

# ELIZABETH ANN PATITSAS

Curriculum Vitae — May 16, 2016

## 1 Biographical Information

### 1.1 Contact Information

- **Email:** patitsas@cs.toronto.edu
- **Mailing Address:** 40 St. George Street, Room 4242, Toronto ON M5S 2E4, Canada

### 1.2 Education

- **DOCTOR OF PHILOSOPHY (IN PROGRESS)** *Aug 2017*  
Programme: Computer Science, University of Toronto  
*Thesis:* Evaluating diversity initiatives in computer science
- **MASTER OF SCIENCE** *Jun 2013*  
Programme: Computer Science, U. of Toronto  
*Thesis:* Comparing and contrasting different algorithms leads to increased student learning
- **HONOURS BACHELOR OF SCIENCE** *Jun 2011*  
Programme: Integrated Sciences (CS/Physics/Math), University of British Columbia  
*Thesis:* Knowledge transfer between laboratory teaching assistants

### 1.3 Employment

- **Course Instructor** *Jan 2015 – May 2015*  
Department of Computer Science, U. of Toronto
- **Course Instructor** *Jan 2014 – May 2014*  
Dept. of Computer Science, U. of Toronto
- **Course Instructor** *Jan 2013 – May 2013*  
Dept. of Computer Science, U. of Toronto
- **Casual Employee** *Jun 2012 – Oct 2012*  
Dept. of Computer Science, U. of Toronto
- **Teaching Assistant** *Sep 2011 – present*  
Dept. of Computer Science, U. of Toronto
- **Research Assistant** *Jul 2011 – present*  
Dept. of Computer Science, U. of Toronto
- **Academic Assistant** *Jan 2011 – Jun 2011*  
Dept. of Computer Science, UBC
- **Summer Camp Instructor** *May 2010 – Aug 2010*  
Dept. of Computer Science, UBC
- **Academic Assistant** *May 2010 – Aug 2010*  
Dept. of Computer Science, UBC
- **Teaching Assistant** *Sep 2008 – Jun 2011*  
Dept. of Computer Science, UBC

## 2 Teaching

### 2.1 Courses Taught

- **CSC 120: Computer Science for the Sciences**, U. of Toronto, Spring 2014, Spring 2015 (Upcoming)
- **CSC 190: Computer Algorithms and Data Structures**, U. of Toronto, Spring 2013
- **CPSC 490: Topics and Methods in CS Education**, UBC, Spring 2011

## 2.2 Teaching Assistantships

- **CSC 209: Software Tools and Systems Programming**, U. of Toronto, Fall 2014
- **CSC 192: Computer Programming, Algorithms, and Data Structures**, U. of Toronto, Fall 2012
- **CSC 258: Computer Organization**, U. of Toronto, Winter 2012
- **CSC 148: Introduction to Computer Science**, U. of Toronto, Fall 2011
- **CSC 165: Mathematical Reasoning and Expression for Computer Science**, U. of Toronto, Fall 2011
- **CPSC 221: Basic Data Structures and Algorithms**, UBC, Summer 2010, Summer 2011
- **CPSC 121: Models of Computation**, UBC, Spring 2009, Spring 2010, Fall 2010, Summer 2010, Spring 2011

