

Amy J. Ko

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The Information School
University of Washington

Research Areas

My research concerns the human understanding of software systems. I invent technologies that help software developers, aspiring programmers, and end users better understand software behavior, especially when software behavior is problematic or unexpected, requiring troubleshooting or debugging. I also conduct social science on the role of software problems in society, investigating the communication dynamics between software designers and software users through social media, software issue trackers, and traditional support processes. My work contributes broadly to human-computer interaction, software engineering, and computing education research.

Education

Carnegie Mellon University 2008

Ph.D. in Human-Computer Interaction

Human-Computer Interaction Institute

Dissertation: *Asking and Answering Questions about the Causes of Software Behaviors*

Committee: Brad Myers (Chair), Bonnie John (CMU), Jonathan Aldrich (CMU), Gail Murphy (UBC)

Oregon State University 2002

Honors B.S. in Computer Science

Honors B.S. in Psychology

Thesis: *Individual Differences in Programming, Testing, and Debugging in a Statistical End-User Programming Environment*

Advisors: Margaret Burnett (Computer Science) and Bob Uttl (Psychology)

Professional Experience

Qazzow, Inc. 2013-present

Chief Technology Officer, Co-Founder

Assistant Professor, University of Washington 2008-present

The Information School

Adjunct Assistant Professor, University of Washington 2008-present

Computer Science and Engineering

Research Intern, Microsoft Research 2006

Mentor: Rob DeLine

Graduate Research Assistant, Carnegie Mellon University 2002-2008

Human-Computer Interaction Institute

Advisor: Brad Myers

Undergrad Research Assistant, Oregon State University 1999-2002

Computer Science Department

Advisor: Margaret M. Burnett

National Science Foundation, Computing Education for the 21 st Century (2012-2015) CER: Computing Education through Collaborative Debugging Amy J. Ko (PI), Margaret M. Burnett (Co-PI, Oregon State University), Catherine Law (Co-PI, Oregon State University)	\$599,999
National Science Foundation, CAREER Award (2010-2014) CAREER: Enabling and Exploiting Evidence-Based Bug Triage Amy J. Ko (PI)	\$592,456
W Fund, Early Stage Capital Investment Early seed round investment for Qazzow, Inc., commercializing research on LemonAid Jacob O. Wobbrock (CEO), Amy J. Ko (CTO)	\$500,000
Microsoft Research Software Engineering Innovation Foundation Award (2013-2014) Mobile/Social Debugging Games for Computing Education Amy J. Ko (PI)	\$25,000
Google Faculty Research Award (2012-2013) Selection-Based Contextual Help in the Wild Amy J. Ko (PI)	\$47,359
National Science Foundation, REU Supplement (2013) Research Experience for Undergraduates Supplement Amy J. Ko (PI)	\$14,000
University of Washington, Royalty Research Fund (2012-2013) Automatic, Individualized Instructional Feedback to Improve Learning in an Online Programming Game Amy J. Ko (PI)	\$32,122
National Science Foundation, REU Supplement (2012) Research Experience for Undergraduates Supplement Amy J. Ko (PI)	\$16,000
University of Washington Center for Commercialization Gap Fund (2012-2013) Chime: Bringing Crowdsourced Contextual Help to the Masses Jacob O. Wobbrock (PI), Amy J. Ko (Co-PI)	\$50,000
Microsoft Gift (2010) Software Developer Help Seeking on the Web Amy J. Ko (PI)	\$6,200
National Science Foundation (2010) Workshop: Democratizing Access to Computational Tools Amy J. Ko (PI)	\$19,040
National Science Foundation (2009) Workshop: Democratizing Access to Computational Tools Amy J. Ko (PI)	\$14,880

Publicly Disclosed Patents

U.S. Patent Pending Systems and Methods for Selection-Based Contextual Help Retrieval Chilana, P., Ko, A.J., and Wobbrock, J.O.	2012
U.S. Patent No. 7,735,066 A Debugging Interface Ko, A.J. and Myers, B.A.	2010

Publications

Unlike most of academia, premiere conferences in Human-Computer Interaction (HCI), Software Engineering (SE), and Computing Education are selective venues for archival research. These conferences exceed many journals in their selectivity, visibility, and impact. Moreover, some of the conferences below are listed as workshops (e.g., ICER), but are in fact selective, archival 2-day research

Authorship order indicates the scope of my intellectual contribution to the work. However, because I collaborate closely with my Ph.D. students on research, they are first author on many of my key publications. I denote my students with a * next to their name. My name is in **bold** throughout.

