CURRICULUM VITAE

Barton Christopher Massey   December 2013

Education

Ph.D. 1999 Computer Science, University of Oregon
M.S.   1992 Computer Science, University of Oregon
B.A.   1987 Physics, Reed College

Selected Employment

Associate Professor, Department of Computer Science, Portland State University, Portland OR, 2007–present.

Assistant Professor, Department of Computer Science, Portland State University, Portland OR, 1998–2007.

System Administrator, Computational Intelligence Research Lab, University of Oregon, Eugene OR, 1996–1998.

Research Assistant, University of Oregon, Eugene, OR, 1990–1998.

Software Engineer III, Tektronix, Beaverton OR, 1988–1990.

Assistant Director of Academic Computing, Reed College, Portland OR, 1985–1987.

Software Engineer II, Tektronix, Wilsonville OR, 1988.

Instructor, Computer Science Department, Portland State University, Portland OR, 1988.

Dissertation

Directions In Planning: Understanding The Flow Of Time In Planning, June 1999. Advisor: Matt Ginsberg, Computational Intelligence Research Laboratory, University of Oregon.

Refereed Publications or Other Creative Achievements

Journal Articles

Bart Massey. "Longitudinal analysis of long-timescale open source repository data". *SIGSOFT Software Engineering Notes*, 30(4), 2005. URL `http://www.cs.pdx.edu/~bart/papers/promise-data.pdf`.

Sergio Antoy, Pascual Julián Iranzo and Bart Massey. "Improving the efficiency of non-deterministic computations". *Electronic Notes On Theoretical Computer Science*, 64, September 2002. URL `http://www.cs.pdx.edu/~bart/papers/entcs-nondet.pdf`.

A Common Intermediate Language and its Use in Partitioning Concurrent Declarative Programs, with Z. M. Ariola, M. Sami, and E. Tick. *New Generation Computing* 14(3):281, Springer-Verlag 1996.

Experience with the Super Monaco Optimizing Compiler, with E. Tick and J. S. Larson. *Journal of Logic Programming* 29(1–3):141–169, Elsevier 1996.

Conference Papers

Bhuricha Deen Sethanandha, Bart Massey and William Jones. *Managing Open Source Contributions For Software Project Sustainability*. In *Proceedings of the 2010 Portland International Conference on Management of Engineering & Technology (PICMET 2010)*, Bangkok, Thailand, July 2010. URL `http://www.cs.pdx.edu/~bart/papers/picmet-patch.pdf`.

Bart Massey. *Fast Perfect Weighted Resampling*. In *Proceedings of the 33rd International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2008)*, Las Vegas, Nevada, March 2008. URL `http://www.cs.pdx.edu/~bart/papers/icassp-ltrs.pdf`.

Sangsuree Vasupongayya, Su-Hui Chiang and Bart Massey. *Search–based Job Scheduling for Parallel Computer Workloads*. In *Proc. 2005 IEEE Annual International Conference on Cluster Computing (Cluster 2005)*, Boston, MA, September 2005. URL `http://www.cs.pdx.edu/~suhui/publications/cluster2005.pdf`.

Bart Massey. *Putative Software Engineering and the X Window System*. In *Proc. 2005 Desktop Developers' Conference, Ottawa Linux Symposium*, Ottawa, Canada, July 2005. URL `http://www.cs.pdx.edu/~bart/papers/ddc-se.pdf`.

James R. Binkley and Bart Massey. *Ourmon and Network Monitoring Performance*. In *Proc. 2005 Usenix Annual Technical Conference, Freenix Track*, Anaheim, CA, April 2005. URL `http://www.cs.pdx.edu/~bart/papers/freenix-ourmon.pdf`.

Bart Massey, Mick Thomure, Raya Budrevich and Scott Long. *Learning Spam: Simple Techniques For Freely-Available Software*. In *Proc. 2003 Usenix Annual Technical Conference, Freenix Track*, San Antonio, TX, June 2003. URL `http://www.cs.pdx.edu/~bart/papers/spam.pdf`.

