

CURRICULUM VITA

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and

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Table of Contents

BIOGRAPHICAL DATA	5
A. Educational Background	5
B. Employment History	5
C. Current Fields of Interest.....	6
D. Bibliometrics	6
TEACHING.....	7
A. Courses Taught	7
B. Continuing Education	10
C. Curriculum Development.....	10
D. Individual Student Guidance	10
Visiting Researchers Supervised	10
Postdoctoral Fellows Supervised.....	10
Former Ph.D. Students.....	11
Current Ph.D. Students	11
Ph.D. Special Problems Students (other than current Ph.D. students).....	11
M.S. Theses/Projects Supervised.....	12
M.S. Special Problems Students	13
Undergraduate Senior Capstone Projects	14
Undergraduate Senior Design	14
Undergraduate Special Problems Students.....	14
Awards for Advised Students	15
Student Advisement and Management in Industrial Contexts	17
E. Other Academic and Teaching Activities	18
RESEARCH.....	19
A. Thesis.....	19
B. Published Journal Papers (Refereed).....	19
Accepted Journal Papers, in Press.....	21
Submitted Journal Papers, Under Review	21
C. Published Books and Parts of Books	21
Books.....	21
Book Chapters	21
D. Edited Proceedings	22
E. Conference Presentations.....	22
Invited Plenaries and Keynotes	22
Refereed Conference Papers	22
Accepted Conference Papers, In Press.....	29

Submitted Conference Papers, Under Review	29
Conference Presentations without Proceedings	29
F. Other	29
Professional Society Magazines	29
Refereed Colloquia Presentations	29
Refereed Workshop Papers.....	30
Workshop Papers Under Submission.....	31
Refereed Demonstrations.....	31
Refereed Posters	32
Major Software Systems Created	32
Trade Publications	33
Technical Reports.....	33
Books In Preparation	33
G. Research Proposals and Grants (Principal Investigator or Co-PI)	34
Approved and Funded	34
Pending Proposals	37
Recent Unfunded Proposals (Previous Five Years)	37
H. Research Proposals and Grants (Contributor)	38
Approved and Funded	38
SERVICE	39
A. Professional Activities.....	39
Memberships and Activities in Professional Societies	39
Conference and Program Chairships.....	39
Conference Committee Activities	39
Workshops Organized	41
B. On-Campus Georgia Tech Service	41
C. Special Assignments at Georgia Tech	43
D. Member of Ph.D. Examining Committees	43
Ph.D. Examining Committees, Georgia Tech.....	43
External Member of Ph.D. Examining Committee	48
E. Consulting and Advisory Appointments	48
F. Research Project Reviewer.....	48
G. Civic Activities.....	49
H. Other Service	49
PROFESSIONAL RECOGNITION.....	50
A. Honors and Awards	50

B. Distinguished Lectures.....	51
C. Invited Talks	51
D. Invited Panel Presentations.....	52
E. Invited Conference Session Chairmanships	52
F. Patents	53
US and International Patents Granted	53
US and International Patents Pending.....	56
G. Editorial and Reviewer Work for Technical Journals and Publishers.....	57
H. Testimony Before Legislative Committees and Other Governmental Advisement	59
I. Selected Media Profiles of Research (note: not up-to-date)	60

BIOGRAPHICAL DATA

1

A. Educational Background

Degree	Year	University	Department
Ph.D.	1995	Georgia Institute of Technology	Computer Science
M.S.	1991	Georgia Institute of Technology	Information and Computer Science
B.S.	1989	Georgia Institute of Technology	Information and Computer Science

B. Employment History

Position	Institution	Dates
Director	GVU Center Georgia Institute of Technology	2012-Present
Professor	College of Computing Georgia Institute of Technology	2012-Present
Consultant	Interdigital, Inc.	2015-2019
Acting Director	GVU Center Georgia Institute of Technology	2011-2012
Associate Director	GVU Center Georgia Institute of Technology	2006-2011
Associate Professor	College of Computing Georgia Institute of Technology	2004-2012
Member, Microsoft Trustworthy Computing Advisory Board	Microsoft	2008-2014
Principal Scientist and Manager, Ubiquitous Computing Area	Palo Alto Research Center	2004
Senior Member of Research Staff	Xerox PARC	2000-2004
Member of Research Staff	Xerox PARC	1996-2000
Research Assistant	Georgia Tech	1988-1995
Project Manager, Mercator Project	Georgia Tech	1995

Position	Institution	Dates
Summer Research Intern	SunSoft	1992
Summer Research Intern	Sun Microsystems Laboratories	1991
Author	UnixWorld Magazine	1991-1993
Consultant	NeXT Computer Inc.	1990-1991
Consultant	BellSouth Information Systems	1989-1990
Summer Research Intern	Olivetti Research Center	1989
Consultant	SecureWare	1989
Consultant	Lockheed Aerospace Corporation	1988-1989
Teaching Assistant	Georgia Tech	1987-1988

C. Current Fields of Interest

Broadly, my research in Human-Computer Interaction (HCI) focuses on understanding and creating the technical underpinnings necessary to support novel and empowering user experiences. More specifically, my work is aimed at improving the ability of lower-layer infrastructures—such as networking and security—to support a desired user experience. I am particularly interested in how taking a human-centered lens can uncover issues in infrastructure design, and lead to the creation of infrastructure-layer technologies that can support improved user experiences. For example, one of my key current areas of focus is *human-centered networking*, which is exploring how to bring human perspectives “down the stack” to inform the creation of new networking technologies.

D. Bibliometrics

- H-Index (computed as of January 2019): 59. Citation count: 12,899.
- ACM Author Profile Page: http://portal.acm.org/author_page.cfm?id=81100595699
- Erdős Number: 4

TEACHING



A. Courses Taught

Term	Course	Number of Students	Student Evaluation	Comments
Fall 2019	CS4470 User Interface Software	77	4.6/5.0	Co-taught with 6456
	CS6456 Principles of UI Software	35	4.6/5.0	
Summer 2019	CS1315 Introduction to Media Computation	36	4.5/5.0	Taught as part of the GT-Oxford study-abroad program
Fall 2018	CS4470 User Interface Software	56	4.7/5.0	Co-taught with 6456
	CS6456 Principles of UI Software	33	4.8/5.0	
Summer 2018	CS1315 Introduction to Media Computation	32	4.6/5.0	Taught as part of the GT-Oxford study-abroad program
Fall 2017	CS6452 Prototyping Interactive Systems	19	5.0/5.0	
Summer 2017	CS1315 Introduction to Media Computation	30	4.9/5.0	Taught as part of the GT-Oxford study-abroad program
Fall 2016	CS4470 User Interface Software	31	4.9/5.0	Co-taught with 6456
	CS6456 Principles of UI Software	22	4.8/5.0	
Summer 2016	CS1315 Introduction to Media Computation	23	4.8/5.0	Taught as part of the GT-Oxford study-abroad program

Term	Course	Number of Students	Student Evaluation	Comments
Fall 2015	CS4470 User Interface Software	24	4.6/5.0	Co-taught with 6456
	CS6456 Principles of UI Software	30	4.8/5.0	
Summer 2015	CS1315 Introduction to Media Computation	20	4.8/5.0	Taught as part of the GT-Oxford study-abroad program
Fall 2014	CS4470 User Interface Software	22	4.2/5.0	Co-taught with 6456
	CS6456 Principles of UI Software	26	4.9/5.0	
Summer 2014	CS1315 Introduction to Media Computation	20	4.9/5.0	Taught as part of the GT-Oxford study-abroad program
Fall 2013	CS4470 User Interface Software	22	4.8/5.0	Co-taught with 6456
	CS6456 Principles of UI Software	29	4.8/5.0	
Fall 2012	CS4470 User Interface Software	13	4.5/5.0	Co-taught with 6456
	CS6456 Principles of UI Software	36	4.7/5.0	
Fall 2011	CS4470 User Interface Software	15	4.7/5.0	Co-taught with 6456
	CS6456 Principles of UI Software	31	4.7/5.0	
Fall 2010	CS4470 User Interface Software	9	4.3/5.0	Co-taught with 6456
	CS6452 Prototyping Interactive Systems	14	4.8/5.0	
	CS6456 Principles of UI Software	27	4.3/5.0	Co-taught with CS4470
Fall 2009	CS3750 User Interface Design	2	N/A	Taught at GT-L Campus in France; co-taught with CS6750

Term	Course	Number of Students	Student Evaluation	Comments
	CS4470 User Interface Software	2	N/A	Taught at GT-L Campus in France; co-taught with CS6456
	CS6456 Principles of UI Software	8	4.5/5.0	Taught at GT-L Campus in France; co-taught with CS4470
	CS6750 Human-Computer Interaction	4	4.3/5.0	Taught at GT-L Campus in France; co-taught with CS3750
Fall 2008	CS4470 User Interface Software	10	4.3/5.0	Co-taught with CS6456
	CS6452 Prototyping Interactive Systems	14	4.9/5.0	
	CS6456 Principles of UI Software	39	5.0/5.0	Offered as remote course to Korea University and GT-Lorraine; co-taught with CS4470
Fall 2007	CS4470 User Interface Software	15	4.0/5.0	Co-taught with CS6456
	CS6452 Prototyping Interactive Systems	18	4.0/5.0	
	CS6456 Principles of UI Software	54	4.2/5.0	Offered as remote course to Korea University; co-taught with CS4470
Fall 2006	CS4470 User Interface Software	16	4.9/5.0	Co-taught with CS6456
	CS6452 Prototyping Interactive Systems	21	4.9/5.0	
	CS6456 Principles of UI Software	28	4.3/5.0	Co-taught with CS4470
	CS8001UST Seminar on Usable Security	17	N/A	New seminar course
Spring 2006	CS6452 Prototyping Interactive Systems	21	4.9/5.0	

Term	Course	Number of Students	Student Evaluation	Comments
Fall 2005	CS1315 Introduction to Media Computation	120	4.0/5.0	Freshman "CS for non-CS majors" course
Spring 2005	CS6452 Prototyping Interactive Systems	19	4.9/5.0	Developed and taught new course

B. Continuing Education

March 1991 Introduction to X Window System Programming
Georgia Tech Educational Extension

Developed a three-day course on programming the X Window System in the Unix environment. Course dealt with all levels of X programming and covered fundamentals of the design and usage of the X Window System.

C. Curriculum Development.

CS6452 Prototyping Interactive Systems

Developed the curriculum for a new required class in the Human-Centered Computing Ph.D. program. This course focuses on both concepts and skills for the development of interactive systems, providing a grounding both in systems development, and communication with systems builders.

D. Individual Student Guidance

Visiting Researchers Supervised

Sueyeon Lee. Visiting researcher from Samsung Design Center, Suwon, Korea.

Young-Sung Son. Visiting researcher from ETRI, Korea

Niels Raabjerg Mathiasen. Visiting researcher from Aarhus University, Denmark

Jonathan Bunde-Pedersen. Visiting researcher from Aarhus University, Denmark

Postdoctoral Fellows Supervised

Marshini Chetty. Ph.D., Georgia Institute of Technology
Currently Assistant Professor, University of Maryland

M.S. Theses/Projects Supervised

Rhea Laroya MS HCI	Fall 2020
Peiran Tan MS HCI	Fall 2020
Matt Britton MS CS	Spring 2019
Tim Major MS CS	Spring 2019
John Crisp MS HCI	Spring 2017
Lei Xu MS CS	Fall 2016
Saad Ismail MS CS	Spring 2015
Toni Aki MS HCI	Spring 2015
Arindam Das MS HCI	Spring 2013
Hitesh Chhabra MS HCI	Spring 2013
Hyung-Min (Sam) Lee MS HCI	Spring 2012
Andy Echenique MS HCI	Spring 2011 (Currently: Ph.D. student, UC Irvine)
Sivasailam Muthiah MS HCI	Spring 2011
Umayr Hassan MS CS	Spring 2009 — Fall 2009 (Currently: Knight Equity Markets)
Puja Verma MS HCI	Spring 2007 — 2008 (Currently: Yahoo!)
Kandha Sankarapandian MS InfoSec	Fall 2006 — Spring 2007 (Currently: FXPal Laboratories)
Shivam Goyal MS HCI	Fall 2006 — Spring 2007 (Currently: PayPal)
Travis Little MS HCI	Fall 2006 — Spring 2007 (Currently: missionary in China)

Matt McKeon
MS HCI

Fall 2005 – Spring 2006
(Currently: IBM T.J. Watson Research Center)

Andrew Miller
MS HCI

Fall 2005 – Spring 2006
(Currently: Information Architect, Schematic.com)

M.S. Special Problems Students

Saad Ismail	Fall 2015	Alternative Methods for Digitizing Notes
Marie le Pichon	Fall 2015	
Brian Creeden	Fall 2015	
Eric Kidder	Spring 2014	
Abdelkareem Bedri	Spring 2014	
Umayr Hassan	Spring 2009	OpenFlow-Based Home Networking
Hafez Rouzati	Spring 2009	inSpace Event Architecture
Pamela Griffith	Fall 2007	Studies of Digital Home Entertainment
Siddharth Gupta	Fall 2007	Studies of Digital Home Entertainment
Meekal Bajaj	Fall 2007	Tabletop Tracking System
Pamela Griffith	Spring 2007	Studies of Digital Home Entertainment
Joshua Teague	Spring 2007	Studies of Digital Home Entertainment
Gaurishankar Krishnan	Spring 2007	Mobile Media Sharing
Shivam Goyal	Spring 2007	Mobile Media Sharing
Travis Little	Spring 2007	Letterhead Anti-Phishing System
Puja Verma	Spring 2007	Ubiquitous Display Framework
Shivam Goyal	Spring 2006	Home Network Visualization
Andrew Miller	Spring 2006	Home Media Management
John Etherton	Spring 2006	Location-Aware Service Framework
Andrew Miller	Fall 2005	Home Media Management
Shivam Goyal	Fall 2005	Home Network Visualization
Matt McKeon	Fall 2005	Place-Based Service Composition
Jason Alderman	Spring 2005	Special Problems in Ubiquitous Computing
Matt McKeon	Spring 2005	Special Problems in Ubiquitous Computing

James Clawson	Spring 2005	Location-Aware User Interfaces
Sonja Maier	Spring 2005	Location-Aware Service Framework

Undergraduate Senior Capstone Projects

Benjamin McMillan	Fall 2007	Ubiquitous Display Framework
Joshua Cuneo	Summer 2007	Home Network Visualization
Neel Parekh	Summer 2007	Home Network Visualization
Kyle Spafford	Spring 2007	Visual Firewall System
Sarah Tursell	Spring 2007	Smart Home Router
Jeremy Duvall	Spring 2007	Smart Home Router
Richard Bailey	Spring 2006	LBS Service Toolkit
Sebastian Becerra	Spring 2006	LBS Service Toolkit

Undergraduate Senior Design

John Etherton	Spring 2005	Location-Aware Service Framework
Brittany Hughes	Spring 2005	Location-Aware Service Framework
John Scaduto	Spring 2005	Location-Aware Service Framework
Mark Winham	Spring 2005	Location-Aware Service Framework

Undergraduate Special Problems Students

Bethany Sumner	Spring 2012	Home Network Bandwidth Management
Karan Daftary	Spring 2011	Home Network Bandwidth Visualization
Jeremy McLeod	Spring 2009	inSpace Event Infrastructure
Darryl Prince	Spring 2008	Mobile Clients for Collaboration
Tom Morgan	Spring 2008-09	Human-centered Home Networking
David Haslem	Spring 2008-09	Human-centered Home Networking
Benjamin McMillan	Fall 2007	Interaction Techniques for Tagged Data
Jon Keyser	Fall 2007	Physical/Virtual Interaction Techniques
Benjamin McMillan	Summer 2007	Ubiquitous Display Framework

Aaron Sun	Spring 2007	Firewall Design
Jonathan Keyser	Spring 2007	Ambient Router Project
Benjamin McMillan	Spring 2007	Ubiquitous Display Framework
Kyle Spafford	Fall 2006	Security System Monitoring
Jeremy Duvall	Fall 2006	Network Monitoring and Management Infrastructure
Brittany Hughes	Spring 2006	Location-Aware Service Framework
John Etherton	Fall 2005	Designing Location-Aware Services

