

Erick Lavoie

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Qualifications

Academic studies	PhD in Computer Science (ongoing) 3.9/4.0 McGill University, Montreal, Qc, Canada Université de Montréal, Montreal, Qc, Canada	Sept. 2013 - ... Jan. 2013-Aug.2013
	Master in Computer Science 4.3/4.3 Université de Montréal, Montreal, Qc, Canada	2010-2012
	Baccalaureat in Computer Engineering 4.06/4.3 Université de Sherbrooke, Sherbrooke, Qc, Canada 7th semester done abroad at Université Catholique de Louvain in Belgium	2005-2009
Other formations	PRST , Sherbrooke, Qc, Canada Summer camp in Science and Technology, with a focus on entrepreneurship and leadership, directly inspired by Shad Valley.	2002
Languages	French (native), English (fluent)	

Publications and Presentations

Conference Papers, peer-reviewed	F. Khan, V. Foley-Bourgon, S. Kathrotia, E. Lavoie , L. Hendren <i>Using JavaScript and WebCL for Numerical Computations : A Comparative Study of Native and Web Technologies</i> Dynamic Language Symposium (DLS). Portland, Oregon. USA. October, 2014
	E. Lavoie , B. Dufour, M. Feeley <i>Portable and Efficient Run-time Monitoring of JavaScript Applications Using Virtual Machine Layering</i> European Conference on Object-Oriented Programming (ECOOP). Uppsala, Sweden. August, 2014
	M. Chevalier-Boisvert, E. Lavoie , M. Feeley, B. Dufour. <i>Bootstrapping a Self-Hosted Research Virtual Machine for JavaScript : An Experience Report.</i> Proceedings of the 2011 symposium on Dynamic languages, ACM, 2011
	G. Mesnil, Y. Dauphin, X. Glorot, S. Rifai, Y. Bengio, I. Goodfellow, E. Lavoie , X. Muller, G. Desjardins, D. Warde-Farley, P. Vincent, A. Courville, J. Bergstra. <i>Unsupervised and Transfer Learning Challenge : a Deep Learning approach.</i> JMLR W& CP : Proceedings of the Unsupervised and Transfer Learning challenge and workshop. Bellevue, Washington. USA. 2011

Workshop Papers, peer-reviewed, unpublished **E. Lavoie**, B. Dufour, M. Feeley
Metacircular Virtual Machine Layering for Run-Time Instrumentation
Runtime Environments, Systems, Layering and Virtualized Environment (RESoLVE).
Houston, Texas. March, 2013

Public Presentations *The SAFE Network from First Principles*
YouTube video playlist : https://www.youtube.com/watch?v=Lr9FJRDCNzk&list=PLiYqQVdgdw_sDkdIZzDRQR9xZ1sukIxD, Fall 2014

In Praise of Metacircular Virtual Machine Layering
Principles of Programming Languages (POPL) Student Short Talk Session, Rome, Italy, January 2013
Mozilla Corporation, Mountain View, California, USA, February 2013

Distinctions and Prizes

McGill School of Computer Science Scholarship (5000\$)	Sept. 2014
McGill School of Computer Science Scholarship (4000\$)	Sept. 2013
FRQNT Scholarship for Doctoral Studies (60000\$) Scholarship offered to exceptional students for 3 years from Fonds de Recherche du Québec - Nature et Technologies	Apr. 2012
University of Montreal Excellence Scholarship (1500\$)	Oct. 2012
University of Montreal Excellence Scholarship (5000\$)	Oct. 2011
University of Montreal Ms. Sc. Admission Scholarship (10000\$)	Nov. 2009
NSERC Scholarship for Master Studies (17500\$) Scholarship offered to exceptional students at the master level for one year from the Natural Sciences and Engineering Research Council of Canada	Apr. 2009
FRQNT Scholarship for Master Studies (15000\$) Scholarship offered to exceptional students at the master level for one year from Fonds de Recherche du Québec - Nature et Technologies	Apr. 2009
Finished 5th/32 at CSGames 2007 , McGill University Montreal North-American computer science team competition Participation in the AI and Team Software Engineering competitions	March 2007
Canadian Millenium Scholarship (4000\$) Canada-wide scholarship for extracurricular and social implication	Sept. 2006
Admission scholarship (2000\$) , University of Sherbrooke	2005

Experiences

Teaching	Teaching Assistant COMP 621 : Program Analysis and Transformations, McGill University	Fall 2015
	Teaching Assistant IFT3065/IFT6232 : Compiler and Programming Languages, Université de Montréal	Winter 2012
Development	C++ Software Developer Safe Software inc., Surrey, BC, Canada	winter and summer 2009 Co-op T-3 T-4
	Python and C++ Software Developer ORTHOsoft Inc., Montreal, Qc, Canada	winter and fall 2007 Co-op T-1 T-2
Volunteering	Volunteer for Tech. Support, Funding, and Visibility , Jun. 2011 - Aug. 2013 Restaurative Justice Center, Montreal, Qc, Canada	
Others	Computer Science Games 2008 Organizer University of Sherbrooke, Qc, Canada Participation on various topics especially : <ul style="list-style-type: none">— Codesign of the AI Competition (Initial specs with focus on usability, Implementation of various tools, UI, Templates in Java, C++ and Python, Grading mecanism, Final integration and tests, Supervision of the competition)— Definition of the strategic plan and general planification— Discussion of a Google sponsorship— Help on logistics, especially on schedule and volunteer assignement	Sept. 2007- Apr. 2008
	World Social Forum Participant Porto Alegre, Brasil	2005

Coursework

PhD (McGill Univ.)	Distributed Systems (Bettina Kemme)	A
	Adv. Prog. Topics on Dynamic Language Compilation (Laurie Hendren)	A
	Program Analysis and Transformations (Laurie Hendren)	A-
	Note : A at McGill is the best score	
PhD (Univ. de Montréal)	Semantics of Programming Languages (Stefan Monnier)	A-
	Note : A+ at Univ. de Montréal is the best score	
Master (Univ. de Montréal)	Compiler (Stefan Monnier)	A+
	Introduction to Machine Learning (Yoshua Bengio)	A+
	Deep Learning Algorithms (Yoshua Bengio)	A+
	Fast Proto. of Num. Hybrid Hard.-Soft. App. using FPGAs (Jean-Pierre David)	A+