CHI 2014
One of a CHInd
Conference Program
Toronto, Canada | April 26 – May 1, 2014
acm
Association for Computing Machinery
SIGCHI
special interest group computer human interaction
The 32nd Annual ACM Conference on Human Factors in Computing Systems

CHI 2014
One of a CHInd

Schedule of Events

MONDAY

7:30 – 8:30	Video Previews
9:00 – 10:20	Opening Keynote – Margaret Atwood
10:20 – 11:00	Coffee Break
11:00 – 12:20	Technical Program
12:20 – 14:00	Lunch Break (on your own)
14:00 – 15:20	Technical Program
15:20 – 16:00	Coffee Break
16:00 – 17:20	Technical Program
17:30 – 19:30	Exhibit Hall Grand Opening Reception

TUESDAY

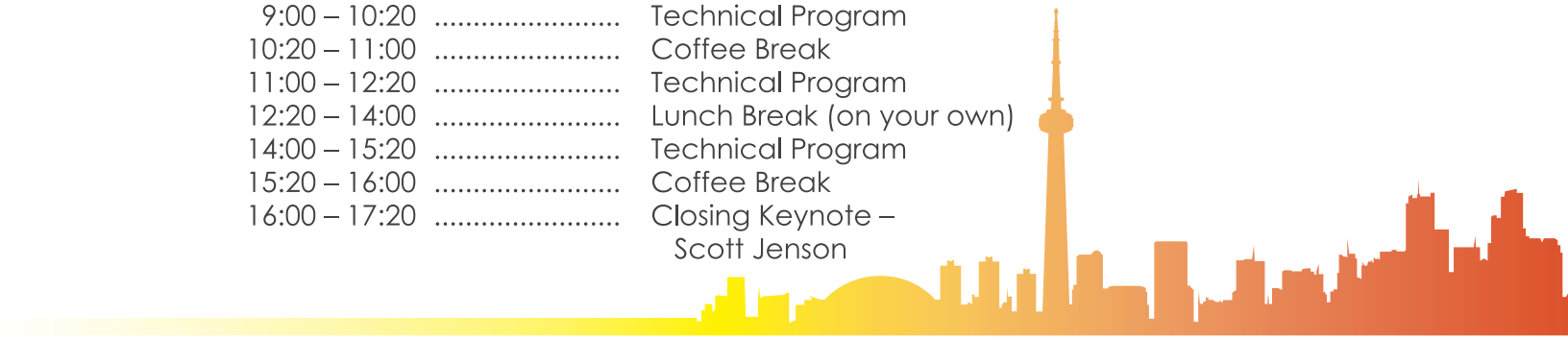
7:00 – 8:20	Video Previews
8:30 – 8:50	Provoke! Wisdom! Impact! – Nathan Eagle
9:00 – 10:20	Technical Program
10:20 – 11:00	Coffee Break
11:00 – 12:20	Technical Program
12:20 – 14:00	Lunch Break (on your own)
14:00 – 15:20	Technical Program
15:20 – 16:00	Coffee Break
16:00 – 17:20	Technical Program
17:30 – 19:30	Job Fair | A Taste of CHI Public Night

WEDNESDAY

7:00 – 8:20	Video Previews
8:30 – 8:50	Provoke! Wisdom! Impact! – Scooter Morris
9:00 – 10:20	Technical Program
10:20 – 11:00	Coffee Break
11:00 – 12:20	Technical Program
12:20 – 14:00	Lunch Break (on your own)
14:00 – 15:20	Technical Program
15:20 – 16:00	Coffee Break
16:00 – 17:20	Technical Program
18:00 – 20:00	Hospitality Event

THURSDAY

7:00 – 8:20	Video Previews
8:30 – 8:50	Provoke! Wisdom! Impact! – Elizabeth F. Churchill
9:00 – 10:20	Technical Program
10:20 – 11:00	Coffee Break
11:00 – 12:20	Technical Program
12:20 – 14:00	Lunch Break (on your own)
14:00 – 15:20	Technical Program
15:20 – 16:00	Coffee Break
16:00 – 17:20	Closing Keynote – Scott Jenson



Welcome to CHI 2014

CHI is more than a conference, it is an international community of researchers and practitioners who want to make a difference. Everything we do is focused on uncovering, critiquing and celebrating radically new ways for people and technology to evolve together. People in their everyday contexts, in diverse regions of the world, from very different backgrounds, with alternative outlooks on life drive this innovation. As you take part in the conference sessions we really hope you will experience how powerful this people-centred approach to technological transformation can be.

CHI as a conference is now in its 32nd year and has grown to become the premier international forum on human-computer interaction, gathering us all to share innovative interactive insights that shape people's lives. CHI draws together a multidisciplinary community from around the globe. Our great strength is our ability to bring together students and experts, researchers and practitioners, scientists, designers and engineers, drawing from their rich perspectives to create new visions of human-computer interaction.