Awards for Advised Students

Awards for Doctoral Students

Craig Tashman	<ul style="list-style-type: none"> • Georgia Tech Research Innovation Competition, First Place Winner for LiquidText project
Christopher Le Dantec	<ul style="list-style-type: none"> • CHI 2010 Best Paper Honorable Mention • Microsoft Research Graduate Fellow, 2009-2011 • Outstanding Graduate Research Assistant Award, Georgia Tech College of Computing, 2009 • Research Excellence Commendation, Georgia Tech School of Interactive Computing, 2008 • GVU Foley Scholar, 2008 • CHI 2008 Best Paper award
Erika Shehan Poole	<ul style="list-style-type: none"> • Outstanding Graduate Research Assistant Award, Georgia Tech College of Computing, 2010 • GVU Foley Scholar, 2009 • Google Anita Borg Scholarship, 2008-2009 • Georgia Tech Presidential Fellow, 2007-2010 • Winner, CHI Atlanta Student Research Competition, 2006 • Sam Nunn Security Program Fellow, 2006-2007 • Department of Homeland Security Fellow, 2005-2007 • NSF Graduate Research Fellowship, 2005

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|---------------------|---|
| Gabriel Reyes | <ul style="list-style-type: none"> • Google Ph.D. Fellowship in Wearable Computing, 2014 • Intel Ph.D. Fellowship, 2014 (declined) • Microsoft Research Graduate Fellowship Finalist, 2014 • Georgia Tech Presidential Fellowship • Intel GEM Fellowship • Goizueta Foundation Fellowship • Best Internship 2016, Technicolor Labs |
| Christina Masden | <ul style="list-style-type: none"> • NSF Graduate Research Fellowship, 2014 |
| April Simmons | <ul style="list-style-type: none"> • NSF Graduate Research Fellowship, 2016 |
| Arielle Schlesinger | <ul style="list-style-type: none"> • NSF Graduate Research Fellowship, 2016 • CHI 2017 Best Paper Honorable Mention • CHI 2018 Best Paper Award |

Awards for Masters Students

- | | |
|--|--|
| Kathy Pham and Marc Pare | <p>1st Place Award, Microsoft Imagine Cup, 2009; Web Mashup category.
 <i>“Team Curious” won first place among 59,000 students in competition from 142 countries.</i></p> |
| Gaurishankar Krishnan and Shivam Goyal | <p>1st Place Award, Young Adults/Teens Category
 2007 IMS Research Competition
 <i>“mobMedia: A Location-Based Media Sharing and Social Networking Application”</i></p> |

Awards for Undergraduate Students

- | | |
|----------------|---|
| Bethany Sumner | <p>NYC Turing Fellow, 2012</p> <p>President’s Undergraduate Research Award
 Spring, 2012</p> <p>Outstanding Oral Presentation Award, Undergraduate Research Opportunity Program, Spring, 2012</p> <p>First Place Judges’ Award, Undergraduate Research Opportunities in Computing, Spring 2012
 <i>“Helping Households Understand and Control Their Networks”</i></p> |
|----------------|---|

Lawrence Jarvis	1 st Place Award, Intel Opportunity Scholars Research Competition, 2008. <i>"Analysis of Remote Home Network Troubleshooting Practices."</i>
Catie Donnelly and Jon Keyser	2 nd Place People's Choice Award (tie) 2007 Undergraduate Research Symposium <i>"Ambient Router Project"</i>
Sarah Tursell and Jeremy Duvall	2 nd Place People's Choice Award (tie) 2007 Undergraduate Research Symposium <i>"A Smart Router for the Home Network"</i>
Jon Keyser	President's Undergraduate Research Salary Award Spring, 2007
Richard Bailey and Sebastian Becerra	3 rd Place People's Choice Award 2006 Undergraduate Research Symposium <i>"Prototyping Location-Based Services"</i>

Student Advisement and Management in Industrial Contexts

Jason Hong (Ph.D. student, UC Berkeley). Co-advised internship, Palo Alto Research Center, summer 2002, summer 2001.

Currently Associate Professor, Carnegie-Mellon University

Shahram Izadi (Ph.D. student, University of Nottingham). Co-advised internship, Palo Alto Research Center, summer 2002, summer 2001.

Currently Industrial Researcher, Microsoft Research Cambridge

Julie Black (undergrad student, Stanford). Co-advised internship, Palo Alto Research Center, summer 2001.

Currently Software Engineer, Google

Takeo Igarashi (Ph.D. student, University of Tokyo). Co-advised internship, Palo Alto Research Center, summer 1998.

Currently Associate Professor, University of Tokyo

Michael Kaminsky (undergrad student, UC Berkeley). Co-advised internship, Palo Alto Research Center, summer 1998.

Currently Research Scientist, Intel Research Pittsburgh

Roy Rodenstein (MS student, Georgia Tech). Advised internship, Palo Alto Research Center, August-December 1995.

Currently Director of Planning, AOL

Sue Long (MS student, Georgia Tech). Managed as part of the Mercator project, August-December 1995.

Currently Product Engagements Manager, Research in Motion (RIM)

Kathryn Stockton (MS student, Georgia Tech). Managed as part of the Mercator project, August-December 1995.

John Selbie (undergrad student, Georgia Tech). Managed as part of the Mercator project, August-December 1995.

Currently at Microsoft

Philip Seaver (MS student, Georgia Tech). Managed as part of the Mercator project, August-December 1995.

Currently Software Engineer, Apago, Inc.

E. Other Academic and Teaching Activities

- | | |
|--|----------------------------------|
| Faculty Mentor, Microsoft Imagine Cup Team
<i>Advised two undergraduate students in the 2009 Imagine Cup, a worldwide competition aimed at applying technology to issues of social impact. Team won First Place in their category (Web Mashups); a total of 59,000 students from 142 countries participated.</i> | 2008-2009 |
| Visiting Researcher, University of Nottingham and Microsoft Research Cambridge
<i>Spent four weeks at Nottingham and MSR Cambridge to establish collaborative research connections with Georgia Tech. Developed joint funding proposals and research papers with researchers there.</i> | June-July, 2007 |
| Teaching Assistant, Georgia Tech ICS 2601 "Assembler Language Programming"
<i>Taught assembler programming for VAX architecture machines. Responsible for preparing and presenting lectures, and design and grading of lab assignments and exams</i> | September 1987-
December 1989 |
| Instructor: "Programming the X Window System," Sales Technologies Incorporated
<i>As a consultant, developed and presented a 24-hour course on programming in the X Window System. The course covered application development at the levels of Xlib, the Xt Intrinsics, and Widget programming.</i> | September 1989 |
| Invited Lecture: "Flatland User Interfaces"
<i>Stanford CS 547. Dr. Terry Winograd, host</i> | April 1999 |
| Invited Lecture: "An Overview of the Jini Distributed Computing Infrastructure"
<i>Stanford University Knowledge on the Web Seminar, Dr. Richard Fikes, host</i> | October, 1999 |
| Invited Tutorial: "An Introduction to Jini"
European Conference on Object-Oriented Programming (ECOOP 2000)
<i>Developed and taught an invited tutorial on the Jini distributed computing environment.</i> | June 2000 |



A. Thesis

- [D.1] Ph.D., Computer Science. *Coordination Infrastructure in Collaborative Systems*. Georgia Institute of Technology, December 1995.
Advisor: John Stasko

B. Published Journal Papers (Refereed)

- [J.21] Gabriel Reyes, Jason Wu, Nikita Juneja, Maxim Goldshtein, W. Keith Edwards, Gregory D. Abowd, and Thad Starner. 2017. SynchroWatch: One-Handed Synchronous Smartwatch Gestures Using Correlation and Magnetic Sensing. *Proc. ACM Interact. Mob. Wearable Ubiquitous Technol.* 1, 4, Article 158 (December, 2017), 26 pages. DOI: <https://doi.org/10.1145/3161162>
- [J.20] Craig Tashman and W. Keith Edwards. WindowScape: Lessons Learned from a Task Centric Window Manager. *ACM Transactions on Computer-Human Interaction (TOCHI)*. Volume 19, Number 1 (March, 2012). ACM Press. DOI>10.1145/2147783.2147791.
- [J.19] W. Keith Edwards, Rebecca Grinter, Ratul Mahajan, and David Wetherall. Advancing the State of Home Networking. *Communications of the ACM*. June, 2011. ACM Press. pp. 62-71.
- [J.18] Kenneth L. Calvert, W. Keith Edwards, Nick Feamster, Rebecca E. Grinter, Ye Deng, and Xuzi Zhou. Instrumenting Home Networks. *ACM Computer Communications Review*, Volume 41, Number 1 (January 2011). ACM Press. pp. 84-89.
DOI>10.1145/1925861.1925875.
- [J.17] Derek Reilly, Stephen Volda, Matt McKeon, Christopher Le Dantec, Jonathan Bunde-Pedersen, W. Keith Edwards, Elizabeth D. Mynatt, Ali Mazalek. Space Matters: Physical-Digital and Physical-Virtual Co-Design in the inSpace Project. *IEEE Pervasive Computing*, Volume 9, Number 3 (July-September 2010). IEEE Computer Society. pp. 54-63.
- [J.16] Rebecca E. Grinter, W. Keith Edwards, Marshini Chetty, Erika Shehan Poole, Ja-Young Sung, Jeongywa Yang, Andy Crabtree, Peter Tolmie, Tom Rodden, Chris Greenhalgh, and Steve Benford. The Ins and Outs of Home Networking: The Case for Useful and Usable Domestic Networking. *ACM Transactions on Computer-Human Interaction (TOCHI)*, Volume 16, No. 2 (June 2009). ACM Press. pp. 1-28.
- [J.15] W. Keith Edwards, Mark W. Newman, Jana Z. Sedivy, Trevor F. Smith. Experiences with Recombinant Computing: Exploring Ad Hoc Interoperability in Evolving Digital Networks. *ACM Transactions on Computer-Human Interaction (TOCHI)*, Volume 16, No. 1 (April 2009). ACM Press.

- [J.14] Erika Shehan Poole, W. Keith Edwards, and Lawrence Jarvis, The Home Network as a Socio-Technical System: Understanding the Challenges of Remote Home Network Help Seeking. *The Journal of Computer-Supported Cooperative Work (JCSCW)*. Volume 18, No. 2-3, 2009. Springer. pp. 277-299.
- [J.13] Bryan D. Payne and W. Keith Edwards. A Brief Introduction to Usable Security. *IEEE Internet Computing*, Volume 12, No. 3, May/June 2008, pp. 13-21.
- [J.12] Mark W. Newman, Nicolas Ducheneaut, W. Keith Edwards, Jana Z. Sedivy, and Trevor F Smith. Supporting the Unremarkable: Experiences with the Obje Display Mirror. *Personal and Ubiquitous Computing*. Springer. DOI 10.1007/s00779-006-0117-0. Vol. 11, No. 7, October, 2007. pp. 523-536.
- [J.11] W. Keith Edwards. Discovery Systems in Ubiquitous Computing. *IEEE Pervasive Computing* 5:2, April-June 2006. pp. 70-77.
- [J.10] W. Keith Edwards, Putting Computing in Context: An Infrastructure to Support Extensible Context-Enhanced Collaborative Applications. *ACM Transactions on Computer-Human Interaction (TOCHI)*. 12:4, December 2005. ACM Press. pp. 446-474.
- [J.9] W. Keith Edwards, Mark W. Newman, Jana Z. Sedivy, Trevor F Smith, Shahram Izadi. An Extensible Set-Top Box Platform for Home Media Applications. *IEEE Transactions on Consumer Electronics*, 51:4, November 2005. IEEE Press. pp. 1175-1181.
- [J.8] W. Keith Edwards, Mark W. Newman, Jana Z. Sedivy, Trevor F Smith (2004). Supporting Serendipitous Integration in Mobile Computing Environments. *International Journal of Human Computer Studies*, 60:5-6, May, 2004. P.C. Pendharkar, ed. Elsevier. pp. 666-700.
- [J.7] Victoria Bellotti and W. Keith Edwards (2001). Intelligibility and Accountability: Human Considerations in Context Aware Systems. *Journal of Human-Computer Interaction*, 16:2-4, 2001, Thomas Moran, ed. Lawrence Erlbaum Associates, Mahwah, NJ. pp. 193-212.
- [J.6] Elizabeth D. Mynatt, Takeo Igarashi, W. Keith Edwards, and Anthony LaMarca (2000). Designing an Augmented Writing Surface. *IEEE Computer Graphics and Applications*, 20:4, July/August, 2000. pp. 55-61.
- [J.5] Paul Dourish, W. Keith Edwards, Anthony LaMarca, John Lamping, Karin Petersen, Michael Salisbury, James Thornton and Douglas B. Terry (2000). Extending Document Management Systems with Active Properties. *ACM Transactions on Information Systems (TOIS)*, 18:2, April 2000. pp. 140-170.
- [J.4] Paul Dourish and W. Keith Edwards (2000). A Tale of Two Toolkits: Relating Infrastructure and Use in Flexible CSCW Toolkits. *The Journal of Computer-Supported Cooperative Work (JCSCW)*, 9:1, Spring, 2000. pp. 33-51.
- [J.3] Paul Dourish, W. Keith Edwards, Anthony LaMarca, and Mike Salisbury. Presto: An Experimental Architecture for Fluid, Interactive Document Spaces. *ACM Transactions on Computer-Human Interaction (TOCHI)*, 6:2, June 1999, pp. 133-161.
- [J.2] W. Keith Edwards, Susan H. Liebeskind, Elizabeth D. Mynatt, and William D. Walker (1995). A Remote Access Protocol for the X Window System, *The X Resource*, Sebastopol CA. Issue #13, Winter, 1995.

- [J.1] W. Keith Edwards, Elizabeth D. Mynatt, and Tom Rodriguez (1993). The Mercator Project: A Nonvisual Interface to the X Window System, *The X Resource*, Sebastopol, CA. Issue #7. Summer, 1993. pp. 33-55.

Accepted Journal Papers, in Press

Submitted Journal Papers, Under Review

C. Published Books and Parts of Books

Books

- [B.2] W. Keith Edwards and Tom Rodden. *Jini, Example by Example*. Prentice Hall, Sun Microsystems Series. Upper Saddle River, NJ. 2001 (ISBN 0-13-033858-3).
- [B.1] W. Keith Edwards. *Core Jini*. Prentice Hall, Sun Microsystems Series. Upper Saddle River, NJ. First Edition, 1999 (ISBN 0-13-014469-X), and *Second Edition*, 2000 (ISBN 0-13-089408-7).

Book translated into Chinese, Dutch, French, German, and Korean.

Book Chapters

- [BC.4] Amy Volda, Rebecca E. Grinter, Nicolas Ducheneaut, W. Keith Edwards, and Mark W. Newman. Listening In: Practices Surrounding iTunes Music Sharing. *Text Messaging*. Edited by John Alberti. Houghton-Mifflin. March 5, 2008. (ISBN 0-61-872223-8)
- [BC.3] W. Keith Edwards. Infrastructure and its Effect on the Interface. *HCI Remixed: Reflections on Notable HCI Papers*. Edited by Thomas Erickson and David McDonald. MIT Press. January 31, 2008. (ISBN 0-26-205088-9)
- [BC.2] Julie A. Black, W. Keith Edwards, Mark W. Newman, Jana Z. Sedivy, Trevor F Smith. Supporting Extensible Public Display Systems with Speakeasy. *Public and Situated Displays: Social and Interactional Aspects of Shared Display Technologies*. Edited by Kenton O'Hara, Mark Perry, Elizabeth Churchill, and Daniel Russell. Kluwer Academic Publishers, 2004. (ISBN 1-40-201677-8)
- [BC.1] Elizabeth D. Mynatt and W. Keith Edwards. Metaphors for Nonvisual Computing. *Extraordinary Human-Computer Interaction*. Edited by Alistair Edwards, University of York, Cambridge University Press, 1995 (ISBN 0-521-43413-0).

D. Edited Proceedings

- [EP.2] *Proceedings of the Twenty-Eighth International ACM SIGCHI Conference on Human Factors in Computing Systems (CHI)*. W. Keith Edwards and Tom Rodden, editors. Atlanta, GA. April 10-15, 2010. ACM Press.
- [EP.1] *Proceedings of the Fifteenth Annual ACM Symposium on User Interface Software and Technology (UIST)*. CHI Letters Vol. 4, Issue 2. W. Keith Edwards and Michel Beaudouin-Lafon, editors. Paris, France. October 27-30, 2002. ACM Press.

E. Conference Presentations

Invited Plenaries and Keynotes

Invited keynote presentation, First ACM SIGCOMM Workshop on Home Networks (HomeNets 2010). "Human-Network Interaction: Building Bridges Between HCI and Networking Research." New Delhi, India. September 3, 2010.

Invited keynote presentation, UW/MSR Summer Institute, 2009. "Interaction and Infrastructure: Bridging the Gap Between Human-Computer Interaction and Networking." Semiahoo Resort, Washington. July 27, 2009.

