location in the nation's capital provides many opportunities for scholarship and research with groups and institutions that reflect the diversity of the country. To learn more about our university and the City of Ottawa, please visit www.carleton.ca/provost.

We are strongly committed to equity, diversity, and inclusion in the nomination and appointment process. Carleton University is committed to fostering diversity within its community as a source of excellence, cultural enrichment, and social strength. We welcome those who would contribute to the further diversification of our university including, but not limited to: women; visible minorities; First Nations, Inuit and Métis peoples; persons with disabilities; and persons of any sexual orientation, gender identity and/or expression. Carleton understands that career paths vary. Legitimate career interruptions will in no way prejudice the assessment process and their impact will be taken into careful consideration.

Applicants selected for an interview are asked to contact the Chair as soon as possible to discuss any accommodation requirements. Arrangements will be made in a timely manner.

All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority. All positions are subject to budgetary approval.