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 techincal 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**
1st 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)