

# RECRUITING

## MASTER AND PHD STUDENTS

### POSTDOCTORAL FELLOWS

**Area:** Stochastic simulation  
**Where:** DIRO, Université de Montréal, Canada  
**Start:** January 2017

The Canada Research Chair in Stochastic Simulation and Optimization is recruiting post-doctoral fellows, as well as students at the master and PhD levels, in the area of stochastic simulation. We are particularly looking for strong candidates interested in *Random Number Generation and Quasi-Monte Carlo Methods*. Specific topics of prime interest include the design, analysis, implementation, and statistical testing of random number generators with multiple streams for single and parallel processors; adaptive construction of randomized quasi-Monte Carlo (RQMC) point sets; RQMC methods to simulate Markov chains; RQMC methods to estimate probability distributions; other RQMC applications; and software design and implementation for all these methods. We may also have openings in other areas of stochastic simulation, depending on industry demand and the strength of candidates.

The research is performed mainly under the supervision of prof. Pierre L'Ecuyer at the Département d'Informatique et de Recherche Opérationnelle (DIRO), Université de Montréal. Professor L'Ecuyer is associated with the GERAD and CIRRELT research centers, and the IVADO research institute. Some of the research may be in collaboration with other researchers from the institute.

A strong background in mathematics (probability, statistics, stochastic processes, mathematical optimization) and computer science (numerical computation, algorithmics, software development) is essential. Good programming abilities in Java and C++, ability to work on large software projects, and good knowledge of Monte Carlo methods, are highly desirable. Capacity to read and understand French would be a valuable asset. Applicants at the postdoctoral level must have obtained their PhD in the last three years (or will obtain it soon).

At each level, the amount of financial support would depend on the qualifications and the level of excellence of the candidate.

All applicants are invited to submit (1) a full curriculum vitae, (2) a copy of all their university-level transcripts, (3) a short statement (at most one page) describing why they want to work in stochastic simulation and why they think they are qualified to do so. The postdoctoral candidates must also send a copy of their thesis and of their two best scientific publications. All these documents should be .pdf or .jpg format (only). They should be sent together in a single email to:

Pierre L'Ecuyer, professeur  
<http://www.iro.umontreal.ca/~lecuyer/>

A selection will be made during the week of **December 5, 2016**. Only the applications that contain *all* the requested documents will be considered.