Refereed Conference Papers

In-Game Assessments Increase Novice Programmers' Engagement and Learning Efficiency *Lee, M.J., Ko, A.J. , Kwan, I. ICER : International Computing Education Research Workshop, to appear ACCEPTANCE RATE 30%	2013
Interactive Record/Replay for Web Application Debugging *Burg, B., Bailey, R., Ko, A.J. , and Ernst, M. UIST : ACM Symposium on User Interface Software and Technology, to appear ACCEPTANCE RATE <i>TBD</i>	2013
A Multi-Site Field Study of Crowdsourced Contextual Help: Usage and Perspectives of End-Users and Software Teams *Chilana, P.K., Ko, A.J. , and Wobbrock, J.O. CHI : ACM Conference on Human Factors in Computing Systems, 217-226 ACCEPTANCE RATE 20%	2013
LemonAid: Selection-Based Crowdsourced Contextual Help for Web Applications *Chilana, P.K., Ko, A.J. , and Wobbrock, J.O. CHI : ACM Conference on Human Factors in Computing Systems, 1549-1558. ACCEPTANCE RATE 25%	2012
Is This What You Meant? Promoting Listening on the Web with Reflect *Kriplean, T., Toomim, M., Morgan, J., Borning, A., and Ko, A.J. CHI : ACM Conference on Human Factors in Computing Systems, 1559-1568. ACCEPTANCE RATE 25%	2012
FeedLack Detects Missing Feedback in Web Applications Ko, A.J. and Zhang, X. CHI : ACM Conference on Human Factors in Computing Systems, 2177-2186. ACCEPTANCE RATE 25%	2011
Design, Discussion, and Dissent in Open Bug Reports Ko, A.J. and Chilana, P.K. iConference 106-113. ACCEPTANCE RATE 63%	2011
Personifying Programming Tool Feedback Improves Novice Programmers' Learning *Lee, M.J. and Ko, A.J. ICER : International Computing Education Research Workshop, 109-116. ACCEPTANCE RATE 30%	2011
Characterizing the Differences Between Pre- and Post-release Versions of Software *Li, P., Kivett, R. Zhan T., Jeon S., Nagappan, N., Murphy, B., and Ko, A.J. ICSE : International Conference on Software Engineering, SEIP Track, 716-725 ACCEPTANCE RATE 18%	2011
Cleanroom: Edit-Time Error Detection with the Uniqueness Heuristic. Ko, A.J. and Wobbrock, J.O. VL/HCC : IEEE Symposium on Visual Languages and Human-Centric Computing, 7-14 ACCEPTANCE RATE 29%	2010
Gestalt: Integrated Support for Implementation and Analysis in Machine Learning Processes Patel, K., Bancroft, N., Drucker, S., Fogarty, J., Ko, A.J. , and Landay, J.A. UIST : ACM Symposium on User Interface Software and Technology, 37-46 ACCEPTANCE RATE 18%	2010
Understanding Usability Practices in Complex Domains: Implications for Training the Next Generation of Usability Professionals *Chilana P., Wobbrock, J.O., and Ko, A.J. CHI : ACM Conference on Human Factors in Computing Systems, 2337-2346 ACCEPTANCE RATE 24%	2010