Invited plenary panel: W. Keith Edwards, organizer. "Interaction and Infrastructure: Crossing the Divide in Ubicomp Research." Panelists: Mark Ackerman (University of Michigan), A.J. Brush (Microsoft Research), Matthew Chalmers (University of Glasgow), Anthony LaMarca (Intel Research Seattle). Uvicomp 2006, Orange County, California, September 21, 2006.

Refereed Conference Papers

Note: entries in **bold** represent stringently reviewed international conference publications with highly selective acceptance.

- [C.70] Gabriel Reyes, Jason Wu, Nikita Juneja, Maxim Goldshtein, W. Keith Edwards, Gregory D. Abowd, and Thad Starner. 2017. SynchroWatch: One-Handed Synchronous Smartwatch Gestures Using Correlation and Magnetic Sensing. ***Proceedings of the ACM International Joint Conference on Pervasive and Ubiquitous Computing***, Singapore. October 8-12, 2018. Full Paper. Published in the Proceedings of the ACM. [23%
- [C.69] Ari Schlesinger, W. Keith Edwards, and Rebecca Grinter. Intersectional HCI: Engaging Identity through Gender, Race, and Class. ***Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems (CHI)***, Denver, CO. May 6-11, 2017. Full paper. [25% acceptance]
- [C.68] Ari Schlesinger, Christina Masden, Eshwar Chandrasekharan, Amy Bruckman, W. Keith Edwards, and Rebecca Grinter. Situated Anonymity: Impacts of Anonymity, Ephemerality, and Hyper-Locality on Social Media Platforms. ***Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems (CHI)***, Denver, CO. May 6-11,

- [C.67] Chaya Hiruncharoenvate, Wesley Smith, W. Keith Edwards, and Eric Gilbert. Popul Networks: Creating Decentralized Social Media on Top of Commodity Wireless Routers. *Proceedings of the ACM Conference on Supporting Group Work (GROUP)*, Sanibel Island, FL. November 13-16, 2016. Full paper.
- [C.66] Gabriel Reyes, Dingtian Zhang, Sarthak Ghosh, Partik Shah, Jason Wu, Aman Parnami, Bailey Bercik, Thad Starner, Gregory Abowd, and W. Keith Edwards. Whoosh: Non-Voice Acoustics for Low-Cost, Hands-Free, and Rapid Input on Smartwatches. *Proceedings of the International Symposium on Wearable Computers (ISWC)*. Heidelberg, Germany. September 12-16, 2016. Full paper. [19% acceptance]
- [C.65] Christina Masden and W. Keith Edwards. Understanding the Role of Community in Online Dating. *Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems (CHI)*, Seoul, South Korea. April 18-23, 2015. Full paper. [23% acceptance]
- [C.64] Marshini Chetty, Hyojoon Kim, Srikanth Sundaresan, Sam Burnett, Nick Feamster, and W. Keith Edwards. uCap: An Internet Data Management Tool for the Home. *Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems (CHI)*, Seoul, South Korea. April 18-23, 2015. Full paper. [23% acceptance]
- [C.63] Derek Reilly, Andy Echenique, Andy Wu, Anthony Tang, W. Keith Edwards. Mapping Out Work in a Mixed Reality Project Room. *Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems (CHI)*, Seoul, South Korea. April 18-23, 2015.
- [C.62] Derek Reilly, Mohamad Salimian, Bonnie MacKay, Niels Mathiasen, W. Keith Edwards, Juliano Franz. SecSpace: Prototyping Usable Privacy and Security for Mixed Reality Collaborative Environments. *Proceedings of the Sixth ACM SIGCHI Symposium on Engineering Interactive Computing Systems*, Rome, Italy, June 17-20, 2014. Full paper.
- [C.61] Christina Masden, Catherine Grevet, Rebecca Grinter, Eric Gilbert, and W. Keith Edwards. Tensions in Scaling-up Community Social Media: A Multi-Neighborhood Study of Nextdoor. *Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems (CHI)*, Toronto, ON, Canada. April 26-May 1, 2014. Full Paper. [23% acceptance]
- [C.60] Anthony Tang, Jonathan Massey, Nelson Wong, Derek Reilly, and W. Keith Edwards. Verbal Coordination in First Person Shooter Games. *Proceedings of the ACM Conference on Computer-Supported Cooperative Work (CSCW)*, Seattle, WA. February 12-15, 2012. Short paper (4 pages). [39.5% acceptance rate, but with revise/
- [C.59] Jennifer Stoll, Kirsten Foot, and W. Keith Edwards. Between Us and Them: Building Connectedness Within Civic Networks. *Proceedings of the ACM Conference on Computer-Supported Cooperative Work (CSCW)*, Seattle, WA. February 12-15, 2012. Short paper (4 pages). [39.5% acceptance rate, but with revise/resubmit process]
- [C.58] LiquidText: A Flexible, Multitouch Environment to Support Active Reading. *Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems (CHI)*, Vancouver, BC, Canada. May 7-12, 2011. Full paper. [26% acceptance]
- [C.57] Active Reading and Its Discontents: The Situations, Problems, and Ideas of Readers. *Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems (CHI)*, Vancouver, BC, Canada. May 7-12, 2011. Full paper. [26% acceptance]
- [C.56] Publics in Practice: Ubiquitous Computing at a Shelter for Homeless Mothers. *Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems (CHI)*, Vancouver, BC, Canada. May 7-12, 2011. Full paper. [26% acceptance]

- [C.55] Jeonghwa Yang, W. Keith Edwards, and David Haslem. Eden: Supporting Home Network Management Through Interactive Visual Tools. *Proceedings of the 23rd ACM Symposium on User Interface Software and Technology (UIST)*, New York, NY, October 3-6, 2010. Full paper. [18% acceptance]
- [C.54] Derek F. Reilly, Hafez Rouzati, Andy Wu, Jee Yeon Hwang, Jeremy Brudvik, and W. Keith Edwards. TwinSpace: an Infrastructure for Cross-Reality Team Spaces. *Proceedings of the 23rd ACM Symposium on User Interface Software and Technology (UIST)*, New York, NY, October 3-6, 2010. Full paper. [18% acceptance]
- [C.53] Christopher Le Dantec, Jim Christensen, Mark Bailey, Robert Farrell, Jason Ellis, Catalina Danis, Wendy Kellogg, W. Keith Edwards. A Tale of Two Publics: Democratizing Design at the Margins. *Proceedings of the ACM Conference on Designing Interactive Systems (DIS 2010)*, Aarhus, Denmark, August 16-20, 2010. Full paper. [15% acceptance]
- [C.52] Matthew Bonner, Jeremy Brudvik, Gregory Abowd, W. Keith Edwards. No-Look Notes: Accessible Eyes-Free Multi-Touch Text Entry. *Proceedings of the Eighth International Conference on Pervasive Computing (Pervasive)*, 2010. Helsinki, Finland, May 17-20, 2010. Full paper. [18% acceptance]
- [C.51] Christopher A. Le Dantec and W. Keith Edwards. Across Boundaries of Influence and Accountability: The Multiple Scales of Public Sector Information Systems. *Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems (CHI)*, 2010. Atlanta, Georgia, April 10-15, 2010. Full paper. [22% acceptance]
- Best Paper Nominee (top 5% of all submissions).**
- [C.50] W. Keith Edwards, Mark W. Newman, and Erika S. Poole. The Infrastructure Problem in HCI. *Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems (CHI)*, 2010. Atlanta, Georgia, April 10-15, 2010. Full paper. [22% acceptance]
- Paper selected (1 of 3 at CHI 2010) to be followed by a special commentary panel.**
- [C.49] Jennifer Stoll and W. Keith Edwards. Informal Interactions in Nonprofit Networks. *Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems (CHI)*, 2010. Atlanta, Georgia, April 10-15, 2010. Short paper (4 pages). [22% acceptance].
- Paper selected to be presented at a special session in the ACM Symposium on Computer-Human Interaction on Management of Information Technology (CHIMIT),**
- [C.48] Jennifer Stoll, W. Keith Edwards, and Elizabeth D. Mynatt. Interorganizational Coordination and Awareness in a Nonprofit Ecosystem. *Proceedings of the ACM Conference on Computer-Supported Cooperative Work (CSCW)*, 2010. Savannah, Georgia, February 6-10, 2010. Full paper. [20% acceptance]
- [C.47] Jeremy Goecks, W. Keith Edwards, Elizabeth D. Mynatt. Challenges in Supporting End-User Privacy and Security Management with Social Navigation. *Proceedings of the Fifth Symposium on Usable Privacy and Security (SOUPS)*, 2009. Mountain View, CA. July 15-17, 2009. Full paper. [31% acceptance]
- [C.46] Erika Shehan Poole, Marshini Chetty, Tom Morgan, Rebecca E. Grinter, and W. Keith Edwards. Computer Help at Home: Methods and Motivations for Informal Technical Support. *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI)*, 2009. Boston, MA. April 4-9, 2009. Full paper. [24.5% acceptance]

- [C.45] Christopher Le Dantec and W. Keith Edwards. The View From the Trenches: Organization, Power, and Technology at Two Nonprofit Homeless Outreach Centers. *Proceedings of the ACM Conference on Computer Supported Cooperative Work (CSCW)*, 2008. San Diego, CA. November 8-12, 2008. Full paper. [23% acceptance]
- [C.44] Stephen Volda, Elizabeth D. Mynatt and W. Keith Edwards. Re-framing the Desktop Interface Around the Activities of Knowledge Work. *Proceedings of the 21st ACM Symposium on User Interface Software and Technology (UIST 2008)*. Monterey, CA. October 19-22, 2008. Full paper. [20% acceptance]
- [C.43] Erika S. Poole, Christopher A. Le Dantec, James Eagan, and W. Keith Edwards. Reflecting on the Invisible: Understanding End-User Perceptions of Ubiquitous Computing. *Proceedings of the Tenth International Conference on Ubiquitous Computing (Ubicomp 2008)*. Seoul, South Korea. September 21-24, 2008. Full paper. [19% acceptance]
- [C.42] Christopher A. LeDantec and W. Keith Edwards. Designs on Dignity: Perceptions of Technology Among the Homeless. *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI, 2008)*. Florence, Italy. April 5-10, 2008. Full paper. [22% acceptance]
- [C.41] Jennifer Stoll, Craig Tashman, and W. Keith Edwards. Sesame: Informing User Security Decisions with System Visualization. *Proceedings of ACM Conference on Human Factors in Computing Systems (CHI, 2008)*. Florence, Italy. April 5-10, 2008. Full paper.
- [C.40] Kandha Sankarapandian, Travis Little, and W. Keith Edwards. TALC: Using Desktop Graffiti to Fight Software Vulnerability. *Proceedings of ACM Conference on Human Factors in Computing Systems (CHI 2008)*. Florence, Italy. April 5-10, 2008. Full paper.
- [C.39] Erika Shehan, Marshini Chetty, Rebecca E. Grinter, and W. Keith Edwards. More Than Meets the Eye: Transforming the User Experience of Home Network Management. *Proceedings of the ACM Conference on Designing Interactive Systems (DIS 2008)*. Cape Town, South Africa. February 25-27, 2008. Full paper.
- [C.38] Ken Calvert, W. Keith Edwards, and Rebecca E. Grinter. Moving Toward the Middle: The Case Against the End-to-End Argument in Home Networking. *Proceedings of the Sixth Annual ACM SIGCOMM Workshop on Hot Topics in Networks (HotNets-VI)*. Atlanta, GA. November 14-15, 2007. Full paper. [18% acceptance]
- [C.37] W. Keith Edwards, Erika Shehan, and Jennifer Stoll. Security Automation Considered Harmful? *Proceedings of Fifteenth IEEE New Security Paradigms Workshop (NSPW)*. New Hampshire, USA. September 18-21, 2007. Full paper.
- Also selected as one of four papers from NSPW to be presented in a special session at the 23rd Annual Computer Security Applications Conference (ACSAC). Miami, FL, December 10-14, 2007.**
- [C.36] Jeonghwa Yang and W. Keith Edwards. ICEBox: Toward Easy-to-Use Home Networking. *Proceedings of Eleventh IFIP International Conference on Human-Computer Interaction (INTERACT)*. Rio de Janeiro, Brazil. September 10-14, 2007. Full paper.
- [C.35] Andrew Miller and W. Keith Edwards. Give and Take: A Study of Consumer Photo-Sharing Culture and Practice. *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI 2007)*. San Jose, CA. April 28-May 3, 2007. pp. 347-356. Full
- [C.34] Erika Shehan and W. Keith Edwards. Home Networking and HCI: What Hath God Wrought? *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI 2007)*. San Jose, CA. April 28-May 3, 2007. pp. 547-556. Full paper. [25% acceptance]

- [C.33] Jin Nakazawa, W. Keith Edwards, Umakishore Ramachandran, Hideyuki Tokuda. A Bridging Framework for Universal Interoperability in Pervasive Systems. *Proceedings of the 26th International Conference on Distributed Computing Systems (ICDCS 2006)*. Lisboa, Portugal. July 4-7, 2006. Full paper. [14% acceptance]
- [C.32] Stephen Volda, W. Keith Edwards, Mark W. Newman, Rebecca E. Grinter, Nicolas Ducheneaut. Share and Share Alike: Exploring the User Interface Affordances of File Sharing. *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI 2006)*. Montreal, Quebec. April 22-27, 2006. pp. 221-230. Full paper. [23% acceptance]
- [C.31] Rebecca E. Grinter, W. Keith Edwards, Mark W. Newman, Nicolas Ducheneaut. The Work to Make a Home Network Work. *Proceedings of the Ninth European Conference on Computer-Supported Cooperative Work (ECSCW 2005)*, Paris, France. September 18-22, 2005. pp. 469-488. Full paper. [19% acceptance]
- [C.30] Amy Volda, Rebecca E. Grinter, Nicolas Ducheneaut, W. Keith Edwards, Mark W. Newman. Listening In: Practices Surrounding iTunes Music Sharing. *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI 2005)*, CHI Letters. Portland, OR. April 2-7, 2005. pp. 191-200. Full paper. [25% acceptance]
- Best Paper Nominee (top 5% of all submissions).**
- Also selected for publication as a chapter in**
***Text Messaging: Reading and Writing about Popular Culture*,**
John Alberti, ed.
- [C.29] W. Keith Edwards, Victoria Bellotti, Anind K. Dey, Mark W. Newman. Stuck in the Middle: The Challenges of User-Centered Design and Evaluation of Infrastructure. *Proceedings of ACM Conference on Human Factors in Computing Systems (CHI 2003)*, CHI Letters 5(1). Fort Lauderdale, FL. April 5-10, 2003. pp. 297-304. Full paper. [16% acceptance]
- [C.28] W. Keith Edwards, Mark W. Newman, Jana Z. Sedivy, Trevor F. Smith, Shahram Izadi. Challenge: Recombinant Computing and the Speakeasy Approach. *Proceedings of the Eighth ACM International Conference on Mobile Computing and Networking (MobiCom 2002)*. Atlanta, GA. September 23-28, 2002. pp. 279-286. Full paper. [7% acceptance]
- [C.27] W. Keith Edwards, Mark W. Newman, Jana Z. Sedivy, Trevor F. Smith, Dirk Balfanz, D.K. Smetters, Hao-Chi Wong, Shahram Izadi. Using Speakeasy for Ad Hoc Peer-to-Peer Collaboration. *Proceedings of the ACM Conference on Computer-Supported Cooperative Work (CSCW 2002)*, CHI Letters 4(3). New Orleans, LA. November 16-20, 2002. pp. 256-265. Full paper. [20% acceptance rate]
- [C.26] Mark W. Newman, Shahram Izadi, W. Keith Edwards, Jana Z. Sedivy, Trevor F. Smith. User Interfaces When and Where They are Needed: An Infrastructure for Recombinant Computing. *Proceedings of the Fifteenth ACM Symposium on User Interface Software and Technology (UIST 2002)*, CHI Letters 4(2). Paris, France. October 37-30, 2002. pp. 171-180. Full paper. [22% acceptance rate]
- [C.25] Mark W. Newman, Jana Z. Sedivy, W. Keith Edwards, Trevor Smith, Karen Marcelo, Christine M. Neuwirth, Jason I. Hong, Shahram Izadi. Designing for Serendipity: Supporting End-User Configurations of Ubiquitous Computing Environments. *Proceedings of the Conference on Designing Interactive Systems (DIS 2002)*. London, UK. June 25-28, 2002. pp. 147-156. Full paper. [22% acceptance rate]