James Perkins, Andrew Greenberg, Jamey Sharp, David Cassard and Bart Massey. *Free Software and High-Power Rocketry: The Portland State Aerospace Society*. In *Proc. 2003 Usenix Annual Technical Conference, Freenix Track*, San Antonio, TX, June 2003. URL http://psas.pdx.edu/psas/usenix_2003/psas.pdf.

Bart Massey and Robert Bauer. *X Meets Z: Verifying Correctness In The Presence Of POSIX Threads*. In *Proc. 2002 Usenix Annual Technical Conference, Freenix Track*, Monterey, CA, June 2002. URL http://www.cs.pdx.edu/~bart/papers/usenix-zxcb.pdf.

Jamey Sharp and Bart Massey. *XCL: An Xlib Compatibility Layer For XCB*. In *Proc. 2002 Usenix Annual Technical Conference, Freenix Track*, Monterey, CA, June 2002. URL http://www.cs.pdx.edu/~bart/papers/usenix-xcl.pdf.

Bart Massey and Jamey Sharp. *XCB: An X Protocol C Binding*. In *Proc. 2001 XFree86 Technical Conference*, Oakland, CA, November 2001. USENIX. URL http://www.cs.pdx.edu/~bart/papers/xfree86-xcb.pdf.

Bart Massey. *Experience With A Process For Competitive Programming*. In *Proc. 2001 Pacific Northwest Software Quality Conference*, Portland, OR, October 2001. URL http://www.cs.pdx.edu/~bart/papers/pnsqc-acm.pdf.

Sergio Antoy, Michael Hanus, Bart Massey and Frank Steiner. *An Implementation of Narrowing Strategies*. In *Proc. 3rd International ACM SIGPLAN Conference on Principles and Practice of Declarative Programming*, Florence, Italy, September 2001. URL http://www.cs.pdx.edu/~bart/papers/ppdp-nmind.pdf.

Sergio Antoy, Pascual Julián Iranzo and Bart Massey. *Improving the Efficiency of Non-Deterministic Computations*. In *Proc. 10th International Workshop on Functional and Logic Programming*, Kiel, Germany, September 2001. Published in revised and extended form as Antoy et al., *Improving the Efficiency of Non-Deterministic Computations* cit.. URL http://www.cs.pdx.edu/~bart/papers/wflp-nondet.pdf.

Bart Massey and Keith Packard. *Nickle: Language Principles and Pragmatics*. In *Proc. 2001 Usenix Annual Technical Conference, Freenix Track*, Boston, MA, June 2001. URL http://www.nickle.org/usenix-nickle.pdf.

Super Monaco: Its Portable and Efficient Parallel Runtime System, with J. S. Larson and E. Tick. In *Proceedings of the International EURO-PAR Conference — 1995*, Stockholm, Sweden 1995. Published as *Lecture Notes in Computer Science* (966):527, Springer-Verlag 1995.

Modes of Comprehension: Mode Analysis of Arrays and Array Comprehensions, with E. Tick. In *Proceedings of the 7th International Symposium on Programming Languages: Implementations, Logics, and Programs (PLILP '95)*, Utrecht, The Netherlands, Springer-Verlag 1995.

Optimizing Clause Matching Automata in Committed-Choice Languages, with E. Tick. In *Proceedings of the First International Symposium on Parallel Symbolic Computation (PaSCo '94)*, Linz, Austria, Springer-Verlag 1994.

Demand-Driven Dataflow for Concurrent Committed-Choice Code, with E. Tick. In *Proceedings of the IFIP WG 10.3 Working Conference on Parallel Architectures and Compilation Techniques (PACT '94)*, Montréal, Québec, North-Holland 1994. Reprinted in *IFIP Transactions A, Computer Science Technology* (A-50):215–224.

The Diadora Principle: Efficient Execution of Fine-Grain Concurrent Languages, with E. Tick. In *Proceedings of the 26th Annual Hawaii International Conference on Systems Sciences (HICCS '93)*, Wailea, HA, IEEE Computer Society Press 1993.

Sequentialization of Parallel Logic Programs with Mode Analysis, with E. Tick. In *Proceedings of the 4th International Conference on Logic Programming and Automated Reasoning (LPAR '93)*, St. Petersburg, Russia 1993.

