

Tenure-Track Position in Quantum Computing Technology and Artificial Intelligence

Last updated: October 13, 2021, 10:27 a.m.

Job title: Assistant Professor, Quantum Computing Technology and Artificial Intelligence

Position code: 20_T_CIISE_M

Date posted: October 13, 2021

Application deadline: December 31, 2021

Advertised until: Position is filled

Position description

The **Concordia Institute for Information Systems Engineering** seeks outstanding candidates for a full-time, tenure-track position in Quantum Computing Technology and Artificial Intelligence. This call extends to all individuals with interests in the following: quantum cryptography, quantum algorithms, quantum information processing, quantum programming, quantum communication networks, quantum data analytics, quantum machine learning, quantum convolutional neural networks, distributed quantum computing, quantum federated learning, and quantum computing applications in cybersecurity, artificial intelligence, healthcare and smart cities. Duties include research, teaching at both the graduate and undergraduate levels, and service to the institution. This is a tenure-track position at the rank of Assistant Professor, but exceptional candidates at the Associate Professor level may also be considered.

Qualifications and assets

Candidates must have completed their PhD in Electrical Engineering, Computer Science, Systems Engineering, Computer Engineering, or a closely related engineering field, or be near completion at the start date of the appointment. Membership or eligibility for membership in a Canadian professional engineering association, preferably in Quebec, is required.

The main criteria for selection are scholarly and teaching excellence. The successful candidate will provide evidence of high-quality scholarly output that demonstrates potential for independent research leading to peer-assessed publications, industrial application of their research activities, and the securing of external research funding, as well as strong potential for outstanding teaching contributions at both the undergraduate and graduate levels. Industrial experience will be a definite asset. The Institute values diversity among its faculty and strongly encourages applications from women and members of underrepresented groups. The language of instruction at Concordia is English, but a working knowledge of French is an asset.

How to apply

Applications should be addressed to Dr. Abdessamad Ben Hamza, Professor and Director: director-ciise@encs.concordia.ca.

Applications must include a cover letter clearly identifying the title and position code (**20_T_CIISE_M**), a detailed curriculum vitae, teaching and research statements, and the names and contact information of four referees. Electronic applications should be submitted by **December 31, 2021** and will be reviewed on an ongoing basis until a suitable candidate has been identified. Only short-listed applicants are notified. The appointment is expected to commence in **August 1, 2022** or shortly thereafter.

Concordia University is strongly committed to building a diverse, equitable, and inclusive community, and recognizes the importance of inclusion in achieving excellence in teaching and research. As part of this commitment to providing our students with the dynamic, innovative, and inclusive educational environment of a Next-Generation University, we require all applicants to articulate in their cover letter how their background, as well as lived and professional experiences and expertise have prepared them to teach in ways that are relevant for a diverse, multicultural contemporary Canadian society.

These ongoing or anticipated examples can include but are not limited to:

- teaching about underrepresented populations
- mentoring students from underrepresented backgrounds
- committee work
- offering or organizing educational programming
- participation in training and workshops

All applicants will receive an email invitation to complete a short equity survey. Participation in the survey is voluntary and no identifying information about candidates will be shared with hiring committees. Candidates who wish to self-identify as a member of an underrepresented group to the hiring committee may do so in their cover letter or by writing directly to the contact person indicated in this posting.

Adaptive measures

Applicants who anticipate requiring adaptive measures throughout any stage of the recruitment process may contact, in confidence, Nadia Hardy, Interim Deputy Provost and Vice-Provost, Faculty Development and Inclusion at vpfdi@concordia.ca or by phone at 514-848-2424, extension 4323.

Information about the Department

The Concordia Institute for Information Systems Engineering is dedicated to multidisciplinary research and training of graduate students, offering master's degrees in Information Systems Security and in Quality Systems Engineering, and a PhD degree in Information and Systems Engineering. The Institute has a faculty complement of 28 professors, including four industrial research chairs, one Gina Cody research chair, and two university research chairs, active in various areas of Information Systems Security, Cloud and Edge Computing, Information Systems Engineering, Quality Systems Engineering, Internet of Things, Artificial Intelligence, Data Analytics, and Smart Cities. For more information about the Institute, please visit www.ciise.concordia.ca.