- [C.24] Victoria Bellotti, Maribeth Back, W. Keith Edwards, Rebecca Grinter, Austin Henderson, and Cristina Lopes. Making Sense of Sensing Systems: Five Questions for Designers and Researchers. *Proceedings of the Conference on Human Factors in Computing Systems (CHI 2002)*, CHI Letters 4(1). Minneapolis, MN. April 20-25, 2002. pp. 415-422.
- [C.23] W. Keith Edwards and Rebecca E. Grinter. At Home with Ubiquitous Computing: Seven Challenges. *Proceedings of the Conference on Ubiquitous Computing (UbiComp 2001)*. Atlanta, GA. September 30-October 2, 2001. pp. 256-272. Full paper. [14%]
- [C.22] W. Keith Edwards, Takeo Igarashi, Anthony LaMarca, and Elizabeth D. Mynatt. A Temporal Model for Multi-Level Undo and Redo. *Proceedings of the Thirteenth ACM Symposium on User Interface Software and Technology (UIST 2000)*, CHI Letters 2(2). San Diego, CA. November 5-8, 2000. pp. 31-40. Full paper. [26% acceptance rate]
- [C.21] Paul Dourish, W. Keith Edwards, Jon Howell, Anthony LaMarca, John Lamping, Karin Petersen, Michael Salisbury, Doug Terry, and Jim Thornton. A Programming Model for Active Documents. *Proceedings of the Thirteenth ACM Symposium on User Interface Software and Technology (UIST 2000)*, CHI Letters 2(2). San Diego, CA. November 5-8, 2000. pp. 41-50. Full paper. [26% acceptance rate]
- [C.20] Takeo Igarashi, W. Keith Edwards, Anthony LaMarca, and Elizabeth D. Mynatt. An Architecture for Pen-based Interaction on Electronic Whiteboards. *Proceedings of the International Working Conference on Advanced Visual Interfaces (AVI 2000)*. Palermo, Italy. May 24-26, 2000. pp. 68-75. Full paper.
- [C.19] Takeo Igarashi, W. Keith Edwards, Anthony LaMarca, and Elizabeth D. Mynatt (2000). An Ink-Oriented Software Framework for Personal Electronic Whiteboards. *Proceedings of the Conference of the Information Processing Society of Japan*. Tokyo, Japan. February 29-March 1, 2000. (In Japanese.) Full paper.
- [C.18] Paul Dourish, W. Keith Edwards, Anthony LaMarca, and Mike Salisbury (1999). Using Properties for Uniform Interaction in the Presto Document System. *Proceedings of the Twelfth ACM Symposium on User Interface Software and Technology (UIST'99)*, CHI Letters 1(1). Asheville, North Carolina, November 7-10, 1999. pp. 55-64. Full paper.
- [C.17] Anthony LaMarca, W. Keith Edwards, Paul Dourish, John Lamping, Ian Smith and Jim Thornton (1999). Taking the Work Out of Workflow: Mechanisms for Document-Centered Collaboration. *Proceedings of the Sixth European Conference on Computer-Supported Cooperative Work (ECSCW'99)*. Copenhagen, Denmark, September 12-16, 1999. pp. 1-20. Full paper. [24% acceptance rate]
- [C.16] W. Keith Edwards and Anthony LaMarca (1999). Balancing Generality and Specificity in Document Management Systems. *Proceedings of the Seventh IFIP Conference on Human-Computer Interaction (Interact'99)*. Edinburgh, Scotland, August 30-September 3, 1999. pp. 1-10. Full paper.
- [C.15] Elizabeth D. Mynatt, Takeo Igarashi, W. Keith Edwards, Anthony LaMarca (1999). Flatland: New Dimensions in Office Whiteboards. *Proceedings of the ACM Conference on Computer-Human Interaction (CHI'99)*. Pittsburgh, PA, May 15-20, 1999. pp. 346-353.
- [C.14] Michael Kaminsky, Paul Dourish, W. Keith Edwards, Anthony LaMarca, Michael Salisbury, Ian Smith (1999). SWEETPEA: Software Tools for Programmable Embodied Agents. *Proceedings of the ACM Conference on Computer-Human Interaction (CHI'99)*. Pittsburgh, PA, May 15-20, 1999. pp. 144-151. Full paper. [25% acceptance rate]

- [C.13] Eyal de Lara, Karin Petersen, Douglas B. Terry, Anthony LaMarca, Jim Thornton, Mike Salisbury, Paul Dourish, W. Keith Edwards and John Lamping (1999). Caching Documents with Active Properties. *Proceedings of the Seventh IEEE Workshop on Hot Topics in Operating Systems (HotOS-VII)*. Rio Rico, Arizona, March 29-30, 1999.
- [C.12] W. Keith Edwards (1997). Flexible Conflict Detection and Management in Collaborative Applications. ***Proceedings of the ACM Symposium on User Interface Software and Technology (UIST'97)***. Banff, Alberta, Canada, October 14-17, 1997. pp. 139-148. Full
- [C.11] W. Keith Edwards, Elizabeth D. Mynatt, Karin Petersen, Mike J. Spreitzer, Douglas B. Terry, Marvin M. Theimer (1997). Designing and Implementing Asynchronous Collaborative Applications with Bayou. ***Proceedings of the ACM Symposium on User Interface Software and Technology (UIST'97)***. Banff, Alberta, Canada, October 14-17, 1997. pp.
- [C.10] W. Keith Edwards, Scott E. Hudson, Joshua Marinacci, Roy Rodenstein, Thomas Rodriguez, Ian Smith (1997). Systematic Output Modification in a 2D User Interface Toolkit. ***Proceedings of the ACM Symposium on User Interface Software and Technology (UIST'97)***. Banff, Alberta, Canada, October 14-17, 1997. pp. 151-158. Full paper.
- [C.9] W. Keith Edwards (1997). Representing Activity in Collaborative Systems. *Proceedings of the Sixth IFIP Conference on Human Computer Interaction (INTERACT'97)*. Sydney, Australia, July 14-18, 1997. pp. 405-412. Full paper.
- [C.8] W. Keith Edwards and Elizabeth D. Mynatt (1997). Timewarp: Techniques for Autonomous Collaboration, ***Proceedings of the ACM Conference on Computer-Human Interaction (CHI'97)***. Atlanta, GA, March 22-27, 1997. pp. 218-225. Full paper. [23% acceptance rate]
- [C.7] W. Keith Edwards (1996). Policies and Roles in Collaborative Applications, ***Proceedings of the ACM Conference on Computer-Supported Cooperative Work (CSCW'96)***. Cambridge, Mass., November 16-20, 1996. pp. 11-20. Full paper. [20% acceptance rate]
- [C.6] W. Keith Edwards, Elizabeth D. Mynatt, and Kathryn Stockton (1994). Providing Access to Graphical Interfaces - Not Graphical Screens, *Proceedings of ACM Conference on Assistive and Enabling Technologies (ASSETS'94)*. Marina Del Rey, CA, November, 1994.
- Selected as the 2017 ASSETS Paper Impact Award, given every other year to a paper published at least 10 years prior, and which has had "significant and sustained impact on the literature."**
- [C.5] W. Keith Edwards, Elizabeth D. Mynatt (1994). An Architecture for Transforming Graphical Interfaces, ***Proceedings of the ACM Symposium on User Interface Software and Technology (UIST'94)***. Marina Del Rey, CA, November, 1994. pp. 39-48. Full paper. [23%
- [C.4] W. Keith Edwards (1994). Session Management for Collaborative Applications, ***Proceedings of the ACM Conference on Computer-Supported Cooperative Work (CSCW'94)***. Chapel Hill, NC, October 22-26, 1994. pp. 323-330. Full paper. [20%
- [C.3] W. Keith Edwards and Tom Rodriguez (1993). Runtime Translation of X Interfaces to Support Visually Impaired Users, *Proceedings of the X Technical Conference*. Boston, MA, 1993. pp. 229-238. Full paper.
- [C.2] Elizabeth D. Mynatt and W. Keith Edwards (1992). Mapping GUIs to Auditory Interfaces, ***Proceedings of ACM Symposium on User Interface Software and Technology (UIST'92)***. Monterey, CA, 1992. pp. 61-70. Full paper.

- [C.1] W. Keith Edwards (1991). The Design and Implementation of the Montage Multimedia Mail System, *Proceedings of IEEE Conference on Communications Software (TriComm'91)*. Chapel Hill, NC, April 17, 1991. pp. 47-58. Full paper.

Accepted Conference Papers, In Press

Submitted Conference Papers, Under Review

Matt Britton, Tim Major, and W. Keith Edwards. InterSketch: Interactive Sketched Queries for Time-Series Data. Submitted to the ACM Symposium on User Interface Software and Technology (UIST), 2019. Under review.

Conference Presentations without Proceedings

- [CWP.4] W. Keith Edwards, Erika Shehan, and Jennifer Stoll. Security Automation Considered Harmful? Selected as one of four papers from NSPW 2007 to be presented in a special session at the 23rd Annual Computer Security Applications Conference (ACSAC). Miami, FL, October 2007.
- [CWP.3] Jennifer Stoll, W. Keith Edwards, and Elizabeth D. Mynatt. Informal Interactions in Non-Profit Networks. Invited to be presented at the ACM Symposium on Computer-Human Interaction for Management of Information Technology (CHIMIT). San Jose, CA, November 2007.
- [CWP.2] PWDs: An Untapped Multimedia Resource. Invited panel presentation at Unix Expo'94. October 4-6, 1994, New York City, NY.
- [CWP.1] Mercator: A Nonvisual Interface for X Workstations. Invited presentation at Educom '91. October 18, 1991. San Diego, CA.

F. Other

Professional Society Magazines

- [PSM.3] W. Keith Edwards, Mark W. Newman, Jana Z. Sedivy, Trevor F. Smith (2005). Bringing Network Effects to Pervasive Spaces. *IEEE Pervasive Computing*, Vol. 4, No. 3, July-September 2005.
- [PSM.2] Gregory D. Abowd, W. Keith Edwards and Rebecca Grinter (2003). Smart Homes or Homes That Smart? *SIGCHI Bulletin*, March/April 2003.
- [PSM.1] W. Keith Edwards, Elizabeth D. Mynatt, and Kathryn Stockton (1995). Access to Graphical Interfaces for Blind Users, *Interactions*. Volume 11.1, January, 1995. pp. 54-67.

Refereed Colloquia Presentations

- [CP.2] W. Keith Edwards (1994). Information Sharing in Collaborative Applications, Doctoral Colloquium, ACM Conference on Computer-Supported Cooperative Work (CSCW'94), Chapel Hill, NC, October 23, 1994.

- [CP.1] W. Keith Edwards (1994). A Framework for Information Sharing in Collaborative Applications, Doctoral Consortium, ACM Conference on Computer-Human Interaction (CHI'94), Boston, MA, 1994.

Refereed Workshop Papers

- [WP.19] Srikanth Sundaresan, Nick Feamster, Renata Teixeira, Anthony Tang, W. Keith Edwards, Rebecca E. Grinter, Marshini Chetty, and Walter de Donato. "Helping Users Shop for ISPs with Internet Nutrition Labels." Second ACM SIGCOMM Workshop on Home Networks (HomeNets '11). August 15-19, 2011. Toronto, Canada.
- [WP.18] Derek Reilly, Anthony Tang, Andy Wu, Andy Echenique, Jonathan Massey, Niels Mathiasen, Ali Mazalek, and W. Keith Edwards. "Organic UIs in Cross-Reality Spaces." 2nd International Workshop on Organic User Interfaces (OUI 2011), at TEI 2011, January 23-26, 2011. Madeira Portugal.
- [WP.16] W. Keith Edwards. "Interactive Systems Architecture Workshop Proposal." CCC/CRA Workshop on Interactive Systems Architecture, part of the CCC/CRA Roadmapping for Interactive Technology. August 11-13, Jackson Hole, WY.
- [WP.15] Ken Calvert, W. Keith Edwards, Nick Feamster, Rebecca E. Grinter, Ye Deng, and XuZi Zhou. "Instrumenting Home Networks." First SIGCOMM Workshop on Home Networks (HomeNets), September 3, 2010. New Delhi, India.
- [WP.14] Jeonghwa Yang and W. Keith Edwards. "A Study on Network Management Tools of Householders." First SIGCOMM Workshop on Home Networks (HomeNets), September 3, 2010. New Delhi, India.
- [WP.13] Tom Rodden, Paul Tennent, Matthew Chalmers, Beki Grinter, Keith Edwards, Andrew Crabtree. HomeBase: Developing a Corpus of Domestic Network Usage. "Workshop on Developing Shared Home Behavior Datasets to Advance HCI and Ubiquitous Computing Research," at CHI 2009, April 4, 2009. Workshop organizers: Stephen Intille, Gregory
- [WP.12] Jennifer Stoll, David McColgin, Michelle Gregory, Vern Crow, and W. Keith Edwards. Adapting Personas for Use in Security Visualization Design. *VizSec 2007: Proceedings of the 4th Workshop on Visualization for Computer Security*. Published by Springer, 2008. John R. Goodall, Gregory Conti, and Kwan-Liu Ma, editors. ISBN 978-3-540-78242-1.
- [WP.11] Aras Bilgen and W. Keith Edwards. "inSpace Projector: An Accessible Display System for Meeting Environments." Workshop on Usable Ubiquitous Computing in Next-Generation Conference Rooms. Ubicomp, San Diego, CA, September 17, 2006. Workshop organizers: Maribeth Back, Masatomi Inagaki Kazunori Horikiri, Saadi Lahlou, Jeffrey Huang, Rafael Ballagas, Surapong Lertsithichai.
- [WP.10] Erika Shehan, Shivam Goyal, and W. Keith Edwards. "Pinning the Tail on the Networked Donkey: Why IT@Home Needs Network Visualization." IT@Home Workshop, ACM Conference on Computer-Human Interaction (CHI), Montreal, Canada, April 22-27, 2006. Workshop organizers: Bill Schilit, David McDonald.
- [WP.9] Jeonghwa Yang and W. Keith Edwards. "ICEbox: Bring! Point! Get Configured!" IT@Home Workshop, ACM Conference on Computer-Human Interaction (CHI), Montreal, Canada, April 22-27, 2006. Workshop organizers: Bill Schilit, David McDonald.

- [WP.8] Stephen Volda, Elizabeth D. Mynatt, W. Keith Edwards (2005). "Toward Activity-Centered Sharing. Workshop on Computer Support for Human Activity, Ninth European Conference on Computer-Supported Cooperative Work. Paris, France. September 17, 2005, Jakob E. Bardram and Thomas P. Moran, organizers.
- [WP.7] James Foley, Gregory Abowd, Amy Bruckman, W. Keith Edwards, Rebecca E. Grinter, Mark Guzdial, Janet Kolodner, Blair MacIntyre, Elizabeth Mynatt, Nancy Nersessian, Jeff Pierce, Colin Potts, Ashwin Ram, John Stakso, Bruce Walker (2005). "HCI and HCC Education @ Georgia Tech." CHI 2005 Workshop on Graduate Education in Human-Computer Interaction. Portland, Oregon. April 2-7, 2005.
- [WP.6] W. Keith Edwards (2002). Web Services Alone Won't Guarantee Interoperability. Position paper for "Network Services for Groupware" workshop, ACM Conference on Computer Supported Cooperative Work (CSCW). New Orleans, LA, November 16, 2002. John
- [WP.5] Julie A. Black, Jason I. Hong, Mark W. Newman, W. Keith Edwards, Shahram Izadi, Jana Z. Sedivy, Trevor F Smith (2002). "Speakeasy: A Platform for Interactive Public Displays." Workshop on Public, Community, and Situated Displays: Design, Use, and Interaction Around Shared Information Displays, ACM Conference on Computer Supported Cooperative Work (CSCW). New Orleans, LA, November 16, 2002. Kenton O'Hara, Elizabeth Churchill, Mark Perry, Dan Russell, and Norbert Streitz, organizers.
- [WP.4] W. Keith Edwards (2002). "Bringing Network Effects to Computing Systems." CRA Conference on Grand Research Challenges in Computer Science and Engineering. Airlie House, Warrenton, VA. June 23-26, 2002. Computing Research Association.
- [WP.3] Mark W. Newman, Jana Z. Sedivy, and W. Keith Edwards (2000). Recombinant Network Components, Workshop on Technologies that Cross Boundaries: Exploring the Gap Between Wireless Networks, Bits, Interfaces, and Mobile Work Practices, ACM Conference on Computer Supported Collaborative Work (CSCW), Philadelphia, PA, 2000. Elizabeth Churchill, Jonathan Trevor, and Catherine Marshall, organizers.
- [WP.2] W. Keith Edwards, Mark W. Newman, and Jana Z. Sedivy (2000). Fluid Representations of Context for Recombinant Network Components. Workshop on Exploring the Framework of Context Awareness in Cooperative System, ACM Conference on Computer Supported Cooperative Work (CSCW), Philadelphia, PA, 2000. Ted Selker and Winslow Burleson,
- [WP.1] W. Keith Edwards (1994). "Infrastructure for the Sharing of Coordination Information." Workshop on Distributed Systems, Multimedia, and Infrastructure, ACM Conference on Computer-Supported Cooperative Work (CSCW), Chapel Hill, NC, October 22, 1994.