Workshop Papers

L. Shapiro, T. Hayes, Delcambre L., Harrison W. and Massey B. *Requirements for a Next Generation Personal File Manager*. In *Workshop on Personal Information Management, in CSCW*, 2012.
URL `http://http://pimworkshop.org/2012/pdf/shapiro_2012_requirements.pdf`.

Bart Massey and Keith Packard. *Regurgitate: Using GIT For F/LOSS Data Collection*. In *Proceedings of the 2006 Workshop on Public Data about Software Development (WoPDaSD 2006), Second International Conference on Open Source Systems*, Como, Italy, June 2006.
URL `http://www.cs.pdx.edu/~bart/papers/wopdasd-regurgitate.pdf`.

Bart Massey. *Longitudinal Analysis of Long–Timescale Open Source Repository Data*. In *Proc. 27th International Conference on Software Engineering (ICSE) Workshop on Predictor Models in Software Engineering (PROMISE 2005)*, St. Louis, MO, May 2005.
URL `http://www.cs.pdx.edu/~bart/papers/promise-data.pdf`.

Fully Demand-Driven Execution of Committed-Choice Programs. *Workshop on Parallel Logic Programming and its Programming Environments*, Eugene, Oregon 1994. Proceedings published as University of Oregon Technical Report CIS-TR–94-04.

Compilation of Concurrent Declarative Languages, with Z. M. Ariola, M. Sami, and E. Tick. *Workshop on Integration of Declarative Languages*, Santa Margherita Ligure, Italy 1994. Published as Max Planck Institut Fur Informatik Technical Report MPI I 1994 issue 224.

Concurrent Logic Programs *a la Mode*, by E. Tick, B. C. Massey, F. Rakoczi, and P. Tulayathun. In *Proceedings of the Workshop on Practical Implementations and Systems Experience in Logic Programming*, Budapest, Hungary 1993.

Other

Ken Tegetmeyer M.D., Bart Massey Ph.D. and Brahm Goldstein M.D. "Diagnosing shock via artificial intelligence: Applying machine learning techniques to medicine". *Critical Care Medicine*, 32(2), February 2004. Editorial.

Charles B. McVey, David P. Clements, Barton C. Massey and Andrew J. Parkes. *Worldwide Aeronautical Route Planner*. In *Proc. 1999 National Conference on Artificial*

Intelligence, Orlando FL, July 1999. Paper for Intelligent Systems Demonstration.
URL `http://www.cs.pdx.edu/~bart/papers/aaai99-warp.pdf`.

Non-Refereed Publications or Other Creative Achievements

Workshop Papers

Bart Massey. *Why OSS Folks Think SE Folks Are Clue-Impaired.* In *Proc. Workshop on Open-Source Software Engineering, 2003 International Conference on Software Engineering*, Portland, OR, May 2003.
URL `http://www.cs.pdx.edu/~bart/papers/icse-osse.pdf`.

Bart Massey. *Where Do Open Source Requirements Come From (And What Should We Do About It)?* In *Proc. 2nd Workshop On Open-Source Software Engineering*, Orlando, FL, May 2002. URL `http://www.cs.pdx.edu/~bart/papers/os-req.pdf`.

Articles

Bart Massey. "Funny business, serious business: O'Reilly OSCON 2006". *IEEE Software Magazine*, November 2006.

Bart Massey. "Open source and government systems: GOSCON 2005". *IEEE Software Magazine*, pp. 111–113, January 2006.
URL `http://csdl2.computer.org/comp/mags/so/2006/01/s1108.pdf`.

Bart Massey. "Opening the mainstream: O'Reilly OSCON 2005". *IEEE Software Magazine*, pp. 101–102, November 2005.
URL `http://csdl2.computer.org/comp/mags/so/2005/06/s6098.pdf`.

Java Development for the Rest of Us: Java Development in Odd Environments. *Power Builder & Java Journal Online*, March 1997. http://www.pbmag.com.

Java AWT Images: Use and Uses. *Power Builder & Java Journal Online*, January 1997. http://www.pbmag.com.

Book reviews

Richard E. Silverman. *Git Pocket Guide: A Working Introduction.* O'Reilly, 2013. ISBN 978-1449325862.