This year's conference theme is One of a CHInd. We chose this nearly two years ago as we began planning for this event. It has helped us focus our efforts and we hope you will use it to keep your eyes open to the bigger picture amongst all the excitement, range of presentations and activities at the conference. CHI 2014 is One of CHInd because it is a celebration of the conference's one of a kind diversity; from the broad range of backgrounds of its attendees, to the diverse spectrum of communities and fields that the conference and its research have an impact on. CHI 2014 will take place at the Metro Toronto Convention Centre in Toronto, Canada, a city itself known for its one of a kind cultural diversity. But, CHI 2014 is more than a celebration of the diversity of our community and conference setting. We hope that this year's event, more than anything, reminds you that the "people", "participants", "users" or "humans" that you hear described throughout this week are actually uniquely wonderful individuals full of hopes, concerns, joys and frustrations. CHI is here to serve all of these one of a kinds.

CHI 2014 features two outstanding keynote speakers: Booker prize winning author, Margaret Atwood; and, leading UX designer, Scott Jenson. New for CHI 2014, we have Provoke! Wisdom! Impact! plenary talks first thing each morning on Tuesday, Wednesday and Thursday. Come along, join the crowd and be energised by our speakers who will each bring in their experience of the Big Picture to inspire us. The talks will be short - twenty minutes - and then the rest of the day's programme will begin. We are also delighted to host a timely retrospective exhibition on wearable technology curated by Thad Starner and Clint Zeagler.

CHI 2014 also includes two days of focused workshops and four days of technical content, including CHI's prestigious technical program, with 15 parallel sessions of rigorously reviewed research Papers, engaging Panels, Case Studies and Special Interest Groups (SIGs), an extensive Course program and invited talks from SIGCHI's award winners: Steve Whittaker, Gillian Grampton Smith and Richard Ladner. We also host student research, design, and game competitions, provocative alt.chi presentations and last-minute SIGs for discussing current topicsInteractivity hands-on demonstrations showcase the best of interactive technology. We also highlight over 241 Work-In-Progress posters: this year we have added some features to these sessions to better help you get the most out of the exciting, early stage work on show; do go along and engage with the authors about their work. Evening events include the CHI 2014 conference reception, Sponsors and University events, local performances and the Job Fair.

We received over 3200 submissions and accepted nearly 1000 that will appear in the ACM Digital Library. To help you navigate through this immense program, there are a number of online and digital resources from the conference website to our mobile apps. You can also browse the videos, papers and extended abstracts on the CHI 2014 USB Key. But, CHI 2014 is about being in Toronto so perhaps the best way to select from and experience the event is by asking for pointers and chatting with your fellow attendees, our wonderful student volunteers, the information desk helpers or any of this year's committee. We are all here to make your experience as useful and enjoyable as possible.

We are deeply indebted to our vast number of volunteers, without whom CHI 2014 would not be possible, including over 3800 reviewers, over 180 senior members of the program committee, nearly 100 members of the CHI 2014 conference committee and, of course, the more than 180 student volunteers. We thank you all!

We are honored and excited by the opportunity to host CHI 2014 and wish you a productive and enjoyable stay in Toronto!

Matt Jones, *Swansea University, UK*
Philippe Palanque, *Université Paul Sabatier, France*
CHI 2014 General Conference Chairs

Albrecht Schmidt, *University of Stuttgart, Germany*
Tovi Grossman, *Autodesk Research, Canada*
CHI 2014 Technical Program Chairs

Conference Chairs

Matt Jones — *Swansea University, Wales, UK*
Philippe Palanque — *Université Paul Sabatier, France*

Technical Program

Technical Program Chairs
Tovi Grossman — *Autodesk Research, Canada*
Albrecht Schmidt — *University of Stuttgart , Germany*

Technical Program Chair Assistant
Michael Glueck — *Autodesk Research, Canada*

Papers and Notes
Stephen Brewster — *University of Glasgow, UK*
Andy Cockburn — *University of Canterbrury, New Zealand*

Panels
Gillian Hayes — *University of California, Irvine, USA*
Khai Truong — *University of Toronto, Canada*

Case Studies
Jonathan Arnowitz — *Google, USA*
Michael Arent — *Rivendel Consulting, USA*
Austin Henderson — *Flipside, The Netherlands*
Dirk-Jan Hoets — *SAP, USA*

Courses
Regina Bernhaupt — *RUWIDO, France*
Elizabeth Churchill — *eBay Research Labs, USA*

Interactivity
Steve Benford — *University of Nottingham, UK*
Julie Rico Williamson — *University of Glasgow, Scotland, UK*

Video Showcase
Nicolas Roussel — *Inria, France*
Jinwook Seo — *Seoul National University, South Korea*

SIGs
Henry Duh — *University Of Tasmania, Australia*
Enrico Rukzio — Ulm *University, Germany*

Doctoral Consortium
Katherine Isbister — *New York University, USA*
Manfred Tscheligi — *University of Salzburg, Austria*

Workshops
Juergen Steimle — *Max Planck Institute, Germany*
Nadir Weibel — *University of California, San Diego, USA*

Works in Progress
Shelly Farnham — *Microsoft, USA*
Shamsi Iqbal — *Microsoft, USA*
Shaun Lawson — *University of Lincoln, USA*

Student Research Competition
Celine Latulipe — *UNC Charlotte, USA*
Floyd Muller — *University in Melbourne, Australia*

Student Design Competition
Youn-Kyung Lim — *KAIST, Korea, Korea*
Thecla Schiphorst — *Simon Fraser University, Canada*

