

Academic unit: Systems and Computer Engineering, Carleton University, Ottawa, Canada

Category of appointment: Preliminary (Tenure-Track) **Field of specialization:** Real-Time Embedded Systems

Rank/Position title: Assistant Professor

Start date: July 1, 2017

Closing date for applications: Consideration of applications will continue until the position is

filled

The Department of Systems and Computer Engineering at Carleton University, Ottawa, Canada invites applications from qualified candidates for a tenure track faculty appointment in Real-Time Embedded Systems (RTES) at the rank of Assistant Professor beginning July 1, 2017.

We are hiring outstanding faculty members with a demonstrated commitment to excellence in teaching at both the undergraduate and graduate levels, and with expertise and dynamic research in the general area of RTES, including but not limited to the design, modeling and evaluation of Embedded and Cyber Physical Systems. Ideal candidates will have expertise in the software aspects of RTES, practical experience in building RTES, and a clear understanding of how system performance is influenced by the underlying hardware.

In addition to supervising students at the Master's and Doctoral levels, successful candidates will deliver early-year and advanced courses on digital logic, microcontrollers, embedded systems, and cyber-physical systems, mentoring undergraduate students and supervising capstone projects, and contribute to curriculum development, improvement and reviews.

Candidates are expected to have some practical experience with assembly language programming (ideally with ARM processors), interrupt-driven programming, the development of device-level drivers using C, and the use of an IDE for microcontroller-specific board-level development. Candidates must be prepared to participate in the evolution of undergraduate courses to include modern hardware components integrating practical experience into course labs. Familiarity with FPGAs and a high-level hardware description language (e.g., Verilog, VHDL) would be an asset.

We encourage applicants possessing leadership qualities and strong interpersonal skills who are eager to build a strong, externally funded, visible, innovative, and internationally recognized research program in RTES to apply. 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, and with a desire to promote interest in young people, and especially women, in a technical, engineering career.

Qualifications:

At the time of appointment, candidates must have earned a PhD in Electrical and Computer Engineering, Computer Science, or a related discipline. Candidates 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.

About the Academic Unit:

The Department of Systems and Computer Engineering is a research-intensive department. The Department participates in a broad range of undergraduate and graduate programs covering the Electrical, Computer, Communications, Biomedical, and Software Engineering spectrum. 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/.

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 hiring-hw@sce.carleton.ca. Applicants who are selected for an interview will be asked to submit a teaching preference form. Please indicate in your application if you are a Canadian citizen or permanent resident of Canada.

About Carleton University:

Carleton University is strongly 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 or gender identity and expressions. To learn more about our University and the City of Ottawa, please visit www.carleton.ca/provost.

Applicants selected for an interview are asked to contact the Chair of the Search Committee 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.