Jon Loeliger. *Version Control With Git.* O'Reilly, second edition, 2012. ISBN 978-1449316389.

Jon Loeliger. *Version Control With Git.* O'Reilly, 2009. ISBN 978-8184047325.

Professional Invited Talks

Lessons From X, Open Source Bridge Conference, June 2013.

Chomp: Game AI in Sixty Minutes, Open Source Bridge Conference, June 2013.

Understand 'Inform 7' as Teh Awesome, Open Source Bridge Conference, June 2012.

⟨*Your Favorite Programming Language*⟩ *Loses*, Open Source Bridge Conference, June 2012.

Understand 'Inform 7' as an Ontological Description Language (colloquium), PSU Systems Science Dept., May 2012.

Seven Habits Of Highly Obnoxious Trolls (with Selena Deckelman and Jonathan Leto), Open Source Bridge Conference, June 2011.

A Tangled Tale, Open Source Bridge Conference, June 2011.

Open Source for Underrepresented Students, Louis B Stokes Alliance for Minority Participation, 2010.

The Evolution of Lower Middle UNIX Userland 1985-2010, Boulder Linux Users Group, 2010.

The Way of Open Source, Portland State Business Accelerator, February 2009.

Randomly State Space Tracking (colloquium), Reed College, October 2008.

Open Tech in Oregon (for Japanese site visit), Oregon Technology Business Center, February 2008.

The State of the X Window System (with Keith Packard), Google Seminar, February 2008.

Ouch! The Awkward Legal Problem of Open Source, Oregon Bar Association (CLE talk), January 2008.

Legal Issues in Open Source, Portland State Business Accelerator, July 2007.

Open Source: Transcending Time and Distance, Oregon Economic Development Commission Summit, June 2006.

The Golem, or Open Source in the Academy (colloquium), University of Oregon, May 2006.

Open Source Perspectives, Microsoft, September 2005.

Information Security Policy, National Security Administration, January 2005.

Introduction to Open Source: Business, Software, and Community, Portland InnoTech Conference, March 2004.

A Nickle Buys More Than It Used To: The Evolution of Nickle 1985-2004, PSU Student ACM Chapter, February 2004.

Open Source in Oregon Higher Ed, Open Source Catalyst Group event, O'Reilly Open Source Conference, June 2003.

Yacht For One Or Two, May 2001, Lewis and Clark College, Portland OR.

Games Computers Play, April 2000, Lewis and Clark College, Portland OR.

Usenix 2000 Trip Report, Networking and Operating Systems Seminar, October 2000.

Other

Classroom Teaching and Technology Engineering: A Study In Wearable Computing, PSU Scholarship of Teaching and Resource Team Annual Report, May 2003.

Interview: Oregon State Representative Phil Barnhart, re HB 2892 (Open Source Initiative), on behalf of IEEE Software Magazine, March 2003.

A 3–5 Year Computing Technology Forecast For The Academy, on behalf of the Technology Subcommittee of the Portland State University Advisory Committee on Academic Information Technologies. In Portland State University Technology Plan III, May 2001.

Presentations at Professional Meetings

Wrong Turn at Palo Alto, LinuxCON, 2011.

10-9 / Open VoiceBridge: Open Tech for Public Safety, Government Open Source Conference, October 2007.

Whence the Workplace?, Portland InnoTech Conference, April 2007.

XCB Status Report (with Keith Packard), X.Org Developers Conference, February 2006.

Open Source Strategies (panel moderator), First Annual Government Open Source Conference (GOSCON 2005), October 2005.

Sensitive Information Sharing: Policy and Mechanism, NSA Site Visit, January 2005.

Nickle's Polite Type System, IBM Workshop on Formal Methods, September 2004.

Matchbox: A Window System Not For The Desktop, Usenix Annual Technical Conference (Freenix Track), June 2003.

Information Sharing Policy, Oregon RAINS NIST Site Visit, March 2003.

Prototyping With Nickle: An Algorithm Sketchpad, Software Engineering Research Center Fall Showcase, Pittsburgh PA, October 2001.

Worldwide Aeronautical Route Planner (joint presentation with David P. Clements), Intelligent Systems Demonstration, American Association for Artificial Intelligence, Orlando FL, July 1999.

