

Postdoctoral Positions

Multiple Postdoctoral Positions in Integrated Machine Learning and Optimization for Decision Making under Uncertainty at HEC Montréal/University of Montréal

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Duration: 1+1 (one-year contract with possible extension for the second year). The start date is flexible but it should ideally be before January 31, 2023.

Project description:

Postdoctoral researchers will work on fundamental or applied research supporting the IVADO Strategic Research Funding Program in [Integrated Machine Learning and Optimization for Decision Making under Uncertainty](#) (ML+Opt4DMU). The research program aims at developing new methods for making the most effective and adaptive use of data in decision-making. It is founded on modern optimization and machine learning perspectives that encompass developments in, for example, deep reinforcement and end-to-end learning, risk-averse decision theory, as well as contextual and distributionally robust optimization. The mission of ML+Opt4DMU is three-fold: (i) develop the next generation of methods to deal with uncertainty in data-driven risk-aware optimization models by integrating machine learning; (ii) identify scientifically challenging and high-impact opportunities for improving robustness in supply chains; and finally (iii) stimulate the integration of stochastic optimization models among our partners while defining use cases that will guide future methodological advances.

Requirements:

PhD in machine learning, applied mathematics, operations research, or related disciplines with a strong research record relevant to the ML+Opt4DMU research program.

How to apply:

Interested candidates are invited to submit (i) a CV, (ii) an electronic copy of all the university-level transcripts, (iii) a short statement (approximately one page) describing their expertise, experience and research topics they would like to focus on under the ML+Opt4DMU research program, and (iv) contact details of 2-3 references (including their PhD supervisors). While all applications received by September 23, 2022 will be fully considered, those received after this date will continue to be considered until the positions are filled. All documents should be compiled into a single PDF file and sent to MLOpt4DMU@gmail.com. Applicants will be informed on the progress of the selection process only if they meet the aforementioned requirements.