

Gail Carmichael

P.O. Box 114 North Gower, ON K0A 2T0 613-489-3296
contact@gailcarmichael.com <http://www.gailcarmichael.com/>

Education

September 2009 – present

PhD Computer Science

Carleton University, Ottawa, ON

- Augmented reality, educational entertainment

September 2007 – September 2009

Master of Computer Science

Carleton University, Ottawa, ON

- Computer vision and image matching

September 2002 – May 2007

Bachelor of Computer Science, Honours, Minor in Mathematics

Carleton University, Ottawa, ON

- Software and computing stream, co-op option, CGPA 11.87 out of 12.0 (highest honours)

Publications

Carmichael, G., Laganière, R., and Bose, P. **Global Context Descriptors for SURF and MSER Feature Descriptors.** *The Seventh Canadian Conference on Computer and Robot Vision (CRV2010)*. 309-316. June 2010.

Carmichael, G. **Matching Spherical Panoramas to Planar Photographs.** M.C.S. thesis, Carleton University, Ottawa, Canada, 2009.

Carmichael, G. **Girls, computer science, and games.** *SIGCSE Bull.* 40, 4, 107-110. Nov. 2008.

Presentations

Carmichael, G. **Girls, computer science, and games.** *Grace Hopper Celebration of Women and Computing*, 2009.

Agarwal, A., Bustos Arellano, P., Carmichael, G., Dej, B., Maldonado Rodriguez, A., Ngai, S., Osborne, L., Villanueva-Rosales, N., and Wu, W. **Support Groups for Women in STEM: International Perspectives.** *Grace Hopper Celebration of Women in Computing*, 2009.

Carmichael, G. Dej, B. **How to Build a Women in Science/Engineering/Technology Support Group.** *National Conference on Women in Engineering*. 2008.

Teaching

Contract instructor assignments:

- COMP 1001: **Introduction to Computers for Arts Students** (*Summer 2010*)

Teaching assistant assignments (* indicates leading tutorials):

- **Teaching Assistant Mentor** (*Fall 2009, Winter 2010*)
- COMP 1805: **Discrete Structures*** (*Spring 2009*)
- COMP 1501: **Introduction to Computer Game Design*** (*Fall 2008*)
- COMP 3007: **Programming Paradigms** (*Fall 2007, Winter 2008*)

Workshops and mini-courses designed and delivered:

- **Computer Science, Finite State Machines, and Searching**, IBM E.X.I.T.E. Camp (*August 2010*)
- **Computer Science, Programming Languages, Cryptographic Protocols, and Image Representation**, Girls @ Virtual Ventures (*July 2010, August 2010*)
- **Help! Nobody Understands My Lecture!**, TA Mentor Program, Carleton University (*March 2010*)
- **Computer Science and Games: Just for Girls**, Enrichment Mini-Course Program, Carleton University (*May 2008, May 2009, May 2010*)
- **Computer Science, Binary Numbers, and Cryptography**, Let's Talk Science, St Mark Catholic High School (*January 2010*)
- **Techniques for Teaching Computer Science Concepts**, TA Mentor Program, Carleton University (*November 2009*)
- **Computer Science, Image Representation, and Searching**, Girls @ Virtual Ventures, Carleton University (*November 2009*)
- **Physics: Mirrors and Lenses**, Let's Talk Science, St Mark Catholic High School (*November 2009*)
- **Grading**, TA Mentor Program, Carleton University (*October 2009*)
- **Effective Office Hours**, TA Mentor Program, Carleton University (*September 2009*)
- **Women in Computer Science and Finite State Machines**, Girls @ Virtual Ventures and IBM E.X.I.T.E. Camp, Carleton University (*August 2009*)
- **Physics Olympics**, Let's Talk Science, St Mark Catholic High School (*January 2009*)

Certifications:

- Carleton University Education Development Center Graduate University Teaching Skills (GUTS) Certificate (*June 2010*)
- Carleton University Education Development Center Certificate in Teaching Skills (*April 2009*)
- Mindtrust Leadership Development Program (*April 2007*)

Service

Carleton University Women in Science Engineering, Internal Affairs Executive (*2007 – present*)

Grace Hopper Celebration of Women in Computing, Online Communities Committee Member (*2010*)

Grace Hopper Celebration of Women in Computing, Volunteer and Head Blogger (*2008, 2009, 2010*)

Let's Talk Science, Science Outreach Volunteer (*2008 – 2010*)

International Symposium on Mixed and Augmented Reality, Student Volunteer (*2009*)

Carleton Computer Science Society, President (2006 – 2007)

Awards

Carleton University Domestic Tuition Doctoral, Departmental Scholarship (2009 – 2013)

NSERC Post Graduate Scholarship Doctoral (2009 – 2011)

Google Student Travel Award for Grace Hopper Celebration of Women in Computing (2009)

Google Canada Anita Borg Memorial Scholarship Finalist (2008, 2009)

Carleton University Graduate Student Association Honour Award (2009)

NSERC Canada Graduate Scholarship Masters (2007 – 2009)

Carleton University Domestic Tuition Masters, Departmental Scholarship (2007-2009)

Senate Medal for Outstanding Academic Achievement (2007)

NSERC Industrial Undergraduate Student Research Award (2004, 2006)

CIPS Ottawa Section Scholarship (2003, 2005)

David A. Thomas Scholarship in Computer Science (2004)

Nortel Networks Entrance Scholarship (2002 – 2007)

Governor General Bronze Academic Medal (2002)

Extra-Curricular Activities

The Female Perspective of Computer Science (<http://compscigail.blogspot.com>), Blogger (2007 – present)

CRA-W Grad Cohort, Delegate and Poster Presenter (2009, 2010)

North Grenville Photography Club, Member and Webmaster (2009 – present)

ITF Taekwondo, Second Degree Black Belt Student, Occasional Instructor (2003 – present)

Google Campus Ambassador Program, Carleton Ambassador (2006 – 2009)

Employment History

May 2010 – June 2010

Contract Instructor, Carleton University, Ottawa, ON

Designing and teaching courses for School of Computer Science

September 2009 – April 2010

Computer Science Teaching Assistant Mentor, Carleton University, Ottawa, ON

Providing support for computer science TA's, including designing workshops and organizing social activities

May 2008, May 2009, May 2010

Enrichment Mini-Course Instructor, Carleton University, ON

Designing and teaching week-long course 'Computer Science and Games: Just for Girls!' to grade eight students

September 2007 – April 2008, September 2008 – April 2009

Computer Science Teaching Assistant, Carleton University, Ottawa, ON

Designing and leading tutorials, office hours, marking assignments

November 2008 – February 2009

globalU Web Application Developer, Carleton International, Carleton University, Ottawa, ON

Database design, Microsoft Visio, SVN, MySQL, project management

May 2007 – August 2007

Google Summer of Code Participant for Inkscape

C/C++, SVN, solving text and font issues

May 2004 – December 2004, May 2006 – September 2006

Software Developer (Co-op), Ross Video, Ottawa, ON

Embedded systems programming, Linux, C, CVS, developing features for production video switcher

May 2005 – September 2005, January 2006 – April 2006

Software Developer (Co-op), Corel Corporation, Ottawa, ON

Windows programming, C++, Microsoft Visual Studio and Visual Source Safe, solving text and font issues