Honors, Grants and Fellowships

Portland Development Council ($75,000), RapidMade Inc. ($75,000 matching), Jobs and Innovation Accelerator Challenge (JIAC) Grant, Additive Manufacturing of Conformal Cooling Channels for Plastic Injection Molds, with RapidMade Inc., 2011–present.

Google ($28,500), PSU Summer of Code, 2005–present.

National Institutes of Justice ($158,000), "Project 10-9", *Using Portable Radios to Operate Mobile Data Terminals*, with Warren Harrison, 2006-2007.

Google ($100,000), grant to support Oregon open source university research initiatives, in partnership with Oregon State University and the OSU Open Source Laboratory (received $250,000), 2005.

Identified as a Pioneer (1 of 10) for work in open source by Oregon Business magazine, as part of their profile of 50 Oregon Leaders, 2005.

Google ($40,000), Mentoring Organization Lead for their *Summer of Code* student open source development program, 2005. Eight students. PSU was the only US University to be selected as a mentoring organization.

Northwest Academic Computing Consortium ($10,000), for equipment for *Applications of Open Software-Defined Radio*, 2005.

IEEE Aerospace and Electronic Systems Society ($1,000), donation for rocket launch logistics, 2005.

IBM Distinguished Faculty Fellowship ($21,000, 11 awarded world-wide), *A Power Platform for Amateur Rocket Avionics*, 2005.

NASA Phase I SBIR in support of the Portland State Aerospace Society ($68,000), *Magic Bullet: Real-time Anytime Treatment Learning for Adaptive Intelligent Vehicle Health Management* with Tim Menzies, 2005.

3D Map Data For PSAS (est. value $500), Digimation Inc., 2005.

Computing Research Experiences for Women (CREW) grant to students Raya Budrevich and Judy Fischbach ($2000), with Pavel Sumazin, Computing Research Association (CRA), 2003-2004.

Portland State University Scholarship of Teaching and Resource Team Grant ($800). *An Inexpensive Wearable Computer For Classroom Teaching*, 2002–2003.

Best Paper. Freenix Track, Usenix 2001 Annual Technical Conference.

Intel Grant ($75,000). *Upgrade of the Intel Microprocessor System Design Lab and Creation of a Linux Lab at Portland State University*, with Doug Hall, Xiaoyu Song, and Joseph Albert, 2000–2001.

NASA Oregon Space Grant ($9,900). *Student Design of a Modular Sounding Rocket*, with James McNames and Herman Migliore, 2000–2001.

IEEE Innovator, Portland State Aerospace Society, Fall 2000.

NSF Grant INT-9981317 ($12,808). *U.S.-Germany Cooperative Research: Advanced Techniques for Multi-Paradigm Declarative Languages*, with Sergio Antoy, 1999–2001.

Portland State University School of Engineering and Applied Sciences Outstanding Teaching Award, Computer Science, 1999–2000.

Best Student Paper. EURO-PAR, 1995.

University of Oregon Doctoral Research Fellowship (highest University of Oregon graduate student honor). 1994.

Other Research and Other Creative Achievements

Software design and implementation, the XCB project, 2001–2010. Developed an advanced replacement system for X Window System infrastructure functionality under the aegis of the `freedesktop.org` group. Current work is on formal desriptions of X protocol using metalanguages, and on increasing the development team size and fielded base.

Software design and implementation, Modular Sounding Rocket, Portland State Aerospace Society, 1999–present. Achieved a successful launch to approximately 12,000' of a launch vehicle containing a highly advanced sensory and communications payload. Current work includes error detection and correction and visualization of telemetry downlink data, analysis of sensor data, and communications protocol design.

Software design and implementation, the Nickle programming language, with Keith Packard, 1988–present. Built and deployed an advanced programming language, with C-like syntax and surface semantics but with an advanced numerical model and a wide range of modern programming language features.

Process model development, PSU ACM Programming Competition Team, 1999, 2000, 2003. Developed a sophisticated process model for team problem solving, tuned it based on experience, and evaluated it in the competitive environment.

