

Caroline Lemieux

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Education

University of California, Berkeley

2016–Present

Ph.D. in Computer Science

University of British Columbia

2012–2016

B.Sc. in Combined Honours Computer Science and Mathematics

Graduated with highest standing in Faculty of Science (Governor General's Silver Medal)

Publications

- [1] [pdf](#) Caroline Lemieux, Dennis Park, Ivan Beschastnikh. *General LTL Specification Mining*. In Proceedings of the 30th International Conference on Automated Software Engineering (ASE), November 2015. (Main Technical Track)
- [2] [pdf](#) Caroline Lemieux, Ivan Beschastnikh. *Investigating Program Behavior Using the Texada LTL Specifications Miner*. In Proceedings of the 30th International Conference on Automated Software Engineering (ASE), November 2015. (Tool Demonstration Track)
- [3] [pdf](#) Caroline Lemieux. *Mining Temporal Properties of Data Invariants*. In Proceedings of the 37th International Conference on Software Engineering (ICSE), May 2015. (ACM SRC Research Abstract; **won 1st place in Undergraduate Category**)

Experience

Research Assistant (USRA)

2014, 2015

Worked with Ivan Beschastnikh at UBC. Developed the general Linear Temporal Logic (LTL) specification mining tool Texada and the data-temporal property mining tool Quarry. Contributed significantly to the writing of the main technical track paper on Texada [1] and wrote nearly all the first draft of the tool demo paper [2], as well as the SRC abstract on Quarry[3].

Research Assistant (Volunteer)

2014

Worked with Ivan Beschastnikh at UBC. Expanded functionality of the InvariMint tool implementation to allow for more flexibility in algorithm specification.

Undergraduate Academic Assistant

2013–2014

Worked with Gregor Kiczales at UBC. Video lecture editor and online teaching assistant (participated in student forums, developed peer-graded problems) for the Coursera offerings of Introduction to Systematic Program Design.

Undergraduate Teaching Assistant

2013

In-class teaching assistant for CPSC 110 (UBC's introductory computer science course) taught by Meghan Allen.

Awards and Scholarships

International

Finalist, CRA Outstanding Undergraduate Researcher Award	2016
1 st Place Undergraduate, ACM Student Research Competition at ICSE 2015	2015
Honorable Mention, CRA Outstanding Undergraduate Researcher Award	2015

National

NSERC CGS D (declined)	2016
NSERC Undergraduate Student Research Award (supervisor: Ivan Beschastnikh)	2014, 2015

Institutional - UCB

Berkeley Fellowship for Graduate Study	2016
EECS Excellence Award	2016

Institutional - UBC

Governor General's Silver Medal (best in the graduating class for the B.Sc. degree)	2016
Markus Meister Memorial Prize in Computer Science	2016
G C Webber Memorial Prize	2016
Computer Science Scholarship	2015
Shirley Snelgrove and John Yule Scholarship	2015
Trek Excellence Scholarship for Continuing Studies	2013, 2014, 2015
Reginald Palliser-Wilson Scholarship	2014, 2015
Daniel Buchanan Scholarship in Mathematics (highest standing in Honours Math)	2015
Maureta Evelyn McDonald Memorial Scholarship	2014
Charles and Jane Banks Scholarship	2013
Janus J Klawe Memorial Science One Scholarship	2012
Chancellor's Scholar Award	2012

Software

Texada

Tool for inferring LTL program specifications from traces of system behavior.

Code: <https://bitbucket.org/bestchai/texada/>

Demo: <http://bestchai.bitbucket.org/texada/>

Computer Skills

Experienced: Java, C++, HtDP Teaching Languages, \LaTeX

Intermediate: C, Python, JavaScript

Basic: Racket

Languages

French (Fluent), English (Fluent), Spanish (Basic)