



Dr. Gregory V. Wilson

gvwilson@third-bit.com

<http://third-bit.com>

416 435 9779

Employment

- 2017–2018 Head of Instructor Training at DataCamp; member of the Toronto Public Library's Innovation Council.
- 2017 Principal Consultant at Rangle.io focusing on technical training.
- 2015–2016 Director of Instructor Training for the Software Carpentry Foundation, a volunteer non-profit organization that teaches basic lab skills for research computing.
- 2014–2015 Executive Director of the Software Carpentry Foundation. Developed curriculum, trained instructors, negotiated partnerships with universities and other organizations, and led developed of a web-based tool for tracking instructors and workshops.
- 2012–2014 Project lead for Software Carpentry while employed by the Mozilla Foundation on a Sloan Foundation grant; co-edited Volume 2 of *The Architecture of Open Source Applications*, a collection of essays on the design of large software systems.
- 2011 Software engineer, Side Effects Software Inc. Helped design and build a web application for their flagship product; co-edited Volume 1 of *The Architecture of Open Source Applications*.
- 2010–2011 Project lead for Software Carpentry; co-edited *Making Software*, a collection summarizing evidence-based results in software engineering; supervised MSc theses at the University of Toronto while an Adjunct Professor in the Department of Computer Science.
- 2006–2010 Assistant Professor in the Department of Computer Science at the University of Toronto. Taught graduate and undergraduate courses; developed a Professional Master's degree in Computer Science; co-edited *Beautiful Code*; on the editorial boards of *Computing in Science and Engineering* and *Doctor Dobb's Journal*; supervised MSc theses; published a children's book titled *Bottle of Light*.
- 2004–2006 Wrote and published *Data Crunching*; rewrote the Software Carpentry course under a grant from the Python Software Foundation; IAdjunct Professor in Computer Science at the University of Toronto; contributing editor with *Doctor Dobb's Journal*.
- 2000–2004 Helped developed an access control and authorization product at Baltimore Technologies and Hewlett-Packard; contributing editor with *Doctor Dobb's Journal*; developed a new course on software design and supervised undergraduate honors projects at the University of Toronto.

- 1998–2000 Organized and ran Software Carpentry classes at Los Alamos National Laboratory; worked on SelectAccess for Nevex Software Technologies; editorial work for *Doctor Dobb's Journal*; published a children's picture book titled *Three Sensible Adventures*.
- 1996–1998 Visible Decisions Inc., Toronto. Led development of an IDE for building 3D data visualization applications.
- 1995–1996 Centre for Advanced Studies, IBM Toronto. Co-developed a C++ library for parallel and distributed computing; co-edited *Parallel Programming Using C++*.
- 1992–1995 Post-doctoral work at the University of Oregon, University of Alberta, Australian National University (Canberra), Vrije Universiteit (Amsterdam), and University of Toronto while writing *Practical Parallel Programming*.
- 1986–1992 Edinburgh Parallel Computing Centre. Developed and parallelized large scientific applications for the Centre's industrial sponsors; supervised graduate and undergraduate theses; created and ran the Centre's Summer Scholarship Program; developed an entry for the 1989 World Computer Chess Championship while completing PhD part-time.
- 1985 Design Interpretive Division, Bell-Northern Research, Ottawa. Developed a real-time interface to a 3D digitizer for use in an office automation system prototype.
- 1984–1985 Developed signal processing software for Miller Communications in Ottawa.
- 1975–1983 Various part-time and summer jobs, including an NSERC USRA in 1982.

Education

- 1993 PhD in Computer Science, University of Edinburgh. Thesis was *Structuring and Supporting Programs on Parallel Computers*.
- 1986 MSc in Artificial Intelligence, University of Edinburgh. Thesis was *An Implementation of a Connection Method Theorem Prover for S5 Modal Logic*. Shared Howe Prize for best thesis in year.
- 1984 BSc in Mathematics and Engineering (First Class Honors), Faculty of Applied Science, Queen's University, Ontario. Top student in graduating class.

Awards

- Winner of ComputerWorld Canada's "IT Educator of the Year" award, 2010.
- Co-winner with Andy Oram of 2008 Jolt Award for Best General Book (for *Beautiful Code*).
- University of Toronto Computer Science Student Union Teaching Award, 2004.
- Shared Howe Prize (best MSc thesis in Artificial Intelligence), University of Edinburgh, 1986.
- Commonwealth Scholarship, 1985–86.
- University Medal, Queen's University, 1984 (top student in graduating class).
- Co-winner of A.B. Lillie Prize, 1984 (top student in Mathematics).
- Dean's Scholar, Queen's University, 1982–84.

Technical Books

- Greg Wilson: *How to Teach Programming (and Other Things)*. Lulu.com, 2017.
- Amy Brown and Greg Wilson (eds.): *The Architecture of Open Source Applications: Elegance, Evolution, and a Few Fearless Hacks* (two volumes), Lulu.com, 2011 and 2012.
- Andy Oram and Greg Wilson (eds.): *Making Software: What Really Works, and Why We Believe It*. O'Reilly, 2010.
- Jennifer Campbell, Paul Gries, Jason Montojo, and Greg Wilson: *Practical Programming*. Pragmatic Bookshelf, 2009.
- Andy Oram and Greg Wilson (eds.): *Beautiful Code: Leading Programmers Explain How They Think*. O'Reilly & Associates, 2007; winner of 2008 Jolt Award for Best General Book.
- Greg Wilson: *Data Crunching: Solve Everyday Problems Using Java, Python, and More*. Pragmatic Bookshelf, 2005.
- Gregory V. Wilson and Paul Lu (eds.): *Parallel Programming Using C++*. MIT Press, 1996.
- Gregory V. Wilson: *Practical Parallel Programming*. MIT Press, 1995.
- Arthur Trew and Greg Wilson (eds.): *Past, Present, Parallel: A Survey of Available Parallel Computing Systems*. Springer-Verlag, London, 1991.