Other Teaching, Mentoring and Curricular Achievements

Courses Taught: PSU

PSU CS 441/541: Artificial Intelligence. Fall 2012–2013, Winter 2011, Fall 2000–2005.

PSU CS 300: Elements of Software Engineering. Fall 2013, Fall 2010, Summer 2009, Winter 2007, Spring 2000 (with Warren Harrison).

PSU CS 461/561 OSS: Open Source UNIX Software Development. Summer 2012–2013. Taught as CS 410/510 Summer 2002–2011.

PSU CS 442/542: Combinatorial Games. Spring 2013, Spring 2011, Spring 2009, Spring 2007, Spring 2005. Taught as 410/510 Summer 2000, Spring 2002.

PSU CS 584/684: Algorithm Design and Analysis. Spring 2013.

PSU CS 462/562: Advanced Open Source Software Engineering. Winter 2013. Taught as CS 410/510 Fall 2010, Fall 2008, Fall 2006.

PSU CS 161: Introduction to Programming and Problem Solving. Winter 2013 (with Warren Harrison and Dona Hertel), Fall 2011.

PSU CS 494/594: Internetworking Protocols. Fall 2012, Spring 2012.

PSU CS 487-488: Capstone. Spring–Summer 2012, Fall–Winter 2012, Winter–Spring 2000.

PSU CS 305: Social, Ethical and Legal Implications of Computing (with Warren Harrison). Spring 2011.

PSU CS 350: Algorithms and Complexity. Spring 2011, Summer 2010.

PSU CS 443/543 CS: Combinatorial Search. Winter 2011, Spring 2010, Spring 2006, Spring 2003. Taught as 410/510 Winter 2001.

PSU CS 572: UNIX Internals (Linux Device Drivers, with Jim Binkley). Fall 2010, Fall 2009, Spring 2005.

PSU CS 251: Discrete Structures II. Spring 2010, Winter 2010.

OMSE 522: Modeling and Analysis of Software Systems. Winter 2008, Winter 2007 (with Cynthia Brown), Winter 2005, Winter 2003, Winter 2002, Spring 2001, Spring 2000 (with Warren Harrison).

PSU CS 410/510: Multicore Computing Practicum. Fall 2008.

PSU CS 410/510: Software Radio FPGA Programming for CS (with Julian Kongslie). Winter 2007.

PSU CS 555: Software Specification and Verification. Winter 2006, Winter 2004.

PSU CS 441/541: Artificial Intelligence. Fall 2000, 2001, 2002, 2003, 2004.

PSU CS 410/510: Search and Scheduling. Winter 2000.

OMSE 535: Software Implementation and Testing, with Dick Hamlet. Fall 1999.

PSU CS 410/510 SPS: Scheduling, Planning, and Search. Spring 1999.

OMSE 500: Principles of Software Engineering. Fall 1998, Spring 1999.

PSU CS (as instructor): Introduction To Programming In Pascal; UNIX, C, and Software Engineering; 8088 Assembly Language Programming; and Data Structures. 1988.

Courses Taught: Other

University of Würzburg, International Week program, compressed courses (1/2–1 week). Open Source Development, 2004; Software in Rocketry, 2005; Adversary Search in Minichess, 2006, 2009, 2010, 2012, 2013.

U. Oregon CIS 410/510: X Window System Programming. Summer 1995.

Course: X Window System Programming (two week intensive course). National Science Foundation *SuperQuest*, Summer 1994.

U. Oregon CIS 405: Survey Of Programming Languages. Winter 1994.

U. Oregon CIS 410/510: C and UNIX. Summer 1992.

Other Achievements

Ph.D. Student Supervised: Bhuricha Deen Sethanandha, 2009–present. Patch Contribution Process in Open Source Software Development. Defense expected 2015.

Honors Undergraduate supervised: Tesca Fitzgerald, 2012–2013. Design of UI modeling tools using a graphically enhanced textual storytelling environment.

Ph.D. Student Supervised: Rob Stites, 2009–2010. Forensic Image Processing.

Ph.D. Student Co-supervised: Anca Williams, with Gerardo Laferriere—Mathematics Dept., 2001–2005. Mathematical and Computational Control Theory.