BEST PAPER AWARD	How Power Users Help and Hinder Open Bug Reporting	2010
	Ko, A.J. and *Chilana, P.K. CHI: ACM Conference on Human Factors in Computing Systems, 1665-1674 ACCEPTANCE RATE 24%	
	Attitudes and Self-Efficacy in Young Adults' Computing Autobiographies	2009
	Ko, A.J. VL/HCC: IEEE Symposium on Visual Languages and Human-Centric Computing, 67-74 ACCEPTANCE RATE 25%	
	Finding Causes of Program Output with the Java Whyline	2009
	Ko, A.J. and Myers, B.A. CHI: ACM Conference on Human Factors in Computing Systems, 1569-1578 ACCEPTANCE RATE 24%	
BEST PAPER NOMINEE	Fixing the Program My Computer Learned: Barriers for End Users, Challenges for the Machine	2009
	Kuleza T., Wong W.K., Stumpf S., Perona S., White R., Burnett M.M., Oberst I., and Ko, A.J. IUI: International Conference on Intelligent User Interfaces, 187-196 ACCEPTANCE RATE 29%	
	How Designers Design and Program Interactive Behaviors	2008
	Myers B.A., Park S., Nakano Y., Mueller G., and Ko, A.J. VL/HCC: IEEE Symposium on Visual Languages and Human-Centric Computing, 177-184 ACCEPTANCE RATE 29%	
	Debugging Reinvented: Asking and Answering Why and Why Not Questions about Program Behavior	2008
	Ko, A.J. and Myers, B.A. ICSE: International Conference on Software Engineering, 301-310 ACCEPTANCE RATE 15%	
	Information Needs in Collocated Software Development Teams	2007
	Ko, A.J. , DeLine, R., and Venolia, G. ICSE: International Conference on Software Engineering, 344-353 ACCEPTANCE RATE 14%	
	Let's Go to the Whiteboard: How and Why Software Developers Draw Code	2007
	Cherubini, M., Venolia, G. DeLine, R. and Ko, A.J. CHI: ACM Conference on Human Factors in Computing Systems, 557-566 ACCEPTANCE RATE 26%	
BEST PAPER AWARD	A Linguistic Analysis of How People Describe Software Problems in Bug Reports	2006
	Ko, A.J., Myers, B.A., and Chau, D.H. VL/HCC: IEEE Symposium on Visual Languages and Human-Centric Computing, 127-134 ACCEPTANCE RATE 28%	
	Answering Why and Why Not Questions in User Interfaces	2006
	Myers, B. A., Weitzman, D., Ko, A.J. , and Chau, D. H. CHI: ACM Conference on Human Factors in Computing Systems, 397-406 ACCEPTANCE RATE 23%	
	Barista: An Implementation Framework for Enabling New Tools, Interaction Techniques and Views for Code Editors	2006
	Ko, A.J. and Myers, B.A. CHI: ACM Conference on Human Factors in Computing Systems, 387-396 ACCEPTANCE RATE 23%	
	Citrus: A Language and Toolkit for Simplifying the Creation of Structured Editors for Code and Data	2005
	Ko, A.J. and Myers, B.A. UIST: ACM Symposium on User Interface Software and Technology ACCEPTANCE RATE 19%	
	Examining Task Engagement in Sensor-Based Statistical Models of Human Interruptibility	2005
	Fogarty, J., Ko, A.J. , Aung, H.H., Golden, E., Tang, K.P., and Hudson, S.E. CHI: ACM Conference on Human Factors in Computing Systems, 331-340 ACCEPTANCE RATE 25%	

