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

Applicants are sought for a postdoctoral position 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.

- Hybrid optimization methods for large scale vehicle routing problems.
- Novel hardware architectures and QUBO/Ising models to solve hard optimization problems.
- Applications of inverse reinforcement learning to animal behaviour research.

Our approach is to apply both AI and OR approaches, in competition and collaboration, to develop a deeper understanding of search, optimization, and planning. See tidel.mie.utoronto.ca/publications.php.

Applicants should have:

- A PhD in Computer Science (AI planning, heuristic search, constraint programming, SAT) or Operations Research (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 record of publication in top AI or OR venues
- A record of leadership and teamwork in research
- An interest in mentoring graduate and undergraduate students
- 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 and 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: April 1, 2022
(Applications will be considered as they are received, and a decision may be made earlier.)

Target start dates: May 1 to September 1, 2022

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