Ph.D. Student Co-supervised: Sangsuree Vasupongayya, with Su-Hui Chiang, 2002–2006. Combinatorial search in scheduling, with supercomputing applications.

M.S. Student Supervised: Mark Heller, 2003–2005. Virtual World Ontologies.

M.S. Student Supervised: Gursharn Khatra, 2003–2005. Quality Analysis of Biological Mass Spectra Using Machine Learning.

Undergraduates Supervised: Raya Budrevich and Judy Cota Robles 2003–2004, with Pavel Sumazin. Work on local search in bioinformatics.

Coach: ACM International Collegiate Programming Competition, Portland State University / Association for Computing Machinery, 1999–2000, 2003–2005.

M.S. Thesis Committee: Andrew Greenberg, Electrical and Computer Engineering Dept., 2004–2005. Developing an Open Source GPS.

M.S. Thesis Committee: Ethan Ham, Art Dept., 2004–2005. Exhibition Project: An Automatic Real-Time Film Blemishing Machine.

Visiting Student Supervised: Antoine Blais (post-M.S., France), 2003. Deontic logic and applications in security.

M.S. Thesis Committee: Supreeth Venkataraman, defended 2003. Mentored on theoretical and software engineering aspects of his thesis.

M.S. Student Supervised: Sheridan Mahoney, 2003. Artificial Intelligence techniques for natural language processing and search.

Undergraduate Supervised: Mick Thomure, 2002–2005. Machine learning and document classification.

Undergraduates Supervised: Raya Budrevich and Scott Long 2002–2003. Machine learning and document classification.

H.S. Students Supervised: Robert Burgess and Erin Chapman, 2002–2003, work on Open Source Software.

Curriculum Development: *Open Source UNIX Software Development*, Summer 2002.

H.S. Student Supervised: Andy Howe, 2001–2002, work on XCB and XCL.

H.S. Student Supervised (with Sarah Mocas): Jeremy Lennert, cryptography projects for the 2001 and 2002 Intel NW Science Expos.

Curriculum Development: *Combinatorial Search*, Computer Science Department, Portland State University, Winter 2001.

H.S. Student Supervised: Nathan Vegdahl, Intern analyzing rocket trajectory data, Fall 2000.

Curriculum Development: *Artificial Intelligence*, Computer Science Department, Portland State University, Fall 2000, 2001.

Dissertation Committee: Ken Willett, Systems Sciences, 2000–2004.

Curriculum Development: *Combinatorial Games*, Computer Science Department, Portland State University, Summer 2000.

Graduate Student Supervised: Samuel Sanseri, M.S. Computer Science Spring 2000. Masters' Project: *Toward an Optimizing JIT Compiler for IA-64*.

Curriculum Development: *Modeling and Analysis of Software Systems*, Oregon Master of Software Engineering, with Warren Harrison, Spring 2000.

Curriculum Development: *Scheduling, Planning, and Search*, Computer Science Department, Portland State University, Winter 2000.

Curriculum Development: *Implementation and Testing*, Oregon Master of Software Engineering, with Dick Hamlet, Fall 2000.

Other Community Outreach Achievements

Invited Talks

The Game and Its Paint, Game Design, Portland Art Institute, November 2004

Rockets, Desktops, Etc.: Open Source—Scholarship, Engineering, Community, PSU "Umbrella Tour", October 2004

The Machine With Two Brains: Paths From Computers To Thinking Machines, Mensa Pacific Northwest Regional Gathering, May 2004.

"Bridges" lecture and laboratory for college-prospective ethnic minority high school students, March 2004, Portland State University.

Games Computers Play: From Tic-Tac-Toe To Bridge And Beyond, PSU Weekend 1999, Portland State University, Portland OR.

Linux In The Classroom, *SuperQuest* 1999, George Fox College, McMinville OR.

Other

Interview, *Women in Open Source*, Linux Format magazine, October 2005.

Press Conference, *Governor Announces Google Contribution Of $350,000 To Oregon Universities*. Syndicated by AP nationally, covered by regional television, radio. Governor's office press release
URL `http://governor.oregon.gov/Gov/press_102505.shtml`. Google press release
URL `http://googleblog.blogspot.com/2005/10/supporting-open-source.html`.
Oregonian article URL `http://www.oregonlive.com/business/oregonian/index.ssf?/base/business/1130322391195030.xml&coll=7`.