Student Game Competition
Alessandro Canossa — *Northeastern University, USA*
Seth Cooper — *University of Washington, USA*

alt.chi
Lilly Irani — *UC San Diego, USA*
Daniela Rosner — *University of Washington, USA*

TOCHI papers
Jeffrey Nichols — *IBM Research, USA*

Best of CHI Awards
Karyn Moffatt — *McGill School of Information, Canada*
Daniel Wigdor — *University of Toronto, Canada*

Spotlights

Spotlights Chairs
Ed Chi — *Google Research, USA*
Kristina Höök — *Royal Institute of Technology, Swedeen*

Games & Entertainment
Magy Seif El-Nasr — *Northeastern University, USA*
Heather Desurvire — *Behavioristics, Inc, USA*
Lennart Nacke — *University of Ontario, Canada*

HCI For Development (HCI4D)
Ban Al-Ani — *University of California - Irvine, USA*
Melissa Densmore — *Microsoft Research, USA*
Matthew Kam — *Carnegie Mellon University, USA*

Interaction Science
Paul Cairns — *University of York, UK*
Benjamin R. Cowan — *University of Birmingham, UK*
Anna L Cox — *University College London, UK*
Anthony J. Hornof — *University of Oregon, USA*
Andrew Howes — *University of Birmingham, UK*
Christian P. Janssen — *The Smith-Kettlewell Eye Research Institute USA*
Stephen J. Payne — *University of Oxford, UK*
Peter Pirolli — *Palo Alto Research Center (PARC), USA*

Making Cultures
Jeffrey Bardzell — *Indiana University, USA*
Shaowen Bardzell — *Indiana University, USA*
Carl DiSalvo — *Georgia Institute of Technology, USA*
Ann Light — *Northumbria University, UK*
Daniela Rosner — *University of Washington, USA*

Art and Interaction
David England — *John Moores University, UK*
Joceyn Spence — *University of Surrey, UK*

Operations

Student Volunteer Coordinator
Lindsay Reynolds — *Cornell University, USA*
Jon Haber — *University of Calgary, Canada*

Technology Liaison
Sara Drenner — *University of Minnesota-Twin Cities, USA*
Scooter Morris — *University of California, San Francisco, USA*

Webmaster
Liam Betsworth — *Swansea University, Wales, UK*

Social Media
- Katie Panciera — *University of Minnesota, USA*
- Max Wilson — *Nottingham University, UK*

Proceedings Chairs
- Stéphane Conversy — *ENAC, France*
- Yann Riche — *Microsoft, USA*
- Marco Winckler — *Université Paul Sabatier, France*

Infrastructure Accessibility Chair
- Jennifer Rode — *Drexel University, USA*

Digital Accessibility Chair
- Jonathan Lazar — *Towson University, USA*

Community Sourcing & Scheduling
- Paul André — *Facebook, USA*
- Anant Bhardwaj — *MIT, USA*
- Lydia Chilton — *University of Washington, USA*
- Steven Dow — *Carnegie Mellon University, USA*
- Juho Kim — *MIT, USA*
- Rob Miller — *MIT, USA*
- Haoqi Zhang — *Northwestern University, USA*

Mobile Apps
- Stephen Oney — *Carnegie Mellon University, USA*
- Eiji Hayashi — *Carnegie Mellon University, USA*
- Jason Wiese — *Carnegie Mellon University, USA*
- Célia Martinie — *Université Paul Sabatier, France*

Video Previews
- Gene Golovchinsky — *[in memory]*
- Gonzalo Ramos — *University of Toronto, Canada*
- Fanny Chevalier — *INRIA, France*

Conference Management
- Janeé Pelletier — *Conference & Logistics Consultants, USA*
- Allison Perrelli — *Conference & Logistics Consultants, USA*

Sponsors, Exhibits & Recruitment
- Carol Klyver — *Foundations of Excellence, USA*

Registration
- Yvonne Lopez — *Executive Events Inc., USA*
- Brooke Daley — *Executive Events Inc., USA*

PCS Liaison
- Max van Kleek — *University of Southampton, UK*
- Carol Klyver — *Foundations of Excellence, USA*
- Scooter Morris — *University of California, San Francisco, USA*

Women's Breakfast Event
- Allison Druin — *University of Maryland, USA*

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MONDAY

7:30 - 8:30 • Video Previews (801AB)

9:00-10:20

Opening Keynote (Exhibit Hall G)
Margaret Atwood - *Robotics in my Work and Life*

10:20 - 11:00 – Coffee Break (Level 700 Foyer)

	701A	701B	709	711	713AB	714AB	715A	716A
11:00-12:20	**Papers** Visualization and Aesthetics	**Papers** Stress		**Course** Designing Unbiased Surveys for HCI Research	**Course** Sampling & Synthesis: The Two Sides of Experience Sketching	**Papers** Social Local Mobile	**SIG** HCI in Food Product Innovation	**Panel** Design Methods for the Future that is NOW
12:20 - 14:00 – Lunch Break								
14:00-15:20	**Papers** Studying Online Communities	**Special** Social Impact Award: Richard Ladner	**Course** HTML5 Game Development 1/2	**Course** Empirical Research Methods for HCI 1/2	**Course** Introduction to HCI 1/2	**Papers** Image and Animation Authoring	**SIG** Art And Interaction: Cataloging The Digital Arts	**Panel** Designing for the Experiential Body
15:20 - 16:00 – Coffee Break (Level 700 Foyer)								
16:00-17:20	**Papers** Designing and Understanding Visualizations	**Papers** Crowdfunding and Crowd Storage	**Course** HTML5 Game Development 2/2	**Course** Empirical Research Methods for HCI 2/2	**Course** Introduction to HCI 2/2	**Papers** Novel Approaches to Navigation		**Panel** Electronic Privacy and Surveillance

