



# McGill

## Tenure-Track Faculty Position

Open to rank of Assistant Professor

## Canada Research Chair Tier 2 in Smart Production Systems Engineering

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**Faculty:** Agricultural and Environmental Sciences

**Department/School:** Bioresource Engineering

The Canada Research Chair is also open to internal candidates who already hold a tenure-track or tenured faculty position at McGill University.

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### Position Description

The Department of Bioresource Engineering invites applications for a tenure-track position as Assistant Professor in Smart Production Systems Engineering. This position is focused on the development, evaluation and adoption of new methods of animal and crop production in the field and in controlled environments. Rapidly evolving information technologies are required to develop sustainable solutions for modern agriculture to feed the generations of today and tomorrow. As it stands, agricultural and food practices require novel methods to integrate mechanical, electrical, computer, and learning systems to utilize effectively the economic, environmental and social benefits of these technological innovations. The Department of Bioresource Engineering is part of the Faculty of Agricultural and Environmental Sciences; it is located on the Macdonald Campus, 35 km west of Montreal's city center and the downtown Campus. The Macdonald campus farm and horticulture center are incubation sites which may be used as applied laboratories to generate ideas, build and test experiments, and apply the research related to modern biological and agricultural production systems and operations with the capacity to expand outreach to farming communities and certificate programs. Our emphasis in this area will increase the ties with farming communities and bring forward cutting-edge McGill research programs in data collection and artificial intelligence.

The successful candidate who satisfies the eligibility conditions of the Canada Research Chair (CRC) program may be supported by the University for nomination to a Tier 2 Chair in Smart Production Systems Engineering, which provides protected time for research within a full-time academic appointment.

Nominees for Tier 2 Chair positions must be emerging scholars and hold the rank of assistant or associate professors, or possess the necessary qualifications to be appointed to these levels. A nominee who is more than 10 years from having earned their highest degree and has experienced legitimate career

interruptions (e.g., maternity or parental leave, extended sick leave, clinical training, and family care) will be taken into consideration using the Tier 2 justification process:

[http://www.chairs-chaire.gc.ca/program-programme/nomination-mise\\_en\\_candidature-eng.aspx#s3](http://www.chairs-chaire.gc.ca/program-programme/nomination-mise_en_candidature-eng.aspx#s3)

Eligibility conditions for CRCs are on the CRC Program website:

[http://www.chairs-chaire.gc.ca/program-programme/nomination-mise\\_en\\_candidature-eng.aspx#s2](http://www.chairs-chaire.gc.ca/program-programme/nomination-mise_en_candidature-eng.aspx#s2)

### **Job Duties**

The suitable individual will teach courses related to the use of electricity, electronics and signal processing for bioresource engineering students as well as graduate students across multiple disciplines who are engaged in data-rich experimentations and advanced computer learning technologies. Special emphasis shall be given to machine vision, artificial intelligence, deep learning and other emerging technologies pertaining to phenotyping (plant and/or animal), animal well-being, food quality assessment, and other relevant applications.

### **Qualifications and Education Requirements**

The successful candidate should have a bachelor's degree in engineering and a Ph.D. in a field associated with agricultural production. The ideal candidate should have a strong background in electronics, mechatronics, electrical engineering, software engineering, agricultural engineering, data science and/or related fields. The ideal candidate should be eligible to register as a professional engineer in Canada. Ability to communicate in French and prior experience with the Canadian agricultural and agri-food industry are highly beneficial.

***Candidates who do not satisfy the CRC eligibility criteria for a Tier 2 Chair are nonetheless invited to apply for the position.***

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### **JOB DETAILS**

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Job Classification:	Tenure-track
Rank:	Assistant Professor
Job Status:	Full-time
Salary:	Commensurate with qualifications and experience
Application Deadline:	March 1, 2019, or until the position is filled

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## APPLICATION PROCESS

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Applications must be submitted to Mark Lefsrud (mark.lefsrud@mcgill.ca), chair of the search committee

The following supporting documents are required:

- A cover letter and curriculum vitae
- A statement of teaching and research interests
- The names and contact information of three referees. *For Tier 2 nominees at the rank of Assistant Professor who are within three years of their PhD, one referee must be the PhD supervisor.*

**For internal applicants only:** Supporting documents include a recent curriculum vitae and a statement of research aligned with the designated subject area for the Chair.

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## COMMITMENT TO EQUITY AND DIVERSITY

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*McGill University hires on the basis of merit and is strongly committed to equity and diversity within its community. We welcome and encourage applications from racialized persons/visible minorities, women, Indigenous persons, persons with disabilities, ethnic minorities, and persons of minority sexual orientations and gender identities, as well as from all qualified candidates with the skills and knowledge to productively engage with diverse communities.*

*McGill further recognizes and fairly considers the impact of leaves (e.g., family care or health-related) that may contribute to career interruptions or slowdowns. Candidates are encouraged to signal any leave that affected productivity, may have had an effect on their career path. This information will be considered to ensure the equitable assessment of the candidate's record.*

*McGill implements an employment equity program and encourages members of designated equity groups to self-identify. It further seeks to ensure the equitable treatment and full inclusion of persons with disabilities by striving for the implementation of universal design principles transversally, across all facets of the University community, and through [accommodation policies and procedures](#). Persons with disabilities who anticipate needing accommodations for any part of the application process may contact, in confidence, Professor Angela Campbell, Associate Provost (Equity and Academic Policies) by [email](#) or phone at 514-398-1660.*

*All qualified applicants are encouraged to apply; however, in accordance with Canadian immigration requirements, Canadians and permanent residents will be given priority.*

**2018-12-18**