Interview, *It Really Is Rocket Science*, PSU Vanguard, 4 March 2005. Referenced by a variety of local and international online news indexes including ACM Tech News, AAAI AI In The News, SurfWax Astronomy News, Findory: A Bioinformatics Weblog, Starry Skies, Oregon Live Tech Blog, etc. URL `http://www.dailyvanguard.com/vnews/display.v/ART/2005/03/04/42281181da210`

Interview, *The Rebel Alliance*, Willamette Week, 28 January 2004.
URL `http://www.wweek.com/story.php?story=4764&page=4`

Interview, *Enterprise devices feel safe with Linux at the core*, SearchEnterpriseLinux.com, 13 July 2004. Referenced by Enterprise Linux Today.
URL `http://searchenterpriselinux.techtarget.com/qna/0,289202,sid39_gci992567,00.html`

Member, Oregon Open Source Catalyst Group (OSCG), 2002–2004. This group was composed of industry, academic, and government open source leaders, and tasked with helping to promote open source in the Portland area.

Evaluator and session chair, Saturday Academy Oregon High School Internships reports, 2003.

Organizational assistance for the Eclipse Developers Workshop, with Phil Quitslund, 2003.

Significant Professional Development Activities

Operator, *Ginsberg's Internet Bridge*, World Computer Bridge Championships, Montreal Canada, August 2002.

Governance and Other Professionally-Related Service

Governance Activities for the University, College, Department

Member, Undergraduate Committee, CS Department, 2004–2006, 2011–present.

Member, Education Subcommittee, Graduate Committee, CS Department, 2003–2006.

Member, PSU Advisory Committee on Academic Information Technologies, 2000–2007.

Equipment Committee member, CS Department, 2001–2006.

Faculty Advisor, Association for Computing Machinery Student Chapter, 2000–2002, 2004–present.

Ph.D. Qualifying Examination Coordinator, CS Department, 2001–2004.

Faculty Advisor, Portland State Aerospace Society, 2000–present.

Member, Search Committee, PSU Director of Information Services, 2000–2001.

Admissions Committee, Oregon Master of Software Engineering, 1999–2000.

PSU Student Coordinator, Oregon Master of Software Engineering, 1999–2000.

Faculty, Oregon Master of Software Engineering, 1998–2010.

Colloquium Chair, CS Department, 1999–2000.

Departmental Service Activities

CS Dept. document infrastructure, 1999–present. Maintain Dept. LATEXforms and styles, including the Dept. LATEXletterhead, an inline bibliography style and associated PSU Official Format Vitae macros, slide templates, etc.

Wiki Farm, 2002–present. Created and currently maintaining a Wiki Farm consisting of over 20 sites, in direct support of teaching and of the missions of the CS Dept., MCECS, and the University. Sites include the CS Dept. Faculty site, which has become the web center for Faculty activities (transferred to CAT in 2010).

Professionally-Related Service

Secretary, X.Org Foundation Board of Directors, 2007-2012.

Technologist in Residence, Open Technology Business Center, 2006–2010.

Program Committee co-chair (with Keith Packard), Freenix Track, Usenix Annual Technical Conference 2004. Refereed 80 papers, "shepherded" three.

Program Committee Member, Freenix Track, 2003 Usenix Annual Technical Conference. Refereed 66 papers, "shepherded" two. Chaired "Guru Sessions" on Embedded Systems and on the X Window System.

Author/Maintainer, Usenix LATEXsubmission style template, 2003–2004.

Member, International Standards Organization Committee JTC1/SC22/WG19 on the Z Notation, 2002–2003.

Journal paper, conference paper, and grant application refereeing (details confidential). Two journal papers, two conference papers, and one grant application in 2004–2005. Ongoing activity.

Memberships in Professional Societies

Association for Computing Machinery, 1999–present.

Usenix Professional Association, 2000–2008.

American Institute of Aeronautics and Astronautics, 2003–2005.

American Association for Artificial Intelligence, 1995–2003.

Association for Logic Programming, 1992–1995, 2001–2003.