17:30 - 19:30 • Conference Reception & Exhibit Grand Opening • Interactivity (Exhibit Hall E)

TUESDAY

7:00 - 8:20 • Video Previews (Exhibit Hall G) • Women's Breakfast (Exhibit Hall F)

8:30-8:50

Provoke! Wisdom! Impact! Plenary (Exhibit Hall G)
Nathan Eagle - *Big Data for Social Good*

8:50 - 9:00 – Break

	701A	701B	709	711	713AB	714AB	715A	716A
9:00-10:20	**Papers** Interactive Visualization and Visual Elements	**Papers** Understanding and Designing Games	**Course** Improving the User Interface for People with Disabilities 1/2	**Course** Multimodal Detection of Affective States 1/2	**Course** Citizen Science: An Introduction	**Papers** Personal Values and Preferences	**SIG** Current Issues in Assessing and Improving Information Usability	**Papers** Enabling Interactive Performances
10:20 - 11:00 – Coffee Break • WIP Posters Rotation 1 • Doctoral Consortium Poster Focus (Exhibit Hall E)								
11:00-12:20	**Papers** Navigating Video	**Papers** Crowds and Creativity	**Course** Improving the User Interface for People with Disabilities 2/2	**Course** Multimodal Detection of Affective States 2/2	**Course** Reflections on Design	**Papers** Interacting with the Web	**SIG** Games and Entertainment: Reaching beyond CHI	**Papers** Music, Dance, and Television
12:20 - 14:00 – Lunch Break								
14:00-15:20	**Papers** Sensemaking and Information in Use	**Special** Lifetime Research Award: Steve Whittaker	**Course** Conceptual Models: Core to Good Design 1/2	**Course** Online A/B Tests & Experiments 1/2	**Course** Mobile HCI 1/2	**Papers** Presentation Technologies	**SIG** Interaction Science: Overcoming Challenges	**Panel** Opportunities and Risks of Discovering Personality Traits from Social Media
15:20 - 16:00 – Coffee Break • WIP Posters Rotation 1 • SDC and SRC Poster Focus (Exhibit Hall E)								
16:00-17:20	**Papers** Studying Visualization	**Papers** Exploring Exergames	**Course** Conceptual Models: Core to Good Design 2/2	**Course** Online A/B Tests & Experiments 2/2	**Course** Mobile HCI 2/2	**Papers** Narratives and Storytelling	**SIG** Jogging with Technology: Interaction Design Supporting Sport Activities	

17:30 - 19:00 • Video Showcase & Golden Mouse Award (718AB)
17:30 - 19:30 • Job Fair & Recruiting Boards (Exhibit Hall E)

MONDAY

7:30 - 8:30 • Video Previews (801AB)

Opening Keynote (Exhibit Hall G)
Margaret Atwood - *Robotics in my Work and Life*

9:00-10:20

10:20 - 11:00 – Coffee Break (Level 700 Foyer)

716B	717AB	Exhibit Hall G	718AB	801A	801B	802AB	
Papers Coordination and Collaboration	**alt.chi** Ways of Knowing in HCI	**Papers** Watches and Small Devices	**Papers** The Third Dimension	**Papers** Audio Interaction	**Papers** Sustainability and Everyday Practices		11:00-12:20
12:20 - 14:00 – Lunch Break							
Papers Studying and Designing Gameplay	**alt.chi** Understanding Interactions	**Papers** Force Input and Haptic Feedback	**Papers** Hackerspaces, Making and Breaking	**Papers** Activity Recognition	**Papers** Managing Income	**Course** Methods of Design Synthesis – Moving from Data to Innovation 1/2	14:00-15:20
15:20 - 16:00 – Coffee Break (Level 700 Foyer)							
Papers Interfaces for Care and Support	**Papers** Research through Design	**Papers** Pointing and Cursors	**Papers** Always Connected: Email and Social Media	**Papers** Smart Homes and Sustainability	**Papers** Multilingual Communication	**Course** Methods of Design Synthesis – Moving from Data to Innovation 2/2	16:00-17:20

17:30 - 19:30 • Conference Reception & Exhibit Grand Opening • Interactivity (Exhibit Hall E)

TUESDAY

7:00 - 8:20 • Video Previews (Exhibit Hall G) • Women's Breakfast (Exhibit Hall F)

Provoke! Wisdom! Impact! Plenary (Exhibit Hall G)
Nathan Eagle - *Big Data for Social Good*