Workshop Papers Under Submission

Refereed Demonstrations

- [RD.6] Hyojoon Kim, Srikanth Sundaresan, Marshini Chetty, Nick Feamster, and W. Keith Edwards (2011). Communicating with Caps: Managing Usage Caps in Home Networks. ACM SIGCOMM 2011, Toronto, Canada. August 15-19, 2011.
- [RD.5] Derek Reilly, Anthony Tang, Andy Wu, Andy Echenique, Shashank Chamoli, Jonathan Massey, and W. Keith Edwards (2010). Or de l'Acadie: a TwinSpace Demo. ACM Symposium on User Interface Software and Technology (UIST). New York, NY, October

- [RD.4] Andy Wu, Derek Reilly, Jee Yeon Hwang, Andy Echenique, Enrique Santos, and W. Keith Edwards. (2009). A Tangible, Cross-Reality Supermarket interface. (demo and video). IEEE Symposium on 3D User Interfaces (3DUI 2010). Waltham, Massachusetts, March 20-21, 2009.
- [RD.3] Stephen Volda, Elizabeth D. Mynatt, and W. Keith Edwards (2007). Giornata: Re-envisioning the Desktop Metaphor to Support Activities in Knowledge Work. Demonstration at the 20th ACM Symposium on User Interface Software and Technology (UIST'07), Newport, Rhode Island, October 7-10, 2007.
- [RD.2] Takeo Igarashi, Elizabeth D. Mynatt, W. Keith Edwards, and Anthony LaMarca (1999). Demonstrating Flatland User Interfaces. Refereed demonstration, ACM Conference on Computer-Human Interaction (CHI), Pittsburgh, PA, May 15-20, 1999.
- [RD.1] Elizabeth D. Mynatt and W. Keith Edwards (1995). Audio GUIs: Interacting with Graphical Applications in an Auditory World, Interactive Experience, ACM Conference on Computer-Human Interaction (CHI), Denver, CO, May 7-11, 1995.

Refereed Posters

- [RP.4] Erika Shehan and W. Keith Edwards. Making the Invisible Visible: Creating Interactive Visualizations of Home Networking. Poster for the Grace Hopper Celebration of Women and Computing, ACM Student Research Competition, San Diego, CA. October 4-7, 2006.
- [RP.3] Craig Tashman, Jennifer Stoll, W. Keith Edwards. SESAME: Extending the Desktop Metaphor to Support Security Decision Making. Poster for the Symposium on Usable Privacy and Security (SOUPS), Pittsburgh, PA. July 12-14, 2006.
- [RP.2] Steven Volda, W. Keith Edwards, and Mark W. Newman (2004). The Sharing Palette: A User Interface for File and Service Sharing. Poster for the Seventeenth Annual ACM Symposium on User Interface Software and Technology (UIST), Santa Fe, NM, October 11-14, 2004.
- [RP.1] W. Keith Edwards (1994). A Framework for Information Sharing in Collaborative Applications, Research Poster Presentation, ACM Conference on Computer-Human Interaction (CHI), Boston, MA, 1994.

Major Software Systems Created

Montage. Created an early multimedia mail system, supporting image, audio, and executable content in a rich presentation. This system was later licensed to SecureWare, Inc. for commercialization.

Mercator. Technical lead and project manager on the creation of a novel infrastructure to support runtime translation of X Window-based interfaces into auditory presentation for non-sighted users. This project resulted in a number of core X Window protocols which are now a part of the standard

Intermezzo. Developed an early infrastructure for context-aware computing applications, specifically focused around the creation of context-enhanced collaborative tools. This system embodied a complete distributed object system, with support for replication and variable consistency controls, in C+

Timewarp. Created a system for loosely-coupled collaborative editing of artifacts such as images and

Flatland. Created a computationally-augmented whiteboard system, supporting the application of custom processing behaviors to freeform ink strokes.

Presto. I was one of the primary developers of a high-performance metadata-oriented document management system. This effort was a predecessor of a system called Harland, which was later released for public download by Xerox Corporation.

Placeless Documents. I was a lead developer on the Placeless Documents System, an infrastructure for rich document management and organization applications. Created core portions of the system, as well as a number of applications.

Speakeasy/Obje. Creator, lead architect, and developer of the Speakeasy ubiquitous computing infrastructure. This system became the lead licensing effort for the Palo Alto Research Center during its transition to an independent company, and was at the core of subsequent PARC partnership deals. This system was commercialized as a part of a \$4 million/2.5 year NIST-ATP contract, and has been transferred to two PARC partner companies where it has been adopted into several internal pre-product prototypes. This system is currently being championed within one partner company as a strategic middleware platform and is being considered for inclusion in at least one emerging industry

Trade Publications

Various articles written for UnixWorld magazine, over the period 1991-1993

Technical Reports

- [R.8] W. Keith Edwards, Mark W. Newman, and Jana Z. Sedivy (2001). The Case for Recombinant Computing. Xerox Palo Alto Research Center Technical Report CSL-01-1,
- [R.7] W. Keith Edwards (1993). Intermezzo Implementation Notes, Graphics, Visualization, & Usability Center Technical Report GIT-GVU-93-42, Georgia Tech, October 1993.
- [R.6] Elizabeth D. Mynatt and W. Keith Edwards (1992). The Mercator Environment: A Nonvisual Interface to X Windows and Unix Workstations, Graphics, Visualization, & Usability Center Technical Report GIT-GVU-92-05, Georgia Tech, February, 1992.
- [R.5] Elizabeth D. Mynatt and W. Keith Edwards (1992). New Metaphors for Nonvisual Interfaces, Graphics, Visualization, & Usability Center Technical Report GIT-GVU-92-28, Georgia
- [R.4] W. Keith Edwards (1992). Montage: An X-Based Multimedia Mail System, Graphics, Visualization, & Usability Center Technical Report GIT-GVU-92-29, Georgia Tech, October
- [R.3] W. Keith Edwards (1992). A Session Management Service for Collaborative Applications, Sun Microsystems Laboratories unpublished internal technical report, August 1992.
- [R.2] W. Keith Edwards (1991). The Multimedia Applications Kit/C++, Sun Microsystems Laboratories unpublished internal technical report, August 1991.
- [R.1] W. Keith Edwards (1990). The Design and Implementation of the Montage Multimedia Mail System, Software Engineering Research Center Technical Report GIT-SERC-90-04, Georgia Tech, August 1990.

Books In Preparation

Foundations of User Interface Software. With Scott Hudson. In early preparation.

G. Research Proposals and Grants (Principal Investigator or Co-PI)

Approved and Funded

Awards in Support of Human-Centered Networking Research

Principal Investigator, President's Undergraduate Research Award (PURA). Salary support for Bethany Sumner for *uCap: Making Household Bandwidth Caps Manageable*. \$1,500. Funded

Co-Principal Investigator, NSF CRI Computing Research Infrastructure Grant: "Collaborative Research: Measurement Infrastructure for Home Networks." Joint between Georgia Tech (lead) and University of Kentucky. Three year award funded at \$545,357; Georgia Tech portion is

Intel, In-Kind Equipment Grant. Atom-based small form-factor computers, estimated value \$1,000. February, 2011.

Principal Investigator, Intel Research Funding. "Understanding Current User Practices in Device-Rich Social Settings." \$80,000 unrestricted gift. Funded January 6, 2011.

Co-Principal Investigator, NSF Research Experience for Undergrads supplement for "NetSE: Medium: Collaborative Research: Towards Human-Network Interaction (HNI) for the Home." \$16,000. Funded June 23, 2010.

Co-Principal Investigator, NSF NetSE Medium-Scale Grant: "Towards Human-Network Interaction for the Home." Joint between Georgia Tech (lead) and University of Kentucky. Four year award funded at \$1,152,992; Georgia Tech portion is \$768,662. Funded August 1, 2009. Award #0904431.

Principal Investigator, Microsoft Research Funding to support human-centered networking research, \$50,000. Funded September, 2008. (Joint with Rebecca Grinter.)

Raytheon Faculty Fellowship. \$15,000 unrestricted award. 2008.

Principal Investigator, Georgia Tech UROP materials and supplies grant for undergraduate research, \$1,300. Funded March, 2008.

Principal Investigator, VentureLab Phase-I Commercialization Proposal, "Smart Router for the Home." \$50,000. Funded July 20, 2007.

Principal Investigator, NSF NeTS Medium-Scale Grant: "Human-Centered Networking for the Home." Joint between Georgia Tech (lead) and University of Kentucky. Three year award funded at \$549,856; Georgia Tech portion is \$363,273. Proposal funded September 1, 2006. Award

Principal Investigator, NSF Research Experience for Undergraduates supplement for "Human-Centered Networking for the Home." \$12,000. Funded June 13, 2006. Award #0626281.

Cisco University Relations Program. "Human-Centered Networking." \$75,000 unrestricted gift.

Intel Equipment Grant. In-kind equipment gift for Universal Plug and Play (UPnP) network testbed. \$450 value. April 2006.

Microsoft University Relations Grant, \$6,986 in-kind software gift. January 6, 2005. W. Keith Edwards and Rebecca E. Grinter, co-PIs.

Intel Equipment Grant, "End-User Centered Home Networking Lab." \$41,694 in-kind equipment gift. January 4, 2005. W. Keith Edwards and Rebecca E. Grinter, co-PIs.

Principal Investigator and Project Manager, National Institute of Standards and Technology (NIST), Advanced Technology Program. "Building for Radical Interoperation." Funded by NIST at \$1.65 million over 2.5 years; cost shared to a total project budget of \$4.14 million. Project started October 1, 2003. Funding rate of submitted proposals was 9.4% (44 awards out of 467 submitted)

Awards in Support of Usable Security Research

Google. \$37,500 unrestricted gift to support "Student Design Competition in Usable Security." Funded January, 2007.

Symantec Corporation. \$50,000 unrestricted gift for support of "Tiger Teams" usable security competition. 2006.

IBM Internet Security Systems (ISS). \$75,000 contract for support of "Tiger Teams" usable security competition. 2006.

Awards in Support of Ubiquitous Computing Research

Principal Investigator, Google Research Award, "Audio-Based Wearable Computing for Situational Awareness and Accessibility." \$51,500 unrestricted gift funding. February, 2016.

Principal Investigator, Google Research Award, "Exploration of Wearable Devices for Eyes-Free Text Entry." \$50,000 unrestricted gift funding. August, 2014.

Principal Investigator, NSF Research Experience for Undergraduates supplement for "HCC: Physical and Digital Design for Fluid Collaboration." \$12,000. Funded April 4, 2008. Award #0705569.

Principal Investigator, NSF IIS Human-Centered Computing Medium-Scale Grant: "HCC: Physical and Digital Design for Fluid Collaboration." Three year award funded at \$898,955. Proposal awarded May, 2007. Award #0705569.

Interface Carpet, in-kind gift of RFID floor tiles to be installed in inSpace lab. December, 2008.

Principal Investigator, President's Undergraduate Research Award (PURA). Salary support for Jon Keyser for *Physical/Virtual Interaction Techniques*. \$1,500; funded Spring, 2007.

Principal Investigator, Nokia University Relations Grant. "Collaborative Services for Mobile Clients." \$8,000 unrestricted cash gift plus in-kind equipment gift, value approximately \$2,000. September 2006.

Nokia Equipment Grant. In-kind equipment gift of Nokia 770 Internet Terminals. \$1,200 value. March 2006.

Steelcase Corporation. Played a leadership role in ongoing collaborative research with Steelcase corporation, including developing a multi-year research relationship, organizing project goals, milestones and deliverables, and sponsor visits to Grand Rapids. \$440,000 cash and in-kind gift.

Principal Investigator, GVI Seed Grant, "Transforming Meeting Spaces Into Meeting Places." \$13,000 grant toward student funding. June 2005.

Awards in Support of Other Research

Principal Investigator, VentureLab Phase-I Commercialization Proposal, "LiquidText." \$31,500.

Nokia Equipment Grant. In-kind equipment gift of 30 Nokia E60 mobile telephones: "A Mobile Information Access System for Social Impact." Estimated value \$22,500 value. October 2009.

Principal Investigator, Samsung, \$138,609 research contract: "LiquidText: A Multitouch Document System to Support Active Reading." Project period October 1, 2009 — September 30, 2010.

Principal Investigator, NSF HCC Proposal: "Technology at the Margins: The Urban Homeless as a Lens on the Needs of Users Outside the Mainstream." \$499,249. Funded July 15, 2009. Award #0915624.

Dell Computer, In-Kind Equipment Gift: 2 Dell XT2 tablet PCs for use in LiquidText project. Estimated value: \$5,500. 2009.

Principal Investigator, Attendi, Inc. cash gift to support research on information coordination needs of non-profits. \$4,500. February, 2009.

Principal Investigator, Attendi, Inc. cash gift to support research on information coordination needs of non-profits. \$7,000. Awarded July, 2008.

Principal Investigator, IBM Joint Study Project: "Studies of Task Management." \$1,000. Awarded June, 2008.

Principal Investigator, GVU Seed Grant, "Homelessness and Technology: Opportunities for Change in At-Risk Communities." 2007.

Awards in Support of GVU Center Activities, and Miscellaneous

Samsung Design Power Program, visiting researcher agreement for two Samsung engineers and designers to spend Fall, 2017 at the GVU Center. \$60,000 unrestricted gift.

Samsung Design Power Program, visiting researcher agreement for two Samsung engineers and designers to spend Fall, 2016 at the GVU Center. \$60,000 unrestricted gift.

Newell-Rubbermaid Corporation. "Studying the Future of Digital Writing." \$100,000 unrestricted gift.

Samsung Design Power Program, visiting researcher agreement for two Samsung engineers and designers to spend Fall, 2015 at the GVU Center. \$60,000 unrestricted gift.

Samsung Design Power Program, visiting researcher agreement for six Samsung engineers and designers to spend Fall, 2014 at the GVU Center. \$240,000 unrestricted gift.

ACT Corporation. "Game-Based Assessment." \$350,000 unrestricted gift. 2014.

Google Glass Research Awards. "A Proposal to Support Wearable Computing Research at the Georgia Tech GVU Center." \$28,000 unrestricted gift and in-kind donation of 12 Google Glass devices (aggregate value \$18,794. Awarded June, 2013.

ACT Corporation. "Game-Based Assessment." \$120,000 unrestricted gift. 2013.

Technology Fee Grant (internal Georgia Tech funding): "Prototype Lab." \$61,470. Awarded January,

Research in Motion Equipment Grant. In-kind equipment gift of 25 Blackberry Bold 9000 smartphones, for use in education. Approximate value \$12,875. July 2010.

Co-Principal Investigator, NSF HCC Grant: "Computing at the Margins Workshop" (funding to support symposium on Computing at the Margins research). PI: Rebecca Grinter. \$50,000.

Principal Investigator, Google, in-kind gift of 5 Android development phones for use in mobile curriculum development. Approximate value \$2,000. February, 2009.

Principal Investigator, Dell Computer, \$65,000 unrestricted gift for establishment of a collaborative research internship program within the Georgia Tech HCI Masters program. 2007.

Principal Investigator, Dell Computer. \$2,500 unrestricted gift to support GVU@CHI Industry Partners Reception, CHI 2007.

Principal Investigator, Apple Computer, hardware and cash gift to support digital media education. 20 4-core Mac Pro systems with displays and software. Total in-kind hardware value approximately \$100,000. Total in-kind software value approximately \$50,000. Cash gift \$25,000. Awarded August

Principal Investigator, NSF IIS Grant: "Workshop: Computer-Supported Cooperative Work Doctoral Research Consortium" (funding to support ACM CSCW 2008 Doctoral Consortium). Co-PI: Pamela Hinds, Stanford University. \$33,710. Awarded September 10, 2007.

Pending Proposals

Principal Investigator, Tennessee Board of Regents: "Phase 1: Exploring How Success Coach Programs Can Be Augmented via Technology Interventions." Under review. Proposed budget: \$50,000.

Recent Unfunded Proposals (Previous Five Years)

Principal Investigator, NSF CHS Small Proposal: "Non-Visual Modalities for Enhancing Situational Awareness and Interpersonal Communication in Mobile Computing." Proposed budget: \$499,679. 2015.

Principal Investigator, Newell-Rubbermaid Collaborative Research Proposal: "Creating an Ongoing Digital Relationship to Expo Markers via Augmented Reality and Other Technologies." Proposed

Principal Investigator, NSF CHS Medium Proposal: "Non-Visual Modalities for Wearable and Mobile Computing." Proposed budget: \$1,199,224. 2014.

