1904873 - Assistant Professor - Computational Medicine

The Department of Computer Science in the Faculty of Arts & Science and the Department of Laboratory Medicine and Pathobiology in the Faculty of Medicine at the University of Toronto invite applications for up to two full-time tenure stream positions in the area of Computational Medicine. The successful candidate’s primary department will depend upon their field of expertise. The appointments will be at the rank of Assistant Professor, and will commence on July 1, 2020, or shortly thereafter.

Applicants must have a Ph.D. in Computer Science, or a related field, by the time of appointment or shortly thereafter, with a demonstrated record of excellence in research and teaching. We seek applications from candidates conducting research in Computational Medicine and with significant expertise in applications of machine learning/deep learning methodologies in medicine. Postdoctoral experience in machine learning or another field of computing applied to healthcare, biology, technology development, and/or natural language processing would be an asset. We seek candidates whose research and teaching interests compliment and strengthen our existing departmental strengths in the Department of Computer Science and the Department of Laboratory Medicine and Pathobiology. The two academic units are developing significant interdisciplinary initiatives that we seek to broaden over the coming years.

Successful candidates will be expected to initiate and lead an outstanding, innovative, independent, competitive, and externally funded research program of international calibre, that will develop advanced computational and statistical methods, such as machine learning and scalable algorithmic approaches, to investigate questions related to human health and disease. For appropriate candidates, cross-appointments to University of Toronto’s affiliated academic hospitals may be available. The successful candidates will also be expected to teach at both the undergraduate and graduate levels.

Evidence of excellence in research will be demonstrated primarily by publications or forthcoming publications in leading journals or conferences in the field, the submitted research statement, presentations at significant conferences, awards and accolades, and strong endorsements by referees of high international standing.
A commitment to excellent teaching at the undergraduate and graduate levels is required and should be demonstrated through the teaching dossier submitted as part of the application to include: a statement of teaching philosophy and interests, a summary of teaching experience, interests, and accomplishments, sample course materials, and teaching evaluations, or other evidence of superior performance in teaching-related activities, as well as strong endorsements by referees. Other teaching-related activities can refer to previous experience as a teaching assistant or course instructor, leading workshops or seminars, student mentorship, or awards for oral presentations and posters at conferences.

The candidates will also be reviewed by the Vector Institute for Artificial Intelligence for consideration of appointment as a Faculty Member or Affiliate Faculty Member, and may be nominated for a Canada CIFAR AI Chair through the Vector Institute.

Salary will be commensurate with qualifications and experience.

The University of Toronto is an international leader in computing, medical research and education. The successful candidates will have an exciting opportunity to create and apply machine learning knowledge that enables sustainable innovation to support predictive analysis and precision medicine, enable the next generation of analytics through high performance computing, deep learning platforms, and real-time data processing and decision support. This will be accomplished through direct collaboration with the Department of Computer Science researchers and the Department of Laboratory Medicine and Pathobiology clinicians, scientists and their databases. Additional information may be found at [http://www.cs.utoronto.ca](http://www.cs.utoronto.ca) and [http://www.lmp.utoronto.ca](http://www.lmp.utoronto.ca).

Concurrent with this search, the University of Toronto is undertaking a series of hires in the area of Deep Learning in recognition of University Professor Emeritus Geoffrey Hinton’s winning of the prestigious A.M. Turing Award in 2019. These searches are in the Department of Computer Science, and joint between the Department of Computer Science and the Edward S. Rogers Sr. Department of Electrical & Computer Engineering, and joint between the Department of Computer Science and the Department of Laboratory Medicine and Pathobiology.

Application material for the position must be submitted online through AcademicJobsOnline, [https://academicjobsonline.org/ajo/jobs/15441](https://academicjobsonline.org/ajo/jobs/15441). It must include a cover
letter, a curriculum vitae, a statement outlining previous and current research and future research plans, and up to three representative publications, as well as a teaching dossier to include a teaching philosophy statement, a summary of teaching experience, interests, and accomplishments, sample course materials, teaching evaluations or evidence of superior performance in other teaching-related activities as listed above, and at least three strong letters of reference (on letterhead, signed and scanned) uploaded to AcademicJobsOnline directly by the writers. It is your responsibility to make sure your referees upload the letters while the position remains open. Review of applications will begin on January 7, 2020, however, the position will remain open until January 30, 2020.

If you have any questions about this position, please contact Sara Burns at recruit@cs.toronto.edu or Patricia Cayetano at patricia.cayetano@utoronto.ca.

The University of Toronto is strongly committed to diversity within its community and especially welcomes applications from racialized persons / persons of colour, women, Indigenous / Aboriginal People of North America, persons with disabilities, LGBTQ persons, and others who may contribute to the further diversification of ideas.

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