	Eliciting Design Requirements for Maintenance-Oriented IDEs: A Detailed Study of Corrective and Perfective Maintenance Tasks Ko, A.J., Aung, H., and Myers, B.A. ICSE: International Conference on Software Engineering, 126-135 ACCEPTANCE RATE 14%	2005
	Six Learning Barriers in End-User Programming Systems Ko, A.J., Myers, B.A., and Aung, H. VL/HCC: IEEE Symposium on Visual Languages and Human-Centric Computing, 199-206 ACCEPTANCE RATE 32%	2004
BEST PAPER AWARD	Designing the Whyline: A Debugging Interface for Asking Questions About Program Failures Ko, A.J. and Myers, B.A. CHI: ACM Conference on Human Factors in Computing Systems, 151-158 ACCEPTANCE RATE 16%	2004
BEST PAPER AWARD	Development and Evaluation of a Model of Programming Errors Ko, A.J. and Myers, B.A. VL/HCC: IEEE Symposia on Human-Centric Computing Languages and Environments, 7-14 ACCEPTANCE RATE 33%	2003
	Individual Differences in Program Comprehension Strategies in Unfamiliar Environments Ko, A.J. and Uttl, B. IWPC: IEEE International Workshop on Program Comprehension, 175-184 ACCEPTANCE RATE 40%	2003
	Visually Testing Recursive Programs in Spreadsheet Languages Burnett, M.M., Ren, B., and Ko, A.J. VL/HCC: IEEE Symposium on Human-Centric Computing Languages and Environments, 288-295 ACCEPTANCE RATE 30%	2001
BEST PAPER AWARD	Using the Cognitive Walkthrough to Improve the Design of a Visual Programming Experiment Green, T.R.G., Burnett, M.M., Ko, A.J. VL/HCC: IEEE Symposium on Visual Languages, 172-179 ACCEPTANCE RATE 32%	2000

Journal Articles

	Thirty Years of Software Problems in the News Ko, A.J., Dosono, B., Duriseti, N. TSE: IEEE Transactions on Software Engineering (<i>Resubmitted with major revisions</i>)	IN REVIEW
	A Practical Guide to Controlled Experiments of Software Engineering Tools with Human Participants Ko, A.J., LaToza, T., Burnett, M. M. ESE: Empirical Software Engineering (<i>Accepted with minor revisions</i>)	IN PRESS
	Why-Oriented End-User Debugging of Naive Bayes Text Classification Kulesza, T., Stumpf, S., Wong, W., Burnett, M.M., Perona, S., and Ko, A.J. TIIS: ACM Transactions on Interactive Intelligent Systems, 1(1), Article 2, 31 pages	2011
	The State of the Art in End-User Software Engineering Ko, A.J., Abraham, R., Beckwith, L., Blackwell, A., Burnett, M.M., Erwig, M., Scaffidi, C., Lawrance, J., Lieberman, H., Myers, B.A., Rosson, M.B., Rothermel, G., Shaw, M., and Wiedenbeck, S. ACM Computing Surveys, 43(3), Article 21, 44 pages.	2011
	Extracting and Answering Why and Why Not Questions about Java Program Output Ko, A.J. and Myers, B.A. TOSEM: ACM Transactions on Software Engineering and Methodology, 22(2), Article 4	2010
	An Exploratory Study of How Developers Seek, Relate, and Collect Relevant Information during Software Maintenance Tasks Ko, A.J., Myers, B.A., Coblenz, M.J., and Aung, H.H. TSE: IEEE Transactions on Software Engineering, 32(12), 971-987	2006

- A Framework and Methodology for Studying the Causes of Software Errors in Programming Systems 2005
Ko, A.J. and Myers, B.A.
JVLC: Journal of Visual Languages and Computing, 16(1-2), 41-84
- Using the Cognitive Walkthrough to Improve the Design of a Visual Programming Experiment 2002
Ko, A.J., Burnett, M.M., Green, T.R.G., Rothermel, K.J., and Cook, C.R.
JVLC: Journal of Visual Languages and Computing, 13(5), 517-544

Refereed Short Conference Papers (Archival papers, such as CHI Notes)