Principal Investigator, NSF CHS Small Proposal: "Non-Visual Modalities for Wearable and Mobile Computing." Proposed budget: \$499,432. 2014. (Proposal flagged as highly competitive but not funded due to resource limitations.)

Principal Investigator, NSF CHS Large Proposal: "Hyper-Local Social Media for Community Building." Proposed budget: \$2,998,808. 2013.

Principal Investigator, Google Faculty Research Proposal: "Digital Walls and Meeting Memory: Enhancing Collaboration Through Cloud- and Location-Based Services." Proposed budget: \$150,000

Principal Investigator, NSF INSPIRE: "Building Social Capital Through a Hyper-Local Social Network Platform." Proposed budget: \$999,441. 2013. (Pre-proposal accepted; final proposal declined.)

Principal Investigator, NSF Expeditions in Computing: "Developing the Science of Civic Social Computing." Proposed budget: \$10M. 2012. (Pre-proposal accepted; final proposal declined.)

Principal Investigator, HCC Small: "A Platform for Hyper-Local Social Media Applications." Proposed budget: \$500,000. 2011.

Co-Principal Investigator, Intel Science and Technology Center Pre-proposal: "Intel STC in Participatory Computing." Proposed budget: \$10M (unrestricted gift). 2011.

Principal Investigator, NSF CRI Computing Research Infrastructure Proposal: "Prototyping Laboratory for Rapid Exploration of Physical/Digital Devices." Budget: \$749,506. 2011

H. Research Proposals and Grants (Contributor)

Approved and Funded

Steelcase Industrial Collaboration, "InSpace: Merging Industrial and Informative Design." \$330,000 cash and in-kind gift for 2005-2008.

Senior Personnel, National Science Foundation ITR (Information Technology Research) program, Award #0205644. "Human-Centered Design of Context-Aware Computing: Scalability, Usability, and Privacy." Funded at \$2.3 million over five years (2002-2006). James Landay, Principal Investigator.

Consulting Senior Personnel, EPSRC (UK) proposal, Homework: Shaping a User-Centered Domestic Infrastructure. Tom Rodden, Steve Benford, Muffy Calder, Matthew Chalmers, N. Dulay, Chris Greenhalgh, Beki Grinter, E. Lupu, Morris Sloman, Joe Sventek. Funded at £1,500,000 (\$3,000,000)



A. Professional Activities

Memberships and Activities in Professional Societies

CHI Academy Member (elected 2014). ACM Special Interest Group on Computer-Human Interaction (SIGCHI)

Distinguished Scientist, Association for Computing Machinery (ACM)

ACM Special Interest Groups: SIGCHI, SIGPLAN, SIGGROUP, SIGMOBILE

SIGTA — The Society of Typographic Aficionados

Conference and Program Chairships

Technical Program Co-chair, ACM Conference on Human Factors in Computing Systems (CHI), Atlanta, GA, 2010. (Co-chair with Tom Rodden, Nottingham University.)

Program Chair, Fifteenth ACM Symposium on User Interface Software and Technology (UIST'02), Paris, France, 2002.

General Conference Co-chair, Thirteenth ACM Symposium on User Interface Software and Technology (UIST'00), San Diego, CA, November 5-8, 2000. (Co-chair with Mark Ackerman, UC Irvine.)

Conference Committee Activities

Program Committee, AfriCHI: First African Conference for Human Computer Interaction. Nairobi, Kenya. November 21-25, 2016.

Program Committee, ACM SIGCOMM Workshop on Measurements up the Stack (W-MUST); held in conjunction with ACM SIGCOMM. Toronto, CA. August 15, 2011.

Program Committee, Workshop on Intelligibility and Control in Pervasive Computing; held in conjunction with Pervasive 2011. San Francisco, CA. June 12, 2011.

Program Committee, Second ACM SIGCOMM Workshop on Home Networks (HomeNets 2011). Toronto, Canada, 2011.

Program Committee, First ACM SIGCOMM Workshop on Home Networks (HomeNets 2010). New Dehli, India, 2010.

Associate Paper Chair. ACM Conference on Human Factors in Computing Systems (CHI'09). Boston, MA, 2009.

Program Committee, IEEE New Security Paradigms Workshop (NSPW'08). Olympic Valley, CA. 2008.

Program Committee, Symposium on Usable Security and Privacy (SOUPS'08). Pittsburgh, PA. 2008.

Co-Chair, Doctoral Colloquium. ACM Conference on Computer-Supported Cooperative Work (CSCW),

Program Committee, Symposium on Usable Security and Privacy (SOUPS'07), Pittsburgh, PA, 2007.

Associate Papers Chair, ACM Conference on Human Factors in Computing Systems (CHI'07), San Jose, CA, 2007.

Associate Papers Chair, ACM Conference on Human Factors in Computing Systems (CHI'06), Montreal, Quebec, 2006.

Program Committee, Ninth European Conference on Computer Supported Cooperative Work (ECSCW'05), Paris, France, 2005.

Program Committee, Seventh International Conference on Ubiquitous Computing (UbiComp'05). Tokyo, Japan, 2005.

Demos Program Committee, Seventeenth ACM Symposium on User Interface Software and Technology (UIST '04), Santa Fe, New Mexico, 2004.

Program Committee, Sixth International Conference on Ubiquitous Computing (UbiComp '04), Nottingham, England, 2004.

Associate Papers Chair, ACM Conference on Computer-Supported Cooperative Work (CSCW 2004), Chicago, Illinois, 2004.

Program Committee, Second Annual ACM/USENIX Conference on Mobile Systems, Applications, and Services (MobiSys'04), 2004.

Associate Papers Chair, ACM Conference on Human Factors in Computing Systems (CHI'04), 2004.

Review Committee, International Symposium of Human-Computer Interaction for Information Visualization (IV04-HCI), London, England, 2004.

Program Committee, Fifth International Conference on Ubiquitous Computing (UbiComp '03), Seattle, WA, 2003.

Associate Papers Chair, ACM Conference on Human Factors in Computing Systems (CHI '03), Fort Lauderdale, FL, 2003.

Associate Program Chair, ACM Conference on Computer-Supported Cooperative Work (CSCW 2002), New Orleans, LA, 2002.

Posters Review Committee, ACM Conference on Computer-Supported Cooperative Work (CSCW 2002), New Orleans, LA, 2002.

Posters Review Committee, Fifteenth ACM Symposium on User Interface Software and Technology (UIST'02), Paris, France, 2002.

Program Committee, Fourteenth ACM Symposium on User Interface Software and Technology (UIST'01), Orlando, FL, November 11-14, 2001.

Program Committee, Thirteenth ACM Symposium on User Interface Software and Technology (UIST'00), San Diego, CA, November 5-8, 2000.

Program Committee, ACM Conference on Computer Supported Cooperative Work (CSCW'00), Philadelphia, PA, 2000.

Program Committee, Twelfth ACM Symposium on User Interface Software and Technology (UIST'99), Ashville, North Carolina, 1999.

Associate Papers Chair, ACM Conference on Computer Supported Cooperative Work (CSCW'98), Seattle, WA, 1998.

Program Committee, Eleventh ACM Symposium on User Interface Software and Technology (UIST'98), San Francisco, CA, 1998.

Demo Committee, ACM Symposium on User Interface Software and Technology (UIST'97), Banff, Alberta, Canada, 1997.

Student Volunteer Chair, ACM Symposium on User Interface Software and Technology (UIST'93), Atlanta, GA, 1993.

Workshops Organized

Organizer and Chair, "CHI Bird" Workshop of U.S. HCI Leadership. Atlanta, GA. March 29-30, 2018.

Organizer and Chair, "CHI Bird" Workshop of U.S. HCI Leadership. Atlanta, GA. September 29-30, 2018.

Co-organizer, Ultra-large-scale Interaction Workshop, part of the CCC/CRA Roadmapping for Interactive Technology Workshop Series. Chicago, IL. October 25-27, 2010. (Co-leads: Mark Ackerman, Mark Newman, Scott Klemmer.)

Co-organizer of the Second Computing at the Margins Workshop, Atlanta, GA. February 17-19, 2010. Other co-organizers include Rebecca Grinter (lead), Michael Best, Aaron Bobick, and Elizabeth D. Mynatt. NSF sponsored workshop, \$50,000.

Co-Chair, Doctoral Colloquium. ACM Conference on Computer-Supported Cooperative Work (CSCW), 2008. Sponsored by NSF, \$33,710.

Lead organizer of the First Computing at the Margins Workshop, Atlanta, GA. May 6-7, 2009. Other co-organizers include Rebecca Grinter, Michael Best, Aaron Bobick, and Elizabeth D. Mynatt.

Brad Johanson, Jan Borchers, Bernt Schiele, Peter Tandler, W. Keith Edwards (2003). At the Crossroads: The Interaction of HCI and Systems Issues in UbiComp, organized workshop at the Fifth International Conference on Ubiquitous Computing (UbiComp), Seattle, WA. October 12-15, 2003.

Mark W. Newman, W. Keith Edwards, and Jana Z. Sedivy (2001). Building the Ubiquitous Computing User Experience, organized Workshop at ACM Conference on Computer-Human Interaction (CHI), Seattle, WA. March 5, 2001.

B. On-Campus Georgia Tech Service

School of Interactive Computing RPT Chair, 2020-

COVID-19 Research Restart Task Force member, organized through the Georgia Tech EVPR's office, 2020-

COVID-19 Rapid Response Seed Grant Review Committee, organized through the Georgia Tech EVPR's office, 2020.

School of Interactive Computing Space/Neighborhood Co-Lead for TSRB (along with Beth Mynatt), 2019-2020.

Co-lead on a successful Coda backfill proposal, *Exploring the Human-Technology Frontier*. This proposal aims to unify much of Georgia Tech's human-facing research in TSRB. This effort involved multiple stakeholders from across the Institute, building consensus, and developing plans based on research capacity, headcount, and future planning. Once accepted, the effort has required ongoing interaction with GT Capital Planning and Space Manager and external design firms. This activity has

QPR Training, 2020.

Member, Search Committee, School Administrative Officer for School of Interactive Computing, 2019.

Georgia Tech Research Advisory Committee, 2019-2020.

College of Computing, Review/Promotion/Tenure Committee Member, 2018-2019

Provost's Emerging Leaders Program, 2018-2019.

Implicit Bias Training, 2018.

Institute for People and Technology, Research Pillar Co-Director, Human-Technology Frontiers. 2017—.

School of Interactive Computing Space Planning Committee, 2017-2019.

LGBTQIA Safe Space Training, 2017.

Coda Research Neighborhood Leadership Team for Smart Cities & Connected Communities.
(Responsible for organizing research neighborhood, collecting and reporting space requirements for the Coda building, etc.), 2016-present.

Chair, School of Interactive Computing Awards Committee, 2015—2017.

Member, TSRB Space Shepherds Committee, 2016.

Member, Search Committee, School Administrative Officer for School of Interactive Computing, 2015.

Member, School of Interactive Computing Space Planning Committee, 2015-2016.

Member, School of Interactive Computing, Periodic Professional Review Committee, 2015.

Member, College of Computing Awards Committee, 2014—2015.

Member, Internal Advisory Board, Center for Urban Innovation, Georgia Tech. 2014— 2019.

Member, College of Computing 25th Anniversary Planning Committee. 2014

Member, Institute for People and Technology (IPaT) Campus Advisory Committee, 2013—present.

Member, Institute for People and Technology (IPaT) Research Directors Committee, 2013—present.

Member-at-Large, School Advisory Committee (SAC), School of Interactive Computing, 2013-2014.

Member, School of Interactive Computing, Periodic Professional Review Committee, 2013.

Member, Institute for People and Technology, Faculty Steering Committee, 2011—present.

Member, HCC Ph.D. Program Committee, 2010—2013.

Chair, CS Ph.D. Admissions Committee, 2008.

Member, College of Computing Faculty Computer Committee, 2008-2009.

Chair, HCC Ph.D. Admissions Committee, 2007.

Member, College of Computing Awards Committee, 2007.

GVU Center Steering Committee, 2005-2009.

Member, College of Computing Technical Support Organization (TSO) Advisory Committee, 2006.

Member, HCC Ph.D. Admissions Committee, 2006.

Member, Ph.D. Recruiting Committee, 2005-2006.

C. Special Assignments at Georgia Tech

Chair, School of Computational Science and Engineering Chair Search Committee, 2013-2014	Led the effort to identify and recruit a new Chair for the School of Computational Science and Engineering (CSE) within the College of Computing at Georgia Tech.
Task Force on Rethinking Graduate Programs, 2009-2010	Participated in a small task force that produced recommendations for systemic changes in the graduate programs across the College of Computing.
Computer Science Ph.D. Program Coordinator, 2008-2010	As CS Ph.D. Coordinator I had oversight of both the processes and aspects of the strategic direction of the CS Ph.D., the largest Ph.D. program in the College of Computing and ranked ...
Associate Director, GVU Center, 2006-2011	In my role as the Associate Director of the GVU Center, I was deeply involved in the research leadership of the Center, and had particular responsibilities for fundraising and intellectual property efforts. My activities resulted in financial support for the Center itself, as well as the other faculty members of the Center. I also acted as GVU liaison to a number of other campus organizations including GTISC and VentureLabs, and initiatives such as as the RIPAC Consortium and emergent e- ...
Dean's Ad Hoc Committee on Fairness in Graduate Admissions, 2006	Participated in a committee chaired by Advisory Board Member David McCoy to evaluate the fairness of the processes and procedures used to select graduate students for admissions to ...
Tiger Team Competition, 2005-07	In order to catalyze a research area around the notion of usable security, I initiated and led the joint GTISC/GVU Student Competition in Usable Security. This is a yearly grassroots student design effort consisting of a seminar series and competition. Over 40 students have participated in some form, with six winning teams selected to receive funding for further development. My work on this effort has led to it becoming financially self-sustaining after the first year.

D. Member of Ph.D. Examining Committees

Ph.D. Examining Committees, Georgia Tech

Youngwook Do, CS Ph.D.

Qualifier committee, 2020.

Advisors: Sauvik Das and Gregory Abowd

Arjun Srinivasan, CS Ph.D.
Proposal committee, 2019.
Advisor: John Stasko

John Thompson, CS Ph.D.
Proposal committee, 2019.
Advisor: John Stasko

Shagun Jhaver, CS Ph.D.
Proposal committee, 2019.
Advisors: Amy Bruckman & Eric Gilbert

Jung Wook Park, CS Ph.D.
Qualifier committee, 2019
Advisors: Gregory Abowd and Rosa Arriaga

Sucheta Ghoshal, HCC Ph.D.
Proposal committee, 2019
Advisor: Amy Bruckman

Bahador Saket, CS Ph.D.
Proposal Committee, 2018
Advisor: Alex Endert

Alex Godwin, CS Ph.D.
Dissertation committee, 2018
Advisor: John Stasko

Ceara Byrne, CS Ph.D.
Qualifier committee, 2018.
Advisor: Melody Jackson

Sucheta Ghoshal, HCC Ph.D.
Qualifier committee, 2018.
Advisor: Amy Bruckman

Arjun Srinivasan, CS Ph.D.
Qualifier committee, 2018.
Advisor: John Stasko

Gheric Speigner, HCC Ph.D.
Proposal committee, 2017.
Advisor: Blair MacIntyre

Rui Zhou, HCC Ph.D.
Qualifier committee, 2017.
Advisor: Neha Kumar

Taeheon Kim, HCC Ph.D.
Qualifier committee, 2017.
Advisor: Blair MacIntyre

Shagun Jhaver, CS Ph.D.
Qualifier committee, 2017.
Advisors: Amy Bruckman & Eric Gilbert

Alan Dingtian Zhang, CS Ph.D.
Qualifier committee, 2017.
Advisor: Gregory Abowd

John Thompson, CS Ph.D.
Qualifier committee, 2017.
Advisor: John Stasko

Bahador Saket, CS Ph.D.
Qualifier committee, 2017.
Advisor: Alex Endert

Aman Parnami, HCC Ph.D.
Dissertation committee, 2017.
Advisors: Betsy DiSalvo and Gregory Abowd

Chaya Hiruncharoenvate, CS Ph.D.
Dissertation committee, 2017
Advisor: Eric Gilbert

Alex Godwin, CS Ph.D.
Proposal committee, 2017
Advisor: John Stasko

Julia Deeb, CS Ph.D.
Qualifier committee, 2016
Advisor: Eric Gilbert

Michaelanne Dye, HCC Ph.D.
Qualifier committee, 2016
Advisor: Amy Bruckman

Aman Parnami, HCC Ph.D.
Dissertation committee, 2016
Advisors: Betsy DiSalvo and Gregory Abowd

Catherine Grevet, CS Ph.D.
Dissertation committee, 2015
Advisor: Eric Gilbert

Chaya Hiruncharoenvate, CS Ph.D.
Proposal committee, 2015
Advisor: Eric Gilbert

Clint Zeagler, HCC Ph.D.
Proposal committee, 2015
Advisor: Thad Starner

Alex Godwin, CS Ph.D.
Qualifier committee, 2015
Advisor: John Stasko

Jeff Wilson, CS Ph.D.
Proposal committee, 2014
Advisor: Bruce Walker

Ramik Sadana, CS Ph.D.
Qualifier committee, 2014
Advisor: John Stasko

Cheng Zhang, CS Ph.D.
Qualifier committee, 2014
Advisor: Gregory Abowd

Aman Parnami, CS Ph.D.
Qualifier committee, 2014
Advisor: Gregory Abowd

Maia Jacobs, HCC Ph.D.
Qualifier committee, 2014
Advisor: Beth Mynatt

Chaya Hiruncharoenvate, CS Ph.D.
Qualifier committee, 2014
Advisor: Eric Gilbert

Gheric Spenger, HCC Ph.D.
Qualifier committee, 2013
Advisor: Blair MacIntyre

Hafez Rouzati CS Ph.D.
Qualifier committee, 2013
Advisor: Blair MacIntyre

Edison Thomaz, CS Ph.D.
Qualifier committee, 2012
Advisor: Gregory Abowd

Maribeth Gandy, CS Ph.D.
Thesis proposal committee, 2011
Advisor: Blair MacIntyre

Tae-Jung Yun, HCC Ph.D.
Thesis proposal committee, 2011.
Advisor: Gregory Abowd

Michael Hewner, HCC Ph.D.
Thesis proposal committee, 2010.
Advisor: Mark Guzdial.