8:30-8:50

8:50 - 9:00 – Break

716B	717AB	Exhibit Hall G	718AB	801A	801B	802AB	
Papers Battery Life and Energy Harvesting	**alt.chi** Ways of Creating in HCI	**Papers** Mid-Air Gestures	**Papers** Touch and Stylus Interaction	**Papers** Quantified Self	**Papers** Sustainability Perspectives	**Course** Card Sorting for Navigation Design 1/2	9:00-10:20
10:20 - 11:00 – Coffee Break • WIP Posters Rotation 1 • Doctoral Consortium Poster Focus (Exhibit Hall E)							
Papers Social Media and Health	**alt.chi** Limits and Futures	**Papers** On and Above the Surface	**Papers** Interactive Whiteboards and Public Displays	**Papers** Human-Robot Interaction	**Papers** Emergency Response	**Course** Card Sorting for Navigation Design 2/2	11:00-12:20
12:20 - 14:00 – Lunch Break							
Papers Personal Health and Wellbeing	**Papers** Design Theory	**Papers** Novel Keyboards	**Papers** DIY and Hacking	**Papers** User Models and Prediction	**Papers** Engage and Educate Children	**Course** Computer Vision in interaction and UX 1/2	14:00-15:20
15:20 - 16:00 – Coffee Break • WIP Posters Rotation 1 • SDC and SRC Poster Focus (Exhibit Hall E)							
Papers Designing for Older Adults and Demographic Change	**Papers** Critical Design	**Papers** Understanding and Modeling Touch	**Papers** 3D Interaction: Modeling and Prototyping	**Papers** The Eyes Have It	**Papers** Learning and Education	**Course** Computer Vision in interaction and UX 2/2	16:00-17:20

17:30 - 19:00 • Video Showcase & Golden Mouse Award (718AB)
17:30 - 19:30 • Job Fair & Recruiting Boards (Exhibit Hall E)

WEDNESDAY

7:00 - 8:20 • Video Previews (Exhibit Hall G)

8:30-8:50 — **Provoke! Wisdom! Impact! Plenary (Exhibit Hall G)**
Scooter Morris - *A CHI Story - Past, Present, and the Next Chapters*

8:50 - 9:00 – Break

	701A	701B	709	711	713AB	714AB	715A	716A
9:00-10:20	**Papers** Telepresence and Connecting over Video	**Papers** Exergame Design	**Course** Rapid Design Labs—A Tool to Turbocharge Design-Led Innovation 1/2	**Course** Agile User Experience and UCD 1/2	**Course** How social media design reshapes society	**Papers** Designing and Modeling GUIs		**SIG** Child Computer Interaction: Towards Sustainable Thinking & Being

10:20 - 11:00 – Coffee Break • WIP Posters Rotation 2 • SGC (Exhibit Hall E)

11:00-12:20	**Papers** Understanding and Using Social Media	**Papers** Working Together	**Course** Rapid Design Labs—A Tool to Turbocharge Design-Led Innovation 2/2	**Course** Agile User Experience and UCD 2/2	**Course** Designing for Seniors	**Papers** Programming and Development Tools	**SIG** The Usability of Text Entry Systems Now and in the Future	**Panel** Making Cultures: Empowerment, Participation, and Democracy – or Not?

12:20 - 14:00 – Lunch Break • SIGCHI Town Hall Lunch (718AB) • SGC (Exhibit Hall E)

14:00-15:20	**Papers** Question and Answer Systems	**Special** Lifetime Practice Award: Gillian Crampton Smith	**Course** Introduction to Designing and Building Musical Interfaces 1/2	**Course** Including Children in Technology Design Processes 1/2	**Course** Interaction Design for Online Video and Television 1/2	**Papers** Cross-Device Interaction	**SIG** Community Centered Collaborative HCI in Developing Countries	**Panel** CROWDFUNDING: An Emerging Field of Research

15:20 - 16:00 – Coffee Break • WIP Posters Rotation 2 (Exhibit Hall E)

16:00-17:20	**Papers** Journalism and Social News	**Papers** Interruptions and Distractions	**Course** Introduction to Designing and Building Musical Interfaces 2/2	**Course** Including Children in Technology Design Processes 2/2	**Course** Interaction Design for Online Video and Television 2/2	**Papers** Decisions, Recommendations, and Machine Learning	**SIG** Interactions Magazine	**Panel** The Meaning of Design in Healthcare

18:00 - 20:00 • Joint Hospitality Reception (Mattamy Athletic Centre)

THURSDAY (Industry Day)

7:00 - 8:20 • Video Previews (Exhibit Hall G)

8:30-8:50 — **Provoke! Wisdom! Impact! Plenary (Exhibit Hall G)**
Elizabeth F. Churchill - *Reasons to be Cheerful, Part 4*

8:50 - 9:00 – Break

	701A	701B	709	711	713AB	714AB	715A	716A
9:00-10:20	**Papers** Social Media Usage	**Papers** Games and Education		**Course** Speech-based Interaction 1/2	**Course** The Glass Class: Designing Wearable Interfaces 1/2	**Papers** Learning and Games	**SIG** Managing UX Teams	**Case studies** Realities of Fieldwork

10:20 - 11:00 – Coffee Break

11:00-12:20	**Papers** Location-Based Services and Navigation	**Papers** Crowdsourcing		**Course** Speech-based Interaction 2/2	**Course** The Glass Class: Designing Wearable Interfaces 2/2	**Papers** Desktop Search and History	**SIG** Communicating User Research to Drive Design and Product Decisions	**Case studies** Cross-Perspective Collaboration