- Investigating the Role of Purposeful Goals on Novices' Engagement in a Programming Game 2012
 *Lee, M.J. and **Ko, A.J.**
VL/HCC: IEEE Symposium on Visual Languages and Human-Centric Computing, 163-166
 ACCEPTANCE RATE 25%
- The Role of Conceptual Knowledge in API Usability 2011
Ko, A.J. and Riche, Y.
VL/HCC: IEEE Symposium on Visual Languages and Human-Centric Computing, 173-176
 ACCEPTANCE RATE 35%
- Post-Deployment Usability: A Survey of Current Practices 2011
 *Chilana, P.K., **Ko, A.J.**, Wobbrock, J.O., Grossman, T., and Fitzmaurice, G.
CHI: ACM Conference on Human Factors in Computing Systems, 2243-2246
 ACCEPTANCE RATE 25%
- Understanding Expressions of Unwanted Behaviors in Open Bug Reporting 2010
 *Chilana, P.K., **Ko, A.J.**, Wobbrock, J.O.
VL/HCC: IEEE Symposium on Visual Languages and Human-Centric Computing, 203-206
 ACCEPTANCE RATE 29%
- The Past, Present and Future of Programming in HCI 2009
 Myers, B.A. and **Ko, A.J.**
HCI: Human-Computer Interaction Consortium
- Designers' Natural Descriptions of Interactive Behaviors 2008
 Park S., Myers B.A., **Ko, A.J.**
VL/HCC: IEEE Symposium on Visual Languages and Human-Centric Computing, 185-188
 ACCEPTANCE RATE 29%
- Dimensions Characterizing Programming Feature Usage by Information Workers 2006
 Scaffidi, C., **Ko, A.J.**, Myers, B. A., and Shaw, M.
VL/HCC: IEEE Symposium on Visual Languages and Human-Centric Computing, 59-62
- Design Requirements for More Flexible Structured Editors from a Study of Programmers' Text Editing 2005
Ko, A.J., Aung, H., and Myers, B.A.
CHI: ACM Conference on Human Factors in Computing Systems, 1557-1560
- Invited Research Overview: End-User Programming 2006
 Myers, B.A., **Ko, A.J.**, Burnett, M.M.
CHI: ACM Conference on Human Factors in Computing, Extended Abstracts, 75-80
- Debugging by Asking Questions About Program Output 2006
Ko, A.J.
ICSE: International Conference of Software Engineering, 989-992
- Using Objects of Measurement to Detect Spreadsheet Errors 2005
 Coblenz, M.J., **Ko, A.J.**, and Myers, B.A.
VL/HCC: IEEE Symposium on Visual Languages and Human-Centric Computing, 314-316
- Designing a Flexible and Supportive Direct-Manipulation Programming Environment 2004
Ko, A.J.
VL/HCC: IEEE Symposium on Visual Languages and Human-Centric Computing, 277-278
- Preserving Non-Programmers Motivation with Error-Prevention and Debugging Support Tools 2003
Ko, A.J.
VL/HCC: IEEE Symposia Human-Centric Computing Languages and Environments, 271-272

A Contextual Inquiry of Expert Programmers in an Event-Based Programming Environment 2003
Ko, A.J.
CHI: ACM Conference on Human Factors in Computing, 1036-1037

Refereed Workshop Papers (Archived and peer reviewed, but in a 1 or 2 day venue)

Representations of User Feedback in an Agile, Collocated Software Team 2012
*Lee, M.J. and Ko, A.J.
CHASE: International Workshop on Cooperative and Human Aspects of Software Engineering, 76-82

A Case Study of Post-Deployment User Feedback Triage 2011
Ko, A.J., Lee, M.J., Ferrari, V., Ip, S., and Tran, C.
CHASE: International Workshop on Cooperative and Human Aspects of Software Engineering, 1-8

Designing Software for Unfamiliar Domains 2009
*Chilana, P.K., Ko, A.J., and Wobbrock, J.O.
CHASE: International Workshop on Cooperative and Human Aspects of Software Engineering

Comparing Bioinformatics Software Development by Computer Scientists and Biologists: An Exploratory Study 2009
*Chilana, P.K., Palmer, C., and Ko, A.J.
Workshop on Software Engineering for Computational Science and Engineering

Source-Level Debugging with the Whyline 2008
Ko, A.J. and Myers, B.A.
CHASE: Cooperative and Human Aspects of Software Engineering, 69-72

JASPER: An Eclipse Plug-In to Facilitate Software Maintenance Tasks 2006
Coblentz, M.J., Ko, A.J., and Myers, B.A.
Workshop on Eclipse Technology eXchange, 65-69

Juried Conference Papers (Archived and reviewed by experts, but in a less rigorous process)

Mining Whining in Support Forums with Frictionary 2012
Ko, A.J.
CHI, alt.chi: ACM Conference on Human Factors in Computing Systems, 191-200