Information about the Gina Cody School of Engineering and Computer Science

The Gina Cody School of Engineering and Computer Science is ranked among the top ten engineering schools in Canada. The School is home to over 10,000 engineering and computer science students and a faculty complement of 235 faculty members. The School has about 4,500 graduate students enrolled in 35 graduate programs. Its research profile continues to grow as it fosters multidisciplinary approaches to finding solutions to a broad range of societal challenges. Concordia University and the School attract a high quality, diverse student population in all its programs. For more information on the Gina Cody School of Engineering and Computer Science, please visit: www.concordia.ca/ginacody.

Information about Concordia

Profoundly global, Concordia is North America's top university under the age of 50 and is recognized for attracting some of the most talented faculty and students from around the world. Driven by ambition, innovation and a commitment to research and community engagement, Concordia is celebrated for advancing transformative learning, convergent thinking and public impact.

Concordia's two campuses are located in Tiohtià:ke/Montreal, on the traditional lands and waters of the Kanien'kehá:ka Nation. Building on the skills of our faculty and the strengths of local and global partnerships, we set our sights further and more broadly than others and align the quality of learning opportunities to larger trends and substantial challenges facing society.

Researchers at Concordia are leading investigations into some of the world's most critical issues, such as health, Indigenous futures, sustainability and cities — more important today than ever. Our priority is to mobilize cross-sections of experts to translate novel scholarship into real-world applications.

With 118 research chairs, 24 research centres and institutes, and research income of more than \$56 million annually,

Concordia is fast advancing on its strategic direction to Double Our Research. Our nine far-looking [directions](#) demonstrate the university's commitment to being agile and innovative and ensuring student success. Our 6,600 faculty and staff and 50,800 students benefit from state-of-the-art research and teaching facilities, technology and pedagogical support, and compelling program offerings in our four faculties, library, School of Graduate Studies and Centre for Continuing Education. These modern venues, such as the Applied Science Hub and modular Learning Square, allow us to foster multidisciplinary collaboration.

"Concordia is a young, forward-looking university. It's a unique place where experimentation, innovation and creativity are truly valued. Our community of students, faculty, staff and alumni all contribute to our momentum as Canada's next-gen university." — Concordia President Graham Carr.

Information about Montreal

Montreal, our home, is exceptional. It is a truly unique city — safe, clean, vibrant and diverse, with new things to discover around every corner. With a population of 1.7 million, it is home to four major universities and several clinical research centres and has been named the best student city in the world. It offers the most affordable tuition in Canada.

The city enjoys a thriving multicultural scene. Bilingualism is a part of Montreal's tradition and adds to its inspiring atmosphere. While supporting a significant anglophone population, it is one of the largest French-speaking cities in the world.

Montreal is famed for its innovative culinary scene and festivals. It was also the first metropolis to be designated a UNESCO City of Design by the Global Alliance for Cultural Diversity.

The city is recognized globally as an important centre for commerce, aerospace, transport, finance, pharmaceuticals, technology, design, gaming and film.

Territorial Acknowledgement

Concordia University is located on unceded Indigenous lands. The Kanien'kehá:ka Nation is recognized as the custodians of the lands and waters on which we gather today. Tiohtiá:ke/Montreal is historically known as a gathering place for many First Nations. Today, it is home to a diverse population of Indigenous and other peoples. We respect the continued connections with the past, present and future in our ongoing relationships with Indigenous and other peoples within the Montreal community.

Employment Equity

Concordia University is strongly committed to employment equity within its community, and to recruiting a diverse faculty and staff. The University encourages applications from all qualified candidates, including women, members of visible minorities, Indigenous persons, members of sexual minorities, persons with disabilities, and others who may contribute to diversification; candidates are invited to self-identify in their applications.

Immigration Status

All qualified candidates are encouraged to apply; however, Canadian and Permanent Residents will be given priority. To comply with the Government of Canada's reporting requirements, the University is obliged to gather information about applicants' status as either Permanent Residents of Canada or Canadian citizens. While applicants need not identify their country of origin or current citizenship, all applications must include one of the following statements:

Yes, I am a citizen or permanent resident of Canada

or

No, I am not a citizen or permanent resident of Canada.