12:20 - 14:00 – Lunch Break

14:00-15:20	**Papers** Computer Mediated Intimacy and Romance	**Papers** Network of Care	**Course** How You Could Benefit from Using ISO Standards	**Course** Evaluating Children's Interactive Products	**Course** A Conversation with Susan Dray	**Papers** Tutorials	**Panel** Can You Do Good and Do Well? Exploring HCI Careers in Development	**Case studies** Creating Methods

15:20 - 16:00 – Coffe Break

16:00-17:20 — **Closing Keynote (Exhibit Hall G)**
Scott Jenson - *The Physical Web*

WEDNESDAY

7:00 - 8:20 • Video Previews (Exhibit Hall G)

Provoke! Wisdom! Impact! Plenary (Exhibit Hall G) — 8:30-8:50
Scooter Morris - *A CHI Story - Past, Present, and the Next Chapters*

8:50 - 9:00 – Break

716B	717AB	Exhibit Hall G	718AB	801A	801B	802AB	
Papers Health and Everyday Life	**alt.chi** Navel Gazing	**Papers** Text Entry and Evaluation	**Papers** Emotions and Mobiles	**Papers** Privacy	**Papers** Issues That Matter	**Course** HCI Meets Data Mining: Principles and Tools for Big Data Analytics 1/2	9:00-10:20

10:20 -11:00 – Coffee Break • WIP Posters Rotation 2 • SGC (Exhibit Hall E)

Papers Interactive Technologies for Rehabilitation	**Special** Student Research Competition	**Papers** Shape-Changing Interfaces	**Papers** Touch Input	**Papers** Risks and Security	**Papers** CHI for Social Development	**Course** HCI Meets Data Mining: Principles and Tools for Big Data Analytics 2/2	11:00-12:20

12:20 -14:00 – Lunch Break • SIGCHI Town Hall Lunch (718AB) • SGC (Exhibit Hall E)

Papers Exergaming for Health and Fitness	**Special** Student Design Competition	**Papers** Sensory Experiences: Smell and Taste	**Papers** Multitouch Interaction	**Papers** Authentication and Passwords	**Papers** Policies and Practice: Doing the Right Thing	**Course** Make This! Introduction to Electronics Prototyping Using Arduino 1/2	14:00-15:20

15:20 -16:00 – Coffee Break • WIP Posters Rotation 2 (Exhibit Hall E)

Papers Accessibility	**Special** Student Game Competition	**Papers** Tangible Interactions and Technologies	**Papers** Head-Worn Displays	**Papers** Applications of Body Sensing	**Papers** Urban Communities and Social Media	**Course** Make This! Introduction to Electronics Prototyping Using Arduino 2/2	16:00-17:20

18:00 - 20:00 • Joint Hospitality Reception (Mattamy Athletic Centre)

THURSDAY (Industry Day)

7:00 - 8:20 • Video Previews (Exhibit Hall G)

Provoke! Wisdom! Impact! Plenary (Exhibit Hall G) — 8:30-8:50
Elizabeth F. Churchill - *Reasons to be Cheerful, Part 4*

8:50 - 9:00 – Break

716B	717AB	Exhibit Hall G	718AB	801A	801B	802AB	
Papers Persuasive Technologies and Applications	**alt.chi** Intimate Interfaces	**Papers** Whole Body Sensing and Interaction	**Papers** Novel Mobile Displays and Devices	**Papers** HCI Paradigms: Past, Present and Future	**Papers** PolitiCHI	**Course** Hands-on Sketching Course 1/2	9:00-10:20

10:20 -11:00 – Coffee Break

Papers Lost and Found in Translation	**Papers** Participatory Design	**Papers** Brain Computer Interfaces	**Papers** 3D Printing and Fabrication	**Papers** Modeling Users and Interaction	**Papers** Engaging Older Adults Through Technology	**Course** Hands-on Sketching Course 2/2	11:00-12:20

12:20 -14:00 – Lunch Break

Papers Driving Interfaces and Evaluations		**Papers** Gesture-Based Interaction	**Papers** Interactive Surfaces and Pervasive Displays	**Papers** Research and Deployment in the Wild	**Papers** Social Media for Relationships	**Course** Modern Geography for HCI Researchers and Practitioners	14:00-15:20

15:20 - 16:00 – Coffee Break

Closing Keynote (Exhibit Hall G) — 16:00-17:20
Scott Jenson - *The Physical Web*

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to Toronto

Microsoft

Computers alone can't change the world. But people and computers? Yes.

Come pay us a visit. Chat with employees and recruiters about careers at Microsoft. Talk with CHI presenters and authors.

Great swag, the latest UX/HCI Microsoft research demos, and Xbox and large-screen games. Enter a raffle to win an Xbox One.

Visit us at booths 3, 4 & 5

Joint Hospitality Reception
Mattamy Athletic Centre, 50 Carlton Street, Toronto
Wednesday, April 30th 6pm – 8pm
Microsoft is a CHI Champion Sponsor Host

Research: http://aka.ms/chi2014research
Design and Design Research: http://aka.ms/chi2014design
Talk to a recruiter: msuxrecruiters@microsoft.com

ACM SIGCHI

CHI 2014 is sponsored by ACM's Special Interest Group on Computer-Human Interaction (ACM SIGCHI). ACM, the Association for Computing Machinery, is an educational and scientific society uniting the world's computing educators, researchers, and professionals to inspire dialogue, share resources, and address the field's challenges. ACM strengthens the profession's collective voice through strong leadership, promotion of the highest standards, and recognition of technical excellence. ACM supports the professional growth of its members by providing opportunities for life-long learning, career development, and professional networking. ACM offers its more than 100,000 worldwide members cutting edge technical information through world class journals and magazines, dynamic special interest groups, and globally recognized conferences. Visit www.acm.org for more information about ACM.