Designing for a Billion Users: A Case Study of Facebook 2012
*Chilana, P.K., Holsberry, C., Oliveira, F., and Ko, A.J.
CHI, Case Studies: ACM Conference on Human Factors in Computing Systems, 419-431

Supporting Active Listening and Grounding on the Web through Restatement 2011
*Kriplean, T., Toomim, M., Morgan, J.T., Borning, A., and Ko, A.J.
CSCW, Horizons: ACM Conference on Computer Supported Cooperative Work

Book Chapters

Software Engineering Through Qualitative Methods 2012
Ko, A.J.
In Making Software: What Really Works, and Why We Believe It, 55-63

Refereed Invited Articles

New to the Movement: Reflections on the Future of Information Schools from Inspired Junior Faculty 2009
Wobbrock, J.O., Ko, A.J., and Kientz, J.A.
Interactions, 69-71

Natural Programming Languages and Environments 2004
Myers, B.A., Pane, J.F., and Ko, A.J.
Communications of the ACM, 47-52

Non-Refereed Workshop Papers

Crowdsourced Q&A-based Contextual Help for Web Applications: Challenges and Opportunities 2013
*Chilana, P.K., Ko, A.J., Wobbrock, J.O.

Designing Crowdsourced, Context-Sensitive Help for Web Applications *Chilana, P.K., Ko, A.J. , and Wobbrock, J.O. Workshop on Crowdsourcing and Human Computation , at CHI	2011
How Do Open Source Developers Talk about Users? Ko, A.J. and *Chilana, P.K. Workshop on The Future of FLOSS in CHI Research and Practice , at CHI	2010
More Natural End-User Software Engineering Myers, B.A., Ko, A.J. , Park, S.Y., Stylos, J., LaToza, T.D., and Beaton, J. International Workshop on End-User Software Engineering , at CHI 30-34	2008
End-User Programming Productivity Tools Ko, A.J. , Myers, B.A., Coblenz, M., and Stylos, J. International Workshop on End-User Software Engineering , at CHI	2006
The Role of Science in Supporting Software Development Ko, A.J. Workshop on Supporting the Social Side of Large-Scale Software Development , at CSCW	2006
Human Factors Affecting Dependability in End-User Programming Ko, A.J. and Myers, B.A. Workshop on End-User Software Engineering , 1-4	2005
More Natural and Open User Interface Tools Myers, B.A. and Ko, A.J. Workshop on the Future of User Interface Design Tools , at CHI	2005
Studying Development and Debugging To Help Create a Better Programming Environment Myers, B.A. and Ko, A.J. Workshop on Perspectives in End User Development , at CHI, 65-68	2003

Honors and Awards

Best Paper Awards

Cleanroom: Edit-Time Error Detection with the Uniqueness Heuristic VL/HCC : IEEE Symposium on Visual Languages and Human-Centric Computing Best Paper Award (top submission)	2010
Debugging Reinvented: Asking and Answering Why and Why Not Questions about Program Behavior ICSE : International Conference on Software Engineering Distinguished Paper Award (top 1% of submissions)	2008
Examining Task Engagement in Sensor-Based Statistical Models of Human Interruptibility CHI : ACM Conference on Human Factors in Computing Best Paper Award (top 1% of submissions)	2005
Eliciting Design Requirements for Maintenance-Oriented IDEs: A Detailed Study of Corrective and Perfective Maintenance Tasks ICSE : International Conference on Software Engineering Distinguished Paper Award (top 1% of submissions)	2005
Development and Evaluation of a Model of Programming Errors VL/HCC : IEEE Symposium on Visual Languages and Human-Centric Computing Best Paper Award (one of top three papers)	2003

Best Paper Nominations

How Power Users Help and Hinder Open Bug Reporting CHI : ACM Conference on Human Factors in Computing Best Paper Honorable Mention (top 5% of submissions)	2010
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Nominated for Most Influential Paper published between 2001-2003

