Posting: March 5, 2021

University of Toronto Faculty of Applied Science and Engineering Mechanical and Industrial Engineering Department

Area of Research: Explainable Machine and Deep Learning

Description of Duties: The Data-Driven Decision Making (D3M) Laboratory directed by Prof. Scott Sanner in Mechanical & Industrial Engineering (and cross-appointed in Computer Science), is looking for a post-doctoral fellow to develop novel explainable machine and deep learning systems for both publication and practical deployment with the industry partner. The fellow will also contribute to the technical and software management of multiple subprojects as well as supervision of students on those subprojects.

Required Qualifications: Applicants should hold a Doctoral (Ph.D., Sc.D.) degree in Engineering, Computer Science, Physics or related fields with a focus on machine learning, deep learning, and/or artificial intelligence. Applicants should demonstrate an active publication record and high potential for success in machine learning, deep learning, and/or artificial intelligence.

Applicants should demonstrate strong applied knowledge of machine learning and deep learning, including relevant Python libraries and object-oriented software engineering. Applicants should also demonstrate excellent knowledge of the mathematical foundations and evaluation methodologies for machine and deep learning systems.

Excellent communication skills, strong independent research skills, and sensitivity to industry partner direction are required. The applicant will be expected to work independently, provide leadership to an interdisciplinary team of graduate students, and produce publishable results.

Salary: starting from \$50,000

Expect start date: as soon as possible **Term**: 1 year term with possible renewal

FTE: 100%

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Closing date: March 31, 2021

The normal hours of work are 40 hours per week for a full-time postdoctoral fellow (pro-rated for those holding a partial appointment) recognizing that the needs of the employee's research and training and the needs of the supervisor's research program may require flexibility in the performance of the employee's duties and hours of work.

Application Instructions: The application package (to be emailed to Prof. Scott Sanner) should include a cover letter and CV, including a list of 3 professional references. If available, the CV should also include a public github or gitlab URL showing evidence of past work on open source software projects. Please email to ssanner@mie.utoronto.ca with subject line "PDF Application: Explainable ML/DL".

Employment as a Postdoctoral Fellow at the University of Toronto is covered by the terms of the CUPE 3902 Unit 5 Collective Agreement. This job is posted in accordance with the CUPE 3902 Unit 5 Collective Agreement.

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.