SIGCHI is the premier international society for professionals, academics, and students who are interested in human-computer interaction (HCI). We provide a forum for the discussion of all aspects of HCI through our conferences, including our flagship CHI conference, publications, web sites, email discussion groups, and other services. We advance education in HCI through courses, workshops, and outreach, and we promote informal access to a wide range of individuals and organizations involved in HCI. Members can be involved in HCI-related activities with others in their region through local SIGCHI chapters. Come to the SIGCHI Town Hall meeting on Wednesday at 12:20 in Room 718AB or visit www.sigchi.org to learn more about SIGCHI.

Membership Information

Please contact ACM's Member Services Department

Online:	*www.acm.org*	
Tel:	+1-800-342-6626	(USA/Canada)
	+1-212-626-0500	(International)
Fax:	+1-212-944-1318	
Email:	acmhelp@acm.org	
Write:	Association for Computing Machinery, Inc. General Post Office P.O. Box 30777 New York, NY 10087-0777, USA	

CHI 2014 OVERVIEW

The CHI 2014 technical program showcases presentations of outstanding research in human-computer interaction (HCI), demonstrations of new and innovative technology, discussions of timely and controversial issues, and presentations of the latest developments in HCI design and practice. The CHI technical program includes presentations in multiple formats, recorded in the *CHI 2014 Proceedings and Extended Abstracts* available from the ACM Digital Library and on the CHI 2014 USB key.

INVITATION-ONLY | SATURDAY– SUNDAY

Doctoral Consortium *Room 711*

Selected doctoral students present and explore their research topics with senior researchers and other students in a two-day interdisciplinary workshop. Doctoral Consortium posters are displayed in the Commons and brief descriptions appear in the *CHI 2014 Extended Abstracts*.

Doctoral Consortium Faculty:
Bill Buxton, Adrian Cheok, Kristina Höök, Katherine Isbister (Co-Chair), Yvonne Rogers, Manfred Tscheligi (Co-Chair)

Workshops *Level 700 and Level 800*

Workshops provide a valuable opportunity for small communities of people with diverse perspectives to engage in rich one- and two-day discussions about a topic of common interest. Workshop participants are pre-selected based on submitted position papers and a brief description of each workshop appears in the CHI 2014 Extended Abstracts. Some workshops choose to display a poster in the Exhibit Hall E Poster Area.

TECHNICAL PROGRAM | MONDAY — THURSDAY

CHI 2014 received over 3200 submissions and accepted over 1000 presentations and events distributed across 15 parallel sessions over four days. With so many presentations happening at once, how do you choose? CHI 2014 offers the following resources to help you make the most of your conference experience:

Choosing sessions to attend

1. This ***CHI 2014 Conference Program*** describes the venues and offers at-a-glance summaries of all events in the main technical program, as well as times and locations.
2. The ***CHI 2014 USB key*** provided when you register includes the *CHI 2014 Conference Proceedings and Extended Abstracts*, also available in the ACM Digital Library, and the CHI 2014 Video Previews (see below). Extra USB keys are available for purchase at the Registration Desk.
3. The free ***CHI 2014 Mobile App*** contains the full CHI 2014 program as well as a personal interactive schedule to help you keep track of events you would like to see. The CHI 2014 Proceedings and Extended Abstracts as well as Video Previews (below) can be loaded into the Mobile App for easy access. That app can be downloaded from Apple's App Store and Google Play. A web version can be accessed at: http://chi2014.acm.org/mobileapp.
4. The ***CHI 2014 Video Previews*** are 30-second video overviews of most presentations in the main technical program. Daily preview sessions will be held Monday in room 801AB from 7:30am to 8:30am, Tue – Thu from 7:00am to 8:20am in Exhibit Hall G. You can also browse Video Previews on the CHI 2014 USB, the CHI 2014 web site and the CHI2014 Mobile App. You can also watch them on the CHI 2014 Interactive Display (below).
5. The large-screen, high resolution, ***CHI 2014 Interactive Display*** will use the Paper Forager system to allow attendees to browse through and view all 4276 papers and notes ever published at CHI conference. You can search and filter the collection by keywords or authors, and view any individual paper full-screen to read the content. For CHI 2014 papers, you can watch the video preview for each submission, and trace it's citation network back to the past CHI papers which it cites.
6. ***CHI 2014 Student Volunteers*** (SVs) are available to point you in the right direction or answer questions about the program.

CHI 2014 CONFERENCE PROCEEDINGS

The *CHI 2014 Conference Proceedings* contain Papers and Notes, the most rigorously reviewed and prestigious material in the main technical program. The CHI 2014 Program Committee received over 2000 submissions for Papers and Notes. Each was reviewed by one or more Associate Chairs, as well as three or more external reviewers. After a rebuttal phase, the 200+ senior Associate Chairs met in person within specialized subcommittees to discuss and select the accepted papers. The CHI 2014 acceptance rate was 23%.

