Postdoctoral Fellowships at the University of Toronto in Artificial Intelligence and Operations Research

Applicants are sought for two postdoctoral positions on topics at the interface of AI and OR. While there is some flexibility on topics, applicants are expected to be able to contribute to one or more of the following projects.

- Data centre resource provisioning and scheduling using statistical methods, machine learning, queueing theory, and combinatorial optimization.
- Using novel hardware architectures and QUBO/Ising models to solve hard optimization problems including scheduling and vehicle routing.
- AI planning and heuristic search for large scale network optimization problems.

Our approach is to apply both AI and OR approaches, in competition and collaboration, to develop a deeper understanding of data-driven approaches to search, optimization, and planning. We have recent publications on these themes at ICML (2019), ICAPS (2018,2019), AAAI (2018, 2019), CPAIOR (2018, 2019), and IJCAI (2018). See `tidel.mie.utoronto.ca/publications.php`.

Applicants should have:

- A PhD in Computer Science (specializing in AI planning, heuristic search, constraint solving) or Operations Research (specializing in mathematical programming and optimization)
- Strong facility in software engineering and implementation
- Strong mathematical and formal foundations
- A good command of written and oral English
- A research record of publication in top AI or OR venues
- A record of leadership and teamwork in research
- Enthusiasm for expanding skill sets and knowledge

The successful applicant will work with Prof. J. Christopher Beck as part of the Toronto Intelligent Decision Engineering Laboratory in the Department of Mechanical & Industrial Engineering at the University of Toronto. The initial contract is for one-year but renewal is a possibility.

Applicants should submit i) a cover letter specifically addressing the job requirements stated above, ii) a CV, iii) names and email addresses of three references who can speak to the research quality of the applicant, and iv) two first-authored research papers published in international venues.

Deadline for applications: August 15, 2019
(Applications will be considered as they are received and a decision may be made earlier.)

Target start date: October 1, 2019
(Earlier start dates are possible.)

Please send inquiries and applications to Prof Beck, jcb@mie.utoronto.ca.

The University of Toronto is consistently ranked as one of the top 30 universities in the world and Toronto is rated in the top 10 cities in the world for livability according to the Economist.