Fellowships and Recognitions

PROF Award, iSchool Teaching Award, Nominee	2013
UW Undergraduate Research Mentor Award, Nominee	2013
Intel Early Career Faculty Honor Program, Nominee	2012
National Science Foundation CAREER Award	2010
National Science Foundation Graduate Research Fellowship	2004
National Defense and Science Engineering Graduate Fellowship	2004
National Science Foundation Graduate Research Fellowship, Honorable Mention	2003
CRA Outstanding Undergraduate, Honorable Mention	2001

Press

Frictionary 'mines your whines' to pinpoint software bugs Paul Marks, NewScientist http://www.newscientist.com/blogs/onepercent/2012/05/frictionary.html	May 31 st , 2012
Study: Facebook relies on good design to retain users Joab Jackson, IDG News http://www.pcworld.com/businesscenter/article/255340/study_facebook_relies_on_good_design_to_retain_users.html	May 9 th , 2012
Violence against technology has psychological roots Owen Lei, King5 News http://www.king5.com/news/technology/Hourglass-Syndrome-106739108.html	November 4 th , 2010
The Ten Biggest Problems in Computing and How We'll Solve Them Alan Cohen, PC Magazine	2005
Researchers to Help Exterminate Bugs in Spreadsheets, Web Applications David Hart, NSF Press Release NSF PR 04-065	May 5 th , 2004
Researchers Aim to Make Debugging Simpler Mike Crissey, Associated Press Appeared online at CNN, PC World, PC Magazine, and hundreds of print and online newspapers	2004

Invited Keynotes

Where HCI and Software Engineering Meet CHOOSE Forum , Bern, Switzerland	2009
Where HCI and Software Engineering Meet iEDGE Conference , Seattle, WA	2009
Asking and Answering Questions about the Causes of Software Behavior India Software Engineering Conference , Pune, India	2009

Invited Talks

Defect Detection for the Wayward Web Microsoft , Redmond, WA	2012
Defect Detection for the Wayward Web Coverity , San Francisco, CA	2011
Defect Detection for the Wayward Web MIT , Cambridge, MA	2011

Where HCI and Software Engineering Meet Conference on Software User Assistance, Seattle, WA	2010
Where is the User in Software Evolution? IBM T.J. Watson Research Center, Hawthorne, NY	2010
Asking and Answering Questions about the Causes of Software Behavior IIT Mumbai, Mumbai, India	2009
Asking and Answering Questions about the Causes of Software Behavior Intel Research, Seattle, WA	2009
Asking and Answering Questions about the Causes of Software Behavior Accenture, Chicago, Illinois	2008
Asking and Answering Questions about the Causes of Software Behavior SRI International, Menlo Park, CA	2008
Asking and Answering Questions about the Causes of Software Behavior Washington University in St. Louis, St. Louis, MO	2008
Asking and Answering Questions about the Causes of Software Behavior IBM T.J. Watson Research Center, Hawthorne, NY	2006
Asking and Answering Questions about the Causes of Software Behavior Oregon State University, Electrical Engineering and Computer Science Department, Corvallis, OR	2006
Information Needs in Software Development Work Microsoft Visual Studio User Experience Group, Microsoft, Redmond, WA	2006
Information Needs in Software Development Work Microsoft Research, Redmond, WA	2006
Human-Centered Approaches to Software Engineering Research University of British Columbia, CS Department, Vancouver, B.C.	2006

Teaching (Multiple teaching evaluation scores represent multiple sections of a course)

Capstone (INFO 490) 96 undergraduate students, Winter 2013	4.0/5.0
Design Thinking (INFO 360) 79 undergraduate students, Autumn 2012	4.3/5.0, 4.7/5.0
Capstone (INFO 490) 18 undergraduate students, Spring 2012	4.7/5.0
Collaborative Software Design (INFO 461) 38 undergraduate students, Winter 2012	4.5/5.0
Design Thinking (INFO 360, Autumn) 77 undergraduate students, Autumn 2011	4.4/5.0, 4.3/5.0
Human-Computer Interaction and Design Fundamentals (INSC 541) 15 graduate students, Spring 2011	4.7/5.0
Design Thinking (INFO 360) 37 undergraduate students, Spring 2011	4.3/5.0
Capstone (INFO 490) 22 undergraduate students, Winter 2011	3.5/5.0
Collaborative Software Design (INFO 461) 26 undergraduate students, Autumn 2010	4.5/5.0
User-Centered Design (INFO 360) 74 undergraduate students, Spring 2010	4.3/5.0, 4.6/5.0
Human-Computer Interaction and Design Fundamentals (INSC 541) 15 graduate students, Winter 2010	4.8/5.0