## 3 Publications

### 3.1 Refereed Conference Publications

- [1] Elizabeth Patitsas, Michelle Craig, and Steve Easterbrook. Scaling up women in computing initiatives: What can we learn from a public policy perspective? In *Proceedings of the eleventh annual International Conference on International Computing Education Research*, pages 61–69. ACM, 2015.
- [2] Elizabeth Patitsas, Michelle Craig, and Steve Easterbrook. A historical examination of the social factors affecting female participation in computing. In *Proceedings of the 2014 Conference on Innovation & Technology in Computer Science Education*, ITiCSE '14, pages 111–116, New York, NY, USA, 2014. ACM.
- [3] Elizabeth Patitsas. A case study of the development of CS teaching assistants and their experiences with team teaching. In *Proceedings of the 12th Koli Calling International Conference on Computing Education Research*, Koli Calling '12, New York, NY, USA, 2013. ACM.
- [4] Kate Sanders, Marizeh Ahmadzad, Tony Clear, Stephen H. Edwards, Mikey Goldweber, Chris Johnson, Raymond Lister, Robert McCartney, Elizabeth Patitsas, and Jaime Spacco. The Canterbury Question-Bank: building a repository of multiple-choice CS1 and CS2 questions. In *Proceedings of the final reports on Innovation and Technology in Computer Science Education 2013 Working Groups*, ITiCSE-WGR '13, New York, NY, USA, 2013. ACM.
- [5] Elizabeth Patitsas, Michelle Craig, and Steve Easterbrook. Comparing and contrasting different algorithms leads to increased student learning. In *Proceedings of the ninth annual international ACM conference on International computing education research*, ICER '13, pages 145–152, New York, NY, USA, 2013. ACM.
- [6] Michael Goldweber, John Barr, Tony Clear, Renzo Davoli, Samuel Mann, Elizabeth Patitsas, and Scott Portnoff. A framework for enhancing the social good in computing education: a values approach. *ACM Inroads*, 4(1):58–79, March 2013.
- [7] Michael Goldweber, John Barr, Tony Clear, Renzo Davoli, Samuel Mann, Elizabeth Patitsas, and Scott Portnoff. A framework for enhancing the social good in computing education: a values approach. In *Proceedings of the final reports on Innovation and Technology in Computer Science Education 2012 Working Groups*, ITiCSE-WGR '12, pages 16–38, New York, NY, USA, 2012. ACM.
- [8] Elizabeth Patitsas. A case study of environmental factors influencing teaching assistant job satisfaction. In *Proceedings of the 9th Annual Conference on International Computing Education Research*, ICER '12, pages 11–16, New York, NY, USA, 2012. ACM.
- [9] Elizabeth Patitsas and Patrice Belleville. What can we learn from quantitative teaching assistant evaluations? In *Proceedings of the Seventeenth Western Canadian Conference on Computing Education*, WCCCE '12, pages 36–40, New York, NY, USA, 2012. ACM.

- [10] Elizabeth Patitsas and Steven Wolfman. Effective closed labs in early CS courses: lessons from eight terms of action research. In *Proceedings of the 43rd ACM Technical Symposium on Computer Science Education*, SIGCSE '12, pages 637–642, New York, NY, USA, 2012. ACM.
- [11] Elizabeth Patitsas, Kimberly Voll, Mark Crowley, and Steven Wolfman. Circuits and logic in the lab: Toward a coherent picture of computation. In *Proceedings of the 15th Western Canadian Conference on Computing Education*, WCCCE '10, pages 7:1–7:5, New York, NY, USA, 2010. ACM.

### 3.2 Refereed Posters

- [1] Elizabeth Patitsas. Investigating the effects of women-in-CS initiatives. In *Proceedings of the ninth annual international ACM conference on International computing education research*, ICER '13, pages 185–186, New York, NY, USA, 2013. ACM.
- [2] Elizabeth Patitsas, Michelle Craig, and Steve Easterbrook. On the countably many misconceptions about #hashtables. In *Proceedings of the 44th ACM Technical Symposium on Computer Science Education*, SIGCSE '13, pages 739–739, New York, NY, USA, 2013. ACM.
- [3] Kuba Karpierz, Joel Kitching, Brendan Shillingford, Elizabeth Patitsas, and Steven A. Wolfman. “Dictionary Wars”: an inverted, leaderboard-driven project for learning dictionary data structures. In *Proceedings of the 44th ACM Technical Symposium on Computer Science Education*, SIGCSE '13, pages 740–740, New York, NY, USA, 2013. ACM.
- [4] Elizabeth Patitsas, Vanessa Kroeker, Rachel Jordan, and Kimberly Voll. Teaching CPU architecture: a new way to provide effective scaffolding. In *Proceedings of the 12th Koli Calling International Conference on Computing Education Research*, Koli Calling '12, pages 149–150, New York, NY, USA, 2012. ACM.
- [5] Elizabeth Patitsas, Meghan Allen, and Steve Wolfman. Revitalizing labs: Lessons from 2.5 years of iterative development and assessment of digital logic labs. In *Proceedings of the 42nd ACM Technical Symposium on Computer Science Education*, SIGCSE '11, New York, NY, USA, 2011. ACM.

### 3.3 Other Refereed Talks

- [1] Elizabeth Patitsas and Daniel Levy. Dr. Horrible’s fork bomb: A lab for teaching security in CS2. In *Proceedings of the 18th ACM Annual Conference on Innovation and Technology in Computer Science Education*, ITiCSE '13, New York, NY, USA, 2013. ACM.
- [2] Michael Goldweber, John Barr, and Elizabeth Patitsas. Computer science education for social good. In *Proceedings of the 44th ACM Technical Symposium on Computer Science Education*, SIGCSE '13, pages 15–16, New York, NY, USA, 2013. ACM.
- [3] Elizabeth Patitsas. Teaching labs on pseudorandom number generation. In *Proceedings of the 17th ACM Annual Conference on Innovation and Technology in Computer Science Education*, ITiCSE '12, pages 376–376, New York, NY, USA, 2012. ACM.

