

Open MASc/PhD Position in Computational Electromagnetism

We are seeking a MASc or PhD student for a project on the development of a new, high-performance electromagnetic solver for integrated circuit (IC) design. The project is in collaboration with Advanced Micro Devices (AMD). Through this project, students will have the opportunity to:

- gain advanced skills in electromagnetism, computational modeling, supercomputing, and their applications to IC design. Such skills are currently in very high demand from various industrial sectors, including: electronics, IT, power engineering, quantum computing;
- work on forefront IC technologies and design challenges;
- work alongside AMD engineers and intern at AMD Canada;
- use SciNET Niagara, one of Canada's largest supercomputers;
- see their research findings applied to real-world applications.

Mandatory qualifications:

- bachelor's degree (or higher) in Electrical Engineering, Computer Engineering, Physics or Computational Mathematics;
- interest in computational electromagnetism;
- proficiency in C/C++ programming.

Desired qualifications:

- experience with integral equation methods (boundary element method, method of moments);
- experience with parallel and high-performance computing (OpenMP, MPI);
- proficiency in python.

Institution and environment: The Electrical and Computer Engineering department of the University of Toronto consistently ranks first in Canada and among the top ECE departments in the world. The university is located in downtown Toronto, and enjoys the lively and vibrant atmosphere of the city. With nearly all of the world's culture groups represented, and more than 100 languages spoken, Toronto is one of the most diverse and multicultural cities in the world.

How to apply: email your CV, letter of intent, and transcripts to piero.triverio@utoronto.ca. Only shortlisted candidates will be contacted.

Contact: Prof. Piero Triverio (piero.triverio@utoronto.ca)

For more information: www.modelics.org.