Doctoral Student Supervision

Chair

Parmit Chilana, The Information School (Co-advised with Jacob O. Wobbrock) Assistant Professor at the University of Waterloo, Management Sciences, starting Fall 2013 Facebook PhD Fellowship, 2010 Canadian Social Sciences and Humanities Research Council (SSHRC) Doctoral Award, 2009	2008-2013
Michael Lee, The Information School	2009-present
Paul Li, The Information School	2010-present
Brian Burg, Computer Science & Engineering (Co-advised with Mike Ernst)	2012-present
Casey Hickerson, The Information School	2009-2011

Committee Member

Sean Fullerton, Information School	2012-present
Jared Bauer, Information School	2011-present
Marilyn Ostergren, Information School	2011-2013
Kayur Patel, Computer Science & Engineering	2008-2012
Michael Toomim, Computer Science & Engineering	2010-2013
Travis Kriplean, Computer Science & Engineering	2010-2012

External Committee Member

Roshanak Zilouchian, Computer Science, University of Illinois, Urbana-Champaign	2012-present
Paul Gross, Computer Science, Washington University in St. Louis	2011-present
Jing Xie, Computer Science, UNC Charlotte	2011-2012

Professional Service

Program Chairing

Program Sub-Committee Chair, ACM Conference on Human Factors in Computing	2013
Deputy Program Sub-Committee Chair, ACM Conference on Human Factors in Computing	2012
Program Co-Chair, IEEE Symposium on Visual Languages and Human-Centric Computing	2011

Program Committee Member

ICSE: International Conference on Software Engineering	2014
CHI: ACM Conference on Human Factors in Computing	2010-2013
UIST: ACM Symposium on User Interface Software and Technology	2011
FSE: ACM Symposium on the Foundations of Software Engineering	2011
VL/HCC: IEEE Visual Languages and Human-Centric Computing	2009, 2010, 2012, 2013
LIVE: International Workshop on Live Programming	2013
SUITE: International Workshop on Search-Driven Development	2009, 2010
USER: Workshop on User Evaluation for Software Engineering Researchers	2012, 2013

Reviewer

UIST: ACM Symposium on User Interface and Software Technology	2005-2007, 2009, 2010, 2013
TOCE: ACM Transactions on Computing Education	2012, 2013
IJHCS: International Journal of Human-Computer Studies	2006
CSCW: ACM Conference on Computer-Supported Cooperative Work	2010-2011
EICS: ACM Symposium on Engineering Interactive Computing Systems	2010
TOSEM: ACM Transactions on Software Engineering and Methodology	2009
IUI: International Conference on Intelligent User Interfaces	2009
TSE: IEEE Transactions on Software Engineering	2009
AHCI: Advances in Human-Computer Interaction	2008
GI: Graphics Interface	2006
JVLC: Journal of Visual Languages and Computing	2004-2005

Steering Committees

VL/HCC: IEEE Symposium on Visual Languages and Human-Centric Computing	2011-present
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Other Professional Service

Director, EUSES Consortium	2013-2015
Panel member, National Science Foundation Proposal Review Panel	2012
Graduate Consortium Chair, Visual Languages and Human-Centric Computing	2009-2010
Member, EUSES Consortium Executive Committee	2010-2011
Co-Editor, IEEE Software Special Issue on End-User Software Engineering	2009

University of Washington Service

Member, Masters in HCI and Design Steering Committee	2012-present
Co-organizer, DUB Retreat	2013
Member, Masters in HCI and Design Hiring Committee	2013
Organizer, CHI 2012 DUB reception	2012