Selected Papers and Articles

- Neil Brown and Greg Wilson: "Ten Quick Tips for Teaching Programming". *PLoS Computational Biology*, 2018.
- Gabriel Devenyi, Rémi Emonet, Rayna Harris, Kate Hertweck, Damien Irving, Ian Milligan, and Greg Wilson: "Ten Simple Rules for Collaborative Lesson Development". *PLoS Computational Biology*, 2018.
- Daniel Almeida, Gail Murphy, Greg Wilson, and Mike Hoye: "Do Software Developers Understand Open Source Licenses?" *ICSE'17*, 2017.
- Morgan Taschuk and Greg Wilson: "Ten Simple Rules for Making Research Software More Robust". *PLoS Computational Biology*, 2017.
- Greg Wilson: "Software Carpentry: Lessons Learned". *F1000 Research*, 2016.
- John Blischak, Emily Davenport, and Greg Wilson: "A Quick Introduction to Version Control with Git and GitHub". *PLoS Computational Biology*, 2016.
- Marian Petre and Greg Wilson: "Code Review For and By Scientists". *WSSSPE'14*, 2014.
- Greg Wilson, Dhavide Aruliah, Titus Brown, Neil Chue Hong, Matt Davis, Richard Guy, Steven Haddock, Kathryn Huff, Ian Mitchell, Mark Plumbley, Ben Waugh, Ethan White, and Paul Wilson: "Best Practices for Scientific Computing". *PLoS Biology*, 2014.
- Eleni Stroulia, Ken Bauer, Michelle Craig, Karen Reid, and Greg Wilson: "Teaching Distributed Software Engineering with UCOSP: The Undergraduate Capstone Open-Source Project". *CTGDSD'11*, 2011.
- Jordi Cabot and Greg Wilson: "Tools for Teams: A Survey of Web-Based Software Project Portals". *Doctor Dobb's Journal*, 2009.
- Greg Wilson: "How Do Scientists Really Use Computers?" *American Scientist*, 2009.
- Jo Erskine Hannay, Hans Petter Langtangen, Carolyn MacLeod, Dietmar Pfahl, Janice Singer, and Greg Wilson: "How Do Scientists Develop and Use Scientific Software?" *SECSE'09*, 2009.
- David Matthews, Greg Wilson, and Steve Easterbrook: "Configuration Management for Large-Scale Scientific Computing at the UK Met Office". *Computing in Science and Engineering*, 2008.
- Debbie Winter, Ben Vinegar, Hardeep Nahal, Ron Ammar, Greg Wilson, and Nicholas Provart: "An 'Electronic Fluorescent Pictograph' Browser for Exploring and Analyzing Large-Scale Biological Data Sets". *PLoS ONE*, 2007.
- Jorge Aranda, Steve Easterbrook, and Greg Wilson: "Requirements in the Wild: How Small Companies Do It". *RE'07*, 2017.

- Greg Wilson: “Where’s the Real Bottleneck in Scientific Computing?” *American Scientist*, 2006.
- Greg Wilson: “Extensible Programming for the 21st Century”. *ACM Queue*, 2004.
- Michelle Levesque and Greg Wilson: “Open Source, Cold Shoulder”. *Software Development*, 2004.

Sole or joint author of over 130 other articles and book reviews in academic journals, popular science magazines, newspapers, and trade publications, including *Doctor Dobb’s Journal*, *IEEE Software*, *New Scientist*, and *The Independent*.

Children’s Books and Fiction

- Greg Wilson: *The Bookster’s Apprentice*. Lulu.com, 2017.
- Greg Wilson: *The Cloudbird and the Tiger’s Boy*. Lulu.com, 2017.
- Greg Wilson: *Still*. Lulu.com, 2013.
- Ellen Hsiang and Greg Wilson: *And Then...* Lulu.com, 2011.
- Greg Wilson: “Still” *On Spec*, 22/2, Summer 2010.
- Greg Wilson: *Bottle of Light*. Scholastic Press Canada, 2008.
- Greg Wilson: “Controlled Release” *On Spec*, 19/4, Winter 2007.
- Greg Wilson: “...But With a Whimper” *On Spec*, 19/3, Fall 2007.
- Greg Wilson: *Three Sensible Adventures*. Annick Press, 1999.

Other Achievements

- Member, Python Software Foundation, 2010-present.
- Advisory Board, Ladies Learning Code, 2012-2014.
- Mentor for Google’s Summer of Code, 2005-2015.
- Supervised or co-supervised over 100 undergraduate theses at several universities.
- Ultimate frisbee, 1991-2003 (Toronto “C” Division championship team 2002).
- PADI Open Water Diver certification, 1998.
- Competitor in 6th World Computer Chess Championship, Edmonton, 1989.
- Past or current member/volunteer with the Canadian National Institute for the Blind, the Sierra Club, Amnesty International, OXFAM, the Bruce Trail Association, and the Green Party of Canada.

References available upon request.