

Mario J. Badr

CONTACT INFORMATION	The Edward S. Rogers Department of Electrical and Computer Engineering 10 King's College Road, Toronto, ON M5S 3G4 Canada University of Toronto
EDUCATION	University of Toronto , Toronto, Ontario, Canada Ph.D., Computer Engineering, September, 2013 - Present Dissertation: "Developing Novel Evaluation Methodologies for Assessing Multi-Threaded Applications" Advisor: Natalie Enright Jerger University of Toronto , Toronto, Ontario, Canada M.A.Sc, Computer Engineering, January, 2014 Thesis: "Synthetic Traffic Models That Capture Cache Coherent Behaviour" Advisor: Natalie Enright Jerger University of Toronto , Toronto, Ontario, Canada B.A.Sc, Electrical Engineering, May, 2011
RESEARCH INTERESTS	Computer architecture, interconnection networks, many/multi-core architectures, cache coherence, application modelling, machine learning.
PEER-REVIEWED PUBLICATIONS	Joshua San Miguel, Mario Badr , and Natalie Enright Jerger. Load Value Approximation In Proceedings of the International Symposium on Microarchitecture (MICRO), to appear, December 2014. (acceptance rate: 19%) Mario Badr and Natalie Enright Jerger. SynFull: Synthetic Traffic Models Capturing a Full Range of Cache Coherence Behaviour. In Proceedings of the International Symposium on Computer Architecture (ISCA), June 2014. (acceptance rate: 18%)
TEACHING EXPERIENCE	Engineering Strategies and Practice , 1st Year Undergraduate <i>Teaching Assistant</i> <i>Tutorials</i> Supervised students through the design process for a given project and provided feedback on written design documents, with a focus on stimulating an engineering methodology to design. Computer Fundamentals , 1st Year Undergraduate <i>Teaching Assistant</i> <i>Tutorials, Computer Lab</i> Taught the fundamentals of computer programming in C, including data structures, recursion, and sorting algorithms. Computer Organization , 3rd Year Undergraduate <i>Teaching Assistant</i> <i>Computer Lab</i> Supervised and helped students implement a simple von Neumann processor using verilog. Computer Architecture , 4th Year Undergraduate & Graduate <i>Teaching Assistant</i> <i>Tutorials, Computer Lab</i> Taught computer architecture concepts, including caches, pipelining, out-of-order cores, and cache coherence.

PRESENTATIONS AND POSTERS	International Symposium on Microarchitecture	
	<i>Poster</i>	<i>December, 2014</i>
	Joshua San Miguel, Mario Badr, and Natalie Enright Jerger. <i>Load Value Approximation</i>	
	Connections: University of Toronto ECE Graduate Symposium	
	<i>Presentation</i>	<i>May, 2014</i>
	Mario Badr and Natalie Enright Jerger. <i>SynFull: Synthetic Traffic Models That Capture Cache Coherent Behaviour</i> . (Awarded Best Oral Performance)	
	Connections: University of Toronto ECE Graduate Symposium	
	<i>Presentation</i>	<i>May, 2012</i>
	Mario Badr, Wenbo Dai, and Natalie Enright Jerger. <i>Realistic Synthetic Traffic</i> .	
INDUSTRY EXPERIENCE	Environment Canada , Toronto, Ontario Canada	
	<i>Intern</i>	<i>June, 2009 - August, 2010</i>
	Implemented new features and bug fixes for the NinJo workstation, a java-based tool for meteorologists. Notable projects include upgrading the visualization framework for lightning strikes to be faster and use significantly less memory, incorporating storm cell data for Canada, and helping to create a configurable view of weather data for a given storm cell.	
SCHOLARSHIPS & AWARDS	SGS Conference Grant - \$880	<i>2014</i>
	TD Bank Higher Education Award - \$3,800	<i>2007</i>
UNIVERSITY SERVICE	Member	
	Bargaining Support Committee, <i>January - April, 2014</i>	
	Steward	
	Canadian Union of Public Employees, <i>2013-2014</i>	
	Social Event Coordinator	
	Electrical and Computer Engineering Graduate Student Society, <i>2012-2013</i>	