The Department of Computer Science invites applications from individuals interested in teaching an undergraduate course in the Winter 2020 semester.

Subject to budgetary restrictions and sufficient enrolments, appointments will be made on a course by course basis and will not entail any obligation to conduct research or to perform any administrative service for Memorial University. Appointments will be made in accordance with the provisions in the MUN-LUMUN Collective Agreement. Course design and evaluation methods for all courses will be in accordance with the Department of Computer Science policies and regulations and the Memorial University Calendar.

**Course Title:** COMP 3719 Theory of Computations and Algorithms

**Course Schedule:** Lectures on Tuesdays and Thursdays, 10:30 to 11:45 a.m. (Slot 18)

**Campus Location:** St. John’s

**Course Description:** COMP 3719 is an introduction to formal algorithmic problem solving. Various algorithm design techniques that sometimes yield efficient solutions are studied. Deterministic and nondeterministic machines (finite state automata, pushdown automata and Turing machines) are discussed and used to efficiently solve problems such as the String Matching Problem, the parsing of Context-free Languages, and to introduce the theory of NP-completeness. In addition, Turing machines are used to prove the unsolvability of certain problems. Tractable, intractable and undecidable problems are contrasted. Basic issues related to parallelization are discussed as well.

For further information regarding the Computer Science undergraduate program, including this course, refer to the Current Handbook at www.mun.ca/computerscience/ugrad

**Qualifications:** A general knowledge of all areas of Computer Science is required. Familiarity with both Algorithmic and systems aspects of computing is necessary. The applicant should be able to confer excitement about the field of Computer Science. Prior teaching experience with course material for Computer science is highly beneficial. Applicants should have a Master’s degree in Computer Science or closely related discipline, or equivalent combination of education and experience.

To apply for this position:

Please submit a letter of application, curriculum vitae, and the names of three referees with their contact information, electronically or in writing to:

Dr. Yuanzhu Chen, Department Head
Department of Computer Science
Memorial University of Newfoundland
St. John’s, NL, A1B 3X5
Email: cs-chair@mun.ca
Tel: (709) 864-8652 Fax: (709) 864-2009

**Salary:** As per the MUN-LUMUN Collective Agreement

**Closing Date:** Tuesday, October 29, 2019

All qualified candidates are encouraged to apply; however, Canadian citizens and permanent residents will be given priority. Memorial University of Newfoundland is committed to employment equity and diversity and encourages applications from all qualified candidates, including women; people of any sexual orientation, gender identity, or gender expression; Indigenous peoples; visible minorities, and racialized people; and people with disabilities.