Catherine Grevet, CS Ph.D.
Qualifier committee, 2010.
Advisor: Elizabeth Mynatt.

Jeremy Brudvik, HCC Ph.D.
Qualifier committee, 2010.
Advisor: Gregory Abowd.

Andrew Miller, HCC Ph.D.
Qualifier committee, 2010.
Advisor: Elizabeth Mynatt

Matt Bonner, HCC Ph.D.
Qualifier committee, 2010.
Advisor: Elizabeth Mynatt.

Tae-Jung Yun, HCC Ph.D.
Qualifier committee, 2010.
Advisor: Gregory Abowd.

Yevgeniy (Eugene) Medynskiy, HCC Ph.D.
Thesis proposal committee, 2010.
Advisor: Beth Mynatt.

Nirmal Patel, CS Ph.D.
Qualifier committee, 2009.
Advisor: Thad Starner.

Benjamin Davison, HCC Ph.D.
Qualifier committee, 2009.
Advisor: Bruce Walker.

Marshini Chetty, HCC Ph.D.
Thesis proposal committee, 2009.
Advisor: Beki Grinter.

Jeremy Goecks, CS Ph.D.
Thesis: "Understanding the Social Navigation User Experience." May, 2009.
Advisor: Elizabeth Mynatt.

Xiang Song, CS Ph.D.
Thesis: "Seamless Mobility in Ubiquitous Computing Environments." June, 2008.
Advisor: Kishore Ramachandran.

Amy Voids, CS Ph.D.
Thesis: "Exploring a Technological Hermeneutic: Understanding the Interpretation of Computer-Mediated Messaging Systems." March, 2008.
Advisor: Elizabeth Mynatt.

Steve Voids, CS Ph.D.
Thesis: "Exploring User Interface Challenges in Supporting Activity-Based Knowledge Work Practices." March, 2008.
Advisor: Elizabeth Mynatt.

James Eagan, CS Ph.D.
Thesis: "Supporting Extensively Customizable Information Awareness Applications." July, 2008.
Advisor: John Stasko.

Shwetak Patel, CS Ph.D.
Thesis: "Supporting Location and Proximity-based Studies in Natural Settings." June, 2008.
Advisor: Gregory Abowd.

Giovanni Iachello, CS Ph.D.
Thesis: "Design by Proportionality." March, 2006.
Gregory Abowd.

Elaine May Huang, CS Ph.D.
Thesis: "The Design and Analysis of Large Display Groupware Applications." January, 2006.
Advisor: Elizabeth Mynatt.

Susan Wyche, HCC Ph.D.
Qualifier committee, 2005.
Advisor: Rebecca Grinter.

Carlos Jenson, CS Ph.D.
Thesis: "Designing for Privacy in Interactive Systems." November, 2005.
Advisor: Colin Potts.

Juwan Ahn, CS Ph.D.
Qualifier committee, 2005.
Advisor: Jeff Pierce.

Maribeth Gandy, CS Ph.D.
Qualifier committee, 2005.
Advisor: Blair MacIntyre.

External Member of Ph.D. Examining Committee

Anthony Tang, CS Ph.D., University of British Columbia, Canada.
Thesis: "Understanding and Supporting Transitions with Large Display Applications." 2009.
Advisor: Dr. Sidney Fels.

Jonathan Bunde-Pedersen, CS Ph.D., Aarhus University, Denmark.
Thesis: "Distributed Interaction for Activity-Based Computing." 2008.
Advisor: Dr. Jakob Bardram.

Martin Mogensen, CS Ph.D., Aarhus University, Denmark
Thesis: "Infrastructure Support for Collaborative Pervasive Computing Systems," 2008.
Advisor: Dr. Jakob Bardram.

Malcolm Hall, CS Ph.D., University of Glasgow.
Thesis: "Contextual Mobile Adaptation," 2008.
Advisor: Dr. Matthew Chalmers.

E. Consulting and Advisory Appointments

Consultant, Interdigital, Inc. 2015-2019.

External Program View Board, Virginia Tech, Center for Human-Computer Interaction. 2017.

Academic Program Review Board, University of California, Irvine, Department of Informatics. 2012.

Microsoft Trustworthy Computing Academic Advisory Board, 2008-2014. Advised Microsoft executives and managers on issues related to security and privacy across their product lines, based on access to internal plans and key staff.

F. Research Project Reviewer

Reviewer, 21st Century Research and Technology Fund (State of Indiana advanced technology seed grant program), 2006.

Reviewer, Research Grants Council of Hong Kong, 2006.

External Reviewer, Equator Project, UK Engineering and Physical Sciences Research Council

Reviewer, University of California MICRO (Microelectronics Innovation and Computer Research Opportunities) Faculty Grant Program, 2003.

Reviewer, Canadian National Sciences and Engineering Research Council (NSERC), Discovery Grant program, 2002.

Reviewer, National Science Foundation ITR Panel, for grants over \$500,000, 2000.

G. Civic Activities

Member, Board of Trustees, Georgia Tech Alumni Association. 2014-2017.

Legislative Study Group. Member of expert panel advising the State Legislature on the digital economy in Georgia. 2013. Effort contributed to Georgia House Bill HB 958, which provides state income tax credits to Georgia video game production companies, signed by Governor Deal April 14, 2014.

H. Other Service

Advisory committee to determine target acceptance rates, ACM Conference on Computer Supported Cooperative Work (CSCW). (Pamela Hinds, Chair; Sue Fussell, Cliff Lampe, Niki Kittur, Gloria Mark).

Freshman Partner program, 2006-2007. Served as a faculty mentor to 20 Freshman students in the Howell honor dormitory.

Served on the PARC Computer Science Lab Recruiting Committee, 1997-2000.

A. Honors and Awards

ASSETS 2017 Paper Impact Award, presented for the 1994 paper “Providing Access to Graphical Interfaces—Not Graphical Screens.” (The ASSETS Paper Impact Award is given every other year for a paper published at least 10 years prior, and which has “had significant and sustained impact in the

Outstanding Senior Faculty Research Award, College of Computing, 2015.

Elected to the CHI Academy, January 2014. Association for Computing Machinery, SIGCHI.

Invited Participant, Steelcase *100 Dreams, 100 Minds, 100 Years Project*. Curated website in celebration of Steelcase’s 100th anniversary. 2012.

Best Paper Nominee: “Across Boundaries of Influence and Accountability: The Multiple Scales of Public Sector Information Systems.” Christopher A. Le Dantec and W. Keith Edwards. *Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems (CHI)*, 2010. Atlanta, Georgia, April

Distinguished Scientist, Association for Computing Machinery; awarded 2009.

Mentor of First Place team, 2009 Imagine Cup (worldwide Microsoft-sponsored competition to develop socially impactful technologies; 59,000 students entered from 142 countries).

Senior Member, Association for Computing Machinery; awarded 2008.

Best Paper Award: “Designs on Dignity: Perceptions of Technology Among the Homeless” Christopher Le Dantec and W. Keith Edwards. *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI 2008)*. Florence, Italy. April 5-10, 2008.

Raytheon Faculty Fellowship, 2008.

Best Paper Nominee: “Listening In: Practices Surrounding iTunes Music Sharing,” Amy Volda, Rebecca E. Grinter, Nicolas Ducheneaut, W. Keith Edwards, and Mark W. Newman. *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI’05)*. Portland, OR. April 2-7, 2005.

PARC Outstanding Performance Award, for the Speakeasy team, 2004.

PARC Golden Acorn Award for Best Patent in Year 2003. “Extending Application Behavior Through Active Properties Attached to a Document in a Document Management System, US Patent #6,562,076.

Red Bank High School Hall of Fame Inductee, 2003.

PARC Excellence in Science Award, for the Speakeasy project, 2002.

PARC Golden Acorn Award for Best Patent in Year 2002. “Property Based Mechanisms for Flexibly Supporting Front-End and Back-End Components Having Different Communication Protocols,” US

Xerox Corporate Research Achievement Award, for contributions to the practice in Jini development,

Xerox Corporate Research Achievement Award, for work on the Placeless Documents project, 1999.

Xerox Corporate Research Achievement Award, for work on the Presto Document Management

B. Distinguished Lectures

Distinguished Lecture. "Interaction and Infrastructure: Taking a Human-Centered View on Networking." University of Michigan, Department of Electrical Engineering and Computer Science, Division of Computer Science and Engineering. November 12, 2007.

Georgia Tech Graphics, Visualization and Usability Center Distinguished Alumni Invited Talk. Speakeasy: An Infrastructure for Recombinant Computing. Dr. Elizabeth Mynatt, host. Atlanta, GA. September 26, 2002.

C. Invited Talks

Invited Talk, Cisco/Intel Home Services Research Summit. "Bridging the Semantic Divide: Striking the Right Balance Between Automated and Managed Configuration." Cisco Corporation, San Jose, CA, November 16-17, 2010.

Invited Talk, CCC/CRA Interactive Systems Architecture Workshop. "A Slightly Contrarian Viewpoint..." Jackson Hole, WY. August 11-13, 2010.

Invited Talk, Intel Research Santa Clara, "Interaction Challenges in a World of Device Abundance." Mobile Connected Continuum Workshop, July 13, 2010.

Invited Talk, Intel Research Santa Clara. "Toward Human-Centered Networking." July 12, 2010.

Invited Talk, Intel Research Seattle. "Human-Centered Networking Research at Georgia Tech." August

Invited Talk, University of Nottingham, UK. "A Brief Overview of Research in Usable Security," Bridge the Gaps seminar on interdisciplinary research. July 3, 2007.

Invited Talk, Microsoft Research Cambridge, UK. "Human-Centered Home Networking Research at Georgia Tech." June 19, 2007.

Invited Talk, University of Kentucky. "Human-Centered Home Networking Research at Georgia Tech." May 17, 2007.

Invited Talk, Cisco Research Lecture Series. "Human-Centered Home Networking Research at Georgia Tech." May 2, 2007.

Invited Talk, Cisco Security Shoptalk. "Human-Centered Networking Research at Georgia Tech." Melinda Shore, host. August 11, 2006.

Invited Talk, Linksys Corporation. "Human-Centered Networking Research at Georgia Tech." Stuart Hamilton, host. Sunnyvale, CA. July 24, 2006.

Invited inaugural talk, Laboratory for Ubiquitous Computing and Interaction, University of California at Irvine. Speakeasy: A Software Platform for Recombinant Computing. Dr. Paul Dourish, host. Irvine, CA. November 10, 2003.

Invited Talk, Samsung Corporation. Support for Evolution in Ad Hoc Digital Networks. Young Choi, host. Suwon, South Korea. November 6, 2003.

Invited presentation to Sun Labs East. Speakeasy: Patterns for Recombinant Computing. . Dr. Jim Waldo, host. Burlington, MA, August 22, 2002.

Invited presentation for the Stanford Knowledge Systems Laboratory, Knowledge on the Web Seminar. An Overview of the Jini Distributed Computing Infrastructure. Dr. Richard Fikes, host. Palo Alto, CA, October 13, 1999.

Invited presentation to open Tandem's SiliconValley.Library facility. An Overview of Jini. Patty Turner, host. October 8, 1999.

Invited presentation for the Stanford Human-Computer Interaction Seminar. Flatland User Interfaces. Dr. Terry Winograd, host. Palo Alto, CA, April 30, 1999.

Invited presentation for the UC Irvine Bay Area Roundtable. Placeless Documents: A Document Management System that Works the Way You Do. Dr. Mark Ackerman, host. Palo Alto, CA, April 9, 1999.

D. Invited Panel Presentations

Panelist, HCI Ways of Knowing. HCI Consortium (HCIC). (Other panelists: Wendy Kellogg, IBM, John Thomas, IBM). Pacific Grove, CA, June 18, 2011.

Panelist, How Should We Evaluate Systems Contributions to Ubicomp? First International Conference on Mobile Systems, Applications, and Services (MobiSys'03). (Other panelists: Armando Fox, Stanford University, Moderator; Anthony LaMarca, Intel Research; Brian Noble, University of Michigan; Yi-Min Wang, Microsoft Research). San Francisco, CA, May 5-8, 2003.

Panelist, Technology—The NextWave. Sixth Annual Stanford University Graduate School of Business Conference on Entrepreneurship. (Other panelists: Ann Winblad, Founding Partner, Hummer-Winblad Ventures; Richard Brandt, Editor-in-Chief, Upside Magazine; Scott Mize, CEO, Angstrovision.) February 23, 2002.

Participant, SRI Roundtable Workshop on Pervasive Computing. SRI Consulting, Business Intelligence. Menlo Park, CA, February, 21, 2002.

E. Invited Conference Session Chairmanships

Session Chair, ACM Conference on Human Factors in Computing Systems (CHI), Vancouver, BC, 2011.

Session Chair, Eleventh ACM Symposium on User Interface Software and Technology (UIST), San Francisco, CA, 1998.

Session Chair, ACM Conference on Computer-Supported Cooperative Work (CSCW), Seattle, WA, 1998.

Session Chair, Twelfth ACM Symposium on User Interface Software and Technology (UIST), Ashville, NC, 1999.

Session Chair, ACM Conference on Computer-Supported Cooperative Work (CSCW), Philadelphia, PA, 1999.

Session Chair, Thirteenth ACM Symposium on User Interface Software and Technology (UIST), San Diego, CA, 2000.

Session Chair, Fourteenth ACM Symposium on User Interface Software and Technology (UIST), Orlando, FL, 2001.

Session Chair, Fifteenth ACM Symposium on User Interface Software and Technology (UIST), Paris, France, 2002.

Session Chair, ACM Conference on Computer-Supported Cooperative Work (CSCW), New Orleans, LA, 2002.

Session Chair, ACM Conference on Human Factors in Computing Systems (CHI), Fort Lauderdale, FL, 2002.

Session Chair, Fifth International Conference on Ubiquitous Computing (UbiComp), Seattle, WA, 2003.

