STA2570HS L5101 – Numerical Methods for Finance and Insurance
This course explores the practical application of various numerical methods to finance and insurance modeling. It covers topics including: the generation of random variables, simulating solutions of stochastic differential equations, variance reduction methods, multi-level sampling, least square Monte Carlo, Markov chain Monte Carlo, and solving partial difference equations stemming from derivative valuation, optimal control, and optimal stopping.

Qualifications
Academic background in Statistical Sciences. PhD student (or graduate) in actuarial science, statistics or biostatistics.

Duties
Any or all of the following: grading term tests, invigilating term tests and final exams, grading homework and/or quizzes, setting tutorial quizzes.

Instructor: Yuchong Zhang & L. Wong
Estimated Course Enrolment: 27
Tutorial Schedule: N/A
Approximate Number of TA Hours: 65 hours each
Approximate Number of Positions: 1
Rate of Pay: UG/SGS I/II - $46.24/hour (+4% vacation pay)

Final availability of the position(s) is contingent upon enrolment, budgetary consideration and the determination of appointments as governed by the collective agreement.

Application Process
Application information is available at https://www.statistics.utoronto.ca/employment-opportunities/cupe-positions-unit-1. The deadline to submit your application is December 13, 2019. For more information, you may contact:

Priya Sivathason
Sidney Smith Hall, Room SS 6025
100 St. George Street
Toronto, ON M5S 3G3
E-mail: job-apps@utstat.utoronto.ca

This job is posted in accordance with the CUPE 3902 Unit 1 Collective Agreement. The Departmental Hiring Policy is available in the Department office and in the CUPE Local 3902 office. 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. Note: Although a graduate student’s preference as to the campus location of his/her TA appointment will be taken into account, both the initial TA appointment (or CI appointment) and the subsequent appointment obligation related to that appointment may be met through position(s) on any one of the three University of Toronto campuses (UTM, UTSC or St. George) in courses in the same discipline as the initial appointment. TAs will only be assigned to courses in fields in which they are or should be qualified to assist. Duties of this position shall be performed at the campus on which the position is located. Where the duties are intended to be performed at another location, such other location will be specified in the posting.