### 3.4 Non-Refereed Talks and Posters

- [1] Elizabeth Patitsas and Steve Easterbrook. Teaching CS to scientists, 2011. ICER 2011 Lightning Talk.
- [2] Elizabeth Patitsas and Kimberly Voll. Changes in CPSC 121: Toward a coherent picture of computation. CWSEI End-of-Year Event, 2010.

## 4 Service

### 4.1 Conferences and Journals

- **Reviewer**, Computer Science Education, Journal, 2016
- **Conference aide**, SIGCSE Symposium, Memphis TN USA, 2016
- **Reviewer**, SIGCSE Symposium, Kansas City MI USA, 2015
- **Reviewer**, SIGCSE Symposium, Atlanta GA USA, 2014

- **Session chair**, Koli Calling, Koli FI, *2013*
- **Reviewer**, Computer Science Education, Journal, *2013*
- **Reviewer**, ITiCSE, Canterbury UK, *2013*
- **Reviewer**, SIGCSE Symposium, Denver CO USA, *2013*
- **Reviewer and session chair**, ITiCSE, Haifa IS, *2012*
- **Reviewer and conference aide**, SIGCSE Symposium, Raleigh NC USA, *2012*
- **Conference aide**, SIGCSE Symposium, Dallas TX USA, *2011*

## 4.2 University Committees

- **Undergraduate Affairs Committee**, U. of Toronto, Dept. of Computer Science, *Oct 2012 – present*
- **Undergraduate Affairs Committee**, UBC, Department of Math, *Sep 2010 – May 2011*
- **Classroom Experience Committee**, UBC, Dept. of Computer Science, *Sep 2009 – May 2011*

## 4.3 Student Government

- **Treasurer and Secretary**, Computer Science Graduate Student Benevolent Society, U. of Toronto, *May 2013 – Mar 2015*
- **Steward**, Canadian Union of Public Employees Local 3902, U. of Toronto, *Jun 2012 – May 2013*
- **President**, Math Club, UBC, *May 2009 – May 2011*

## 4.4 Reading Groups

- **Coordinator**, Collaborative Changes for the Climate Change Research Community, U. of Toronto, *Aug 2012 – May 2013*
- **Coordinator**, Social Studies of Computer Science, U. of Toronto, *Dec 2012 – Apr 2013*
- **Coordinator**, CS Education Reading Group, U. of Toronto, *Jun 2011 – present*
- **Participant**, Physics Education Brown-Bag Seminars, UBC, *May 2009 – Jun 2011*
- **Coordinator**, CS Education Reading Group, UBC, *Sep 2009 – Jun 2011*

## 4.5 Outreach

- **Instructor**, Software Carpentry, U. of Toronto, *Oct 2014*
- **Helper**, Software Carpentry, U. of Toronto, *Jun 2014*
- **Helper**, Software Carpentry, U. of Toronto, *Jan 2012*
- **Facilitator**, CS4HS, University of Toronto at Mississauga, *Jul 2012*
- **Instructor**, TechTrek, UBC, *Jun 2008 – Jun 2011*

# 5 Awards

## 5.1 Grants and Scholarships

- **Doctoral Fellowship**, Social Sciences and Humanities Research Council of Canada - 60,000 CAD, *Sep 2014 – Aug 2017*
- **Ontario Graduate Scholarship**, Government of Ontario - 15,000 CAD, *Sep 2013 – Aug 2014*
- **Ontario Graduate Scholarship**, Government of Ontario - 15,000 CAD, *Sep 2012 – Aug 2013*

## 5.2 Honours

- **Best Working Group Award**, *Nov 2012*, ITiCSE, ACM SIGCSE
- **Undergraduate TA Award**, *May 2011*, Dept. of Computer Science, UBC
- **Certificate of Appreciation**, *Apr 2010*, Dept. of Computer Science, UBC
- **Members' Choice Award**, *Mar 2010*, Department of Membership, The White Tower

# 6 Other Information

## 6.1 Professional Organizations

- ACM Special Interest Group on Computer Science Education, *Feb 2008 – present*

## 6.2 Guest Lectures

- **CSC 148: Introduction to Computer Science**, U. of Toronto  
*Jun 2013*: review of basic Python, mutability, and basic command-line use
- **CPSC 101: Connecting with Computer Science**, UBC  
*Jul 2010*: talk on public-key cryptography and the  $P?=NP$  problem

## 6.3 Personal Background

- **Citizenship**: Canadian
- **Languages spoken**: English, French