F. Patents

US and International Patents Granted

- [P.1] United States Patent #6,240,429. *Using Attached Properties to Provide Document Services*. James D. Thornton, J. Paul Dourish, W. Keith Edwards, Anthony G. LaMarca, John O. Lamping, Karin Petersen, Michael P. Salisbury, and Douglas B. Terry. Filed August 31, 1998, granted May 29, 2001.
- [P.2] United States Patent #6,253,217. *Active Properties for Dynamic Document Management System Configuration*. J. Paul Dourish, W. Keith Edwards, Anthony G. LaMarca, John O. Lamping, Karin Petersen, Michael P. Salisbury, Douglas B. Terry, and James D. Thornton. Filed August 31, 1998, granted June 26, 2001.
Also granted in the European Union as #EP986,011 and in Japan as #JP2,000,090,077.
- [P.3] United States Patent #6,266,670. *User Level Accessing of Low-Level Computer System Operations*. Anthony G. LaMarca, J. Paul Dourish, W. Keith Edwards, John O. Lamping, Karin Petersen, Michael P. Salisbury, Douglas B. Terry, and James D. Thornton. Filed August 31, 1998, granted July 24, 2001.
Also granted in the European Union as #EP986,012.
- [P.4] United States Patent #6,266,682. *Tagging Related Files in a Document Management System*. Anthony G. LaMarca, J. Paul Dourish, W. Keith Edwards, and Michael P. Salisbury. Filed August 31, 1998, granted July 24, 2001.
- [P.5] United States Patent #6,269,380. *Property-Based Mechanism for Flexibly Supporting Front-End and Back-End Components Having Different Communication Protocols*. Douglas B. Terry, James P. Dourish, W. Keith Edwards, Anthony G. LaMarca, John O. Lamping, Karin Petersen, Michael P. Salisbury, and James D. Thornton. Filed August 31, 1998,
- [P.6] United States Patent #6,308,179. *User-Level Controlled Mechanism Inter-Positioned in a Read/Write Path of a Property-Based Document Management System*. Karin Petersen, James P. Dourish, W. Keith Edwards, Anthony G. LaMarca, John O. Lamping, Michael P. Salisbury, Douglas B. Terry, James D. Thornton. Filed August 31, 1998, granted October 23, 2001.
- [P.7] United States Patent #6,324,551. *Self-Contained Document Management Based on Properties*. John O. Lamping, James P. Dourish, W. Keith Edwards, Anthony G. LaMarca, Karin Petersen, Michael P. Salisbury, Douglas B. Terry, James D. Thornton. Filed August 31, 1998, granted November 27, 2001.
- [P.8] United States Patent #6,330,573. *Maintaining Document Identity Across Hierarchy and Non-hierarchy File Systems*. Michael P. Salisbury, James P. Dourish, W. Keith Edwards, Anthony G. LaMarca. Filed August 31, 1998, granted December 11, 2001.
- [P.9] United States Patent #6,370,553. *Atomic and Molecular Documents*. W. Keith Edwards, James P. Dourish, Anthony G. LaMarca, John O. Lamping, Karin Petersen, Michael P. Salisbury, Douglas B. Terry, James D. Thornton. Filed August 31, 1998, granted April 9,
- [P.10] United States Patent #6,397,231. *Virtual Documents Generated Via Combined Documents or Portions of Documents Retrieved from Data Repositories*. Michael P. Salisbury, James P. Dourish, W. Keith Edwards, Anthony G. LaMarca, John O. Lamping, Karin Petersen, Douglas B. Terry, James D. Thornton. Filed August 31, 1998, granted May 28, 2002.

- [P.11] United States Patent #6,459,442. *System for Applying Application Behaviors to Freeform Data*. W. Keith Edwards, Elizabeth D. Mynatt, Anthony G. LaMarca, Takeo Igarashi. Filed December 1, 1999, granted October 1, 2002.
- [P.12] United States Patent #6,535,884. *System, Method, and Article of Manufacture for Providing an Attribute System with Primitive Support of Dynamic and Evolvable Roles in Support of Fluid and Integrative Application Development*. James D. Thornton, Paul M. Aoki, Ian E. Smith, W. Keith Edwards, Thomas K. Rodriguez, Karin Petersen. Filed July 11, 1998, granted August 13, 2003.
- [P.13] United States Patent #6,562,076. *Extending Application Behavior Through Active Properties Attached to a Document in a Document Management System*. W. Keith Edwards, James P. Dourish, Anthony G. LaMarca, John O. Lamping, Karin Petersen, Michael F. Salisbury, Douglas B. Terry, James D. Thornton. Filed August 31, 1998, granted May 13, 2003.
- [P.14] United States Patent #6,582,474. *Tagging Related Files in a Document Management System*. Anthony G. LaMarca, J. Paul Dourish, W. Keith Edwards, and Michael P. Salisbury. (Divisional of United States Patent #6,266,682.) Filed August 31, 1998, granted August 13, 2003.
- [P.15] United States Patent #6,608,549. *Virtual Interface for Configuring an Audio Augmentation System*. Elizabeth D. Mynatt, Maribeth Back, Roy Want, Jason Ellis, W. Keith Edwards, Maureen C. Stone. Filed July 31, 1998, granted August 19, 2003.
- [P.16] United States Patent #6,611,196. *System and Method for Providing Audio Augmentation of a Physical Environment*. Elizabeth D. Mynatt, Maribeth Back, Roy Want, Jason Ellis, W. Keith Edwards. Filed March 20, 1998, granted August 26, 2003.
- [P.17] United States Patent #6,647,391. *System, Method and Article of Manufacture for Fast Mapping from a Propertied Document Management System to a Relational Database*. Ian E. Smith, Paul M. Aoki, W. Keith Edwards, John O. Lamping, Thomas K. Rodriguez, James D. Thornton. Filed July 11, 2000, granted November 11, 2003.
- [P.18] United States Patent #6,810,363. *Method, Apparatus, and Program Products for Analyzing Context in a Networked Computing Environment*. Mark W. Newman, W. Keith Edwards, Jana Z. Sedivy. Filed December 12, 2002, granted October 26, 2004.
- [P.19] United State Patent #7,086,000. *Tagging Related Files in a Document Management System*. Anthony G. LaMarca, James P. Dourish, W. Keith Edwards, Michael P. Salisbury. Filed May 14, 2003, granted August 1, 2006.
- [P.20] United States Patent #7,133,872. *Method and System for Unifying Component Metadata*. W. Keith Edwards, Mark W. Newman, Trevor Smith, Jana Z. Sedivy, Karen Marcelo, Shahram Izadi, and Jason Hong. Filed November 7, 2002; granted November 7, 2006.
- [P.21] United States Patent #7,155,662. *Representing an Entity as a Document Using a Data Source Having Active Properties*. W. Keith Edwards and Anthony G. LaMarca. Filed June 30, 2000; granted December 26, 2006.
- [P.22] United States Patent #7,296,042. *System and Method for Enabling Communication Among Arbitrary Components*. W. Keith Edwards, Mark W. Newman, and Jana Z. Sedivy. Filed April 20, 2001; granted November 13, 2007.
- [P.23] United States Patent #7,363,508. *System and Method for Dynamically Enabling Components to Implement Data Transfer Security Mechanisms*. W. Keith Edwards, Mark W. Newman, Jana Z. Sedivy, Diana K. Smetters, Trevor Smith. Filed May 21, 2003; granted August 13, 2008.

- [P.24] United States Patent #7,367,029. *Method and System for Handling Data*. W. Keith Edwards, Mark W. Newman, Jana Z. Sedivy, Karen Marcelo, Shahram Izadi, Jason Hong. Filed August 1, 2002; granted April 29, 2008.
- [P.25] United States Patent #7,376,834. *System and Method for Securely Controlling Communications*. W. Keith Edwards, Mark W. Newman, Jana Z. Sedivy, Trevor F. Smith, Diana Smeters, Dirk Balfanz, Paul Stewart. Filed July 18, 2003; granted May 20, 2008.
- [P.26] United States Patent #7,398,534. *System and Method for Assessing Component Capabilities*. W. Keith Edwards, Mark W. Newman, Jana Z. Sedivy, Trevor Smith, Shahram Izadi. Filed December 18, 2002; granted July 8, 2008.
- [P.27] United States Patent #7,421,494. *Method and Apparatus for Facilitating Data Transfers Between Arbitrary Components*. W. Keith Edwards, Mark W. Newman, Jana Z. Sedivy. (Continuation in Part of *System and Method for Enabling Arbitrary Components to Transfer Data Between Each Other*.) Filed December 9, 2003; granted September 2, 2008.
- [P.28] United States Patent #7,424,545. *Methods, Apparatus, and Program Products for Providing Supplemental Content to a Recorded Experiential Data Stream*. Nicolas B. Ducheneaut, W. Keith Edwards, Eric S. Nickell, James D. Thornton, Daniel G. Bobrow. Filed November 23, 2004; granted September 9, 2008.
Also granted in the European Union as #EP2,405,653.
- [P.29] United States Patent #7,433,915. *System and Method for Controlling Communication*. W. Keith Edwards, Mark W. Newman, Trevor Smith, Jana Z. Sedivy, Karen Marcelo, Shahram Izadi, and Jason Hong. Filed August 1, 2002; granted October 7, 2008.
- [P.30] United States Patent #7,461,172. *Methods, Apparatus, and Program Products for Configuring Components in Networked Computing Environments*. Mark W. Newman, W. Keith Edwards, Jason Hong, Shahram Izadi, Karen J. Marcelo, Jana Z. Sedivy, Trevor Smith. Filed December 12, 2002; granted December 2, 2008.
- [P.31] United States Patent #7,526,482. *System and Method for Enabling Components on Arbitrary Networks to Communicate*. W. Keith Edwards, Jason I. Hong, Shahram Izadi, Karen Marcelo, Mark W. Newman, Jana Z. Sedivy, Trevor F. Smith. Filed August 1, 2002;
- [P.32] United States Patent #7,552,265. *System and Method for Providing Context Information*. Mark W. Newman, W. Keith Edwards, Jana Z. Sedivy. Filed January 23, 2002; granted
- [P.33] United States Patent #7,620,737. *Methods, Apparatus, and Program Products for Abstract Applications/Components in a Ubiquitous Computing Environment*. Mark W. Newman, W. Keith Edwards, Jana Z. Sedivy, Trevor Smith, Jason Hong, Shahram Izadi, Karen J. Marcelo. Filed December 12, 2002; granted November 17, 2009.
- [P.34] United States Patent #7,624,143. *Methods, Apparatus, and Program Products for Utilizing Contextual Property Metadata in Networked Computing Environments*. Mark W. Newman, W. Keith Edwards, Jana Z. Sedivy. Filed December 12, 2002; granted November 24, 2009.
- [P.35] United States Patent #7,668,903. *Method and Apparatus for Dynamically Delivering Service Profiles to Clients*. W. Keith Edwards, Mark W. Newman, Trevor F. Smith, Jana Z. Sedivy, Karen Marcelo, Shahram Izadi, Jason I. Hong. Filed July 7, 2003; granted
- [P.36] United States Patent #7,814,518. *Method, Apparatus, and Program Products for Presenting Replacement Content Instead of a Portion of a Recorded Content*. Nicolas B. Ducheneaut, W. Keith Edwards, Eric S. Nickell, and James D. Thornton. Filed November 23, 2004;

- [P.37] United States Patent #7,818,770. *Method, Apparatus, and Program Products to Support a Shared Viewing Experience from Remote Locations*. Nicolas B. Ducheneaut, W. Keith Edwards, Robert J. More, Diana K. Smetters, James D. Thornton, and Daniel G. Bobrow. Filed November 23, 2004; granted October 19, 2010.
- [P.38] United States Patent #7,870,589. *Method for Providing Commentary Audio and Additional or Replacement Video Content*. Nicolas B. Ducheneaut, W. Keith Edwards, Eric S. Nickell, James D. Thornton, Daniel G. Bobrow. Filed November 23, 2004; granted January 11, 2011.
- [P.39] United States Patent #7,873,983. *Method and Apparatus for Controlling an Experiential Data Stream in a Social Space*. Nicolas B. Ducheneaut, W. Keith Edwards, Robert J. Moore, Eric S. Nickell, Diana K. Smetters, James D. Thornton, and Daniel G. Bobrow. Filed November 23, 2004; granted January 18, 2011.
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- [P.41] United States Patent #7,975,002. *System and Method for Accumulating a Historical Context of Interactions Between Components*. Mark W. Newman, W. Keith Edwards, Jana Z. Sedivy. Filed April 4, 2007; granted July 5, 2011.
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- [P.43] United States Patent #8,224,893. *System and Method for Prioritizing Components*. Mark W. Newman, W. Keith Edwards, Jana Z. Sedivy. Filed July 1, 2011; granted July 17, 2012.
- [P.44] United States Patent #10,268,661. *System and Methods to Facilitate Active Reading*. Craig S. Tashman and W. Keith Edwards. Filed March 16, 2011; granted April 23, 2019.
- [P.45] United States Patent #10,424,120. *System and Method for Using Augmented Reality to Visualize Network Service Quality*. Filed November 10, 2016; granted September 24, 2019.
- [P.46] United States Patent #10,692,296. *System and Method for Using Augmented Reality to Visualize Network Service Quality*. Continuation-in-part from 10,424,120 (above). Filed September 10, 2019; granted June 23, 2020.

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System and Method for Enabling Arbitrary Components to Transfer Data Between Each Other. W. Keith Edwards, Mark W. Newman, Jana Z. Sedivy.

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System and Method for Crowdsourcing Automated Smart Home Scenes. W. Keith Edwards.

System and Method for Network-Level Smart Home Security. W. Keith Edwards.

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G. Editorial and Reviewer Work for Technical Journals and Publishers

Reviewer, ACM Conference on Human Factors in Computing Systems (CHI), alt.chi track. San Jose, San Francisco, May 7-12, 2016.

Reviewer, ACM International Joint Conference on Pervasive and Ubiquitous Computing (Ubicomp), Osaka, Japan. September 7-11, 2015.

Reviewer, ACM International Joint Conference on Pervasive and Ubiquitous Computing (Ubicomp), Seattle, WA. September 13-17, 2014.

Reviewer, 16th International Conference on Human-Computer Interaction with Mobile Devices and Services (MobileHCI), Toronto, CA. September 23-26, 2014.

Reviewer, ACM Conference on Human Factors in Computing Systems (CHI), Toronto, CA. April 29-May 1, 2014.

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Editorial Board, Information Technologies and International Development Journal (ITID). 2010-present.

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Reviewer, ACM Conference on Human Factors in Computing Systems (CHI), Vancouver, BC. May 7-12, 2010.

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Conference Paper Reviewer, Nineteenth ACM Symposium on User Interface Software and Technology (UIST), Montreux, Switzerland. October 15-18, 2006.

Conference Paper Reviewer, Graphics Interface (GI). London, Ontario, Canada. May 17-19, 2004.

Journal Referee, International Journal of Human-Computer Studies, Elsevier, 2003.

Conference Paper Reviewer, Sixteenth ACM Symposium on User Interface Software and Technology (UIST), Vancouver, Canada, November 2-5, 2003.

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Journal Reviewer, *Computing Systems* (The Journal of the USENIX Association), University of California Press, 1993.

H. Testimony Before Legislative Committees and Other Governmental Advisement

Georgia Digital Media and Entertainment Coalition. Member of expert panel formed by the Georgia Chamber of Commerce to make policy recommendations to the State Legislature on topics related to digital media. 2013. This Chamber of Commerce effort led to the formation of the Legislative Study Group in the same year (see next item).

Legislative Study Group. Member of expert panel advising the State Legislature on the digital economy in Georgia. 2013. Effort contributed to Georgia House Bill HB 958, which provides state income tax credits to Georgia video game production companies, signed by Governor Deal April 14, 2014.

Co-organizer, Georgia Digital Day. Event highlighting the importance of the digital economy to state legislators and their staffs, held in the rotunda of the Georgia Capitol. March 21, 2013.

Contributor, *Toward Better Usability, Security, and Privacy of Information Technology: Report of a Workshop*. Steering Committee on the Usability, Security, and Privacy of Computer Systems. National Research Council, Computer Science and Telecommunications Board (CSTB). The National Academies of Science. ISBN 0-309-16090-1. 2010.

Whitepaper to National Science Foundation: "Computing at the Margins," Rebecca E. Grinter, Michael L. Best, W. Keith Edwards, and Elizabeth D. Mynatt. Report summarizing results from Second Computing at the Margins workshop, February 17-19, 2010.

Participant, National Academy of Science, Computer Science and Telecommunications Board workshop on Usable Security and Privacy. July 21-22, 2009. Invited participant in workshop to identify new areas of research in usable security, and influence the agenda of NSF and NIST.

Whitepaper to National Coordination Office for Networking and Information Technology Research and Development (NITRD), Federal Plan for Cyber Security and Information Assurance Research and Development: "Secure Systems Must be Usable," Glenn Fink, Jean Scholtz, Deborah Frincke, David McColgin, Michelle Gregory (Pacific Northwest National Laboratory), Denis Gracanin, Chris North (Virginia Tech), W. Keith Edwards (Georgia Tech), John Karat, Clare-Marie Karat, and Carolyn Brodie (IBM T.J. Watson Research Center). November 30, 2006. This whitepaper provides input to the federal government to shape the roadmap for future funding of cyber security R&D efforts in the United States.

I. Selected Media Profiles of Research (note: not up-to-date)

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Online news article: Digital Music Sharing Stirs Social Tensions. Will Knight, NewScientist.com News Service. May 16, 2005.

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