The CHI 2014 Papers and Notes document research that makes a lasting and significant contribution to our knowledge and understanding of human-computer interaction. CHI Conference Proceedings are read and cited worldwide, with a broad impact on the development of HCI principles, theories, techniques, and their practical application.

CHI Papers

20-minute presentations

Papers present significant contributions to research, development, and practice in all areas of human-computer interaction.

CHI Notes

10-minute presentations

Notes are briefer and more focused than CHI Papers but follow the same rigorous review process.

TOCHI Papers

20-minute presentations

TOCHI papers were published within the past year in SIGCHI's flagship journal, *ACM Transactions on Computer-Human Interaction*.

CHI 2014 EXTENDED ABSTRACTS

The *CHI 2014 Extended Abstracts* record interactive events designed to provoke, intrigue, teach and inspire the CHI audience and capture a history of HCI practice.

Courses — *Rooms 709, 711, 713AB, 802AB*

One or two 80-minute units — *List on page 56*

Courses provide professional development opportunities for existing and prospective HCI community members. This year, CHI is pleased to also offer six "One of a CHInd Courses". These are special invited courses that will be given by distinguished members of the HCI community. Pre-register to receive the course notes and an identifier on your badge that permits entry to the course. You may register for any unfilled courses at the Registration Desk.

Case Studies — *Room 716A*

20-minute presentations

Case Studies describe examples of best practices in human-computer interaction. The goal is to explain methods that deliver reliable, high-quality results based on real-world experience and to present the lessons learned.

Panels — *Room 716A*

80-minute sessions

Panels take various formats but always involve significant interaction among panelists and audience members around a specified topic. The goal is to stimulate thought and discussion on current issues in human-computer interaction.

alt.chi — *Room 717AB*

20-minute presentations

alt.chi offers an outlet for unusual, controversial, alternative or thought-provoking work that does not fit within the standard CHI submission process. The format encourages lively audience participation.

Special Interest Groups (SIGs) — *Rooms 715A and 716A*

80-minute sessions

SIGs offer a forum for conference attendees who share similar interests to discuss a specified topic. Previous SIGs have launched new conferences and publications or generated new CHI activities.

Video Showcase — *Room 718AB*

80-minute session — *List on page 57*

The Video Showcase features engaging videos that offer a variety of perspectives on human-computer interaction, including novel interfaces, reflective pieces and future envisionments. Come and enjoy the videos on Tuesday (17:30) followed by the Golden Mouse award ceremony.

Interactivity — *Exhibit Hall E*

Hands-on demonstrations — *List on page 64*

Interactivity offers hands-on demonstrations that let you see, hear and touch interactive visions of the future. They take the form of prototypes, demonstrations, artworks, design experiences and inspirational technologies. Interactivity offers an alternative to CHI's traditional text format to disseminate advances in the field. Interactivity promotes and provokes discussion about the role of technology by actively engaging attendees one-on-one. Come see Interactivity at the CHI 2014 Conference Reception and Exhibits Grand Opening (Monday 17:30 – 19:30 Exhibit Hall E) and during coffee breaks.

Works in Progress (WIP) — *Exhibit Hall E*

Posters — *List on page 58*

Works in Progress present work at an early stage that can benefit from one-on-one discussions with colleagues. WIP Posters will be displayed in two rotations; the first rotation on Tuesday (29th April) and the second on Wednesday (30th April). Each rotation contains a number of themed clusters. Morning and afternoon coffee breaks on Tuesday and Wednesday are designated sessions during which WIP authors will be available at their posters to informally discuss their research with colleagues. These sessions will also feature some structured interactive activities where authors will pitch their work; do please come along and support them in doing this! Finally, watch out for WIP mini-presentations on the CHI YouTube channel!

Doctoral Consortium — *Exhibit Hall E*

Posters — *List on page 54*

Doctoral Consortium students are available to discuss their research in the DC Spotlight session Tuesday during morning coffee break (10:20 – 11:00)

Student Research Competition

Posters and 80-minute session — *List on page 54*

The Student Research Competition (SRC) is a branch of the ACM Student Research Competition. Monday 16:00 – 17:20 (Room 715B) is the Judging session (jury & competitors only). Students' posters are on display in Exhibit Hall E with author presentations during Tuesday's afternoon break (15:20-16:00). Final presentations are held on Wednesday 11:00 – 12:20 in 717AB. Winners are announced at the Closing Plenary.

Student Design Competition

Posters and 80-minute session *List on page 55*

The Student Design Competition (SDC) challenges students to design an object, interface, system, or service related to bodydata: the qualities of the quantified self. Monday 11:00 – 12:20 (Room 715B) is the Judging session (jury & competitors only). Semi-finalist posters are displayed in Exhibit Hall E poster area and authors will be presenting their work to all attendees during Tuesday's afternoon break (15:20 – 16:00). The SDC jury selects four finalists to present on Wednesday 14:00 – 15:20 in 717AB. The winner is announced at the Closing Plenary.

Student Game Competition

Demonstrations and 80-minute session *List on page 55*

The Student Game Competition (SGC) challenges students to design games in three categories: Games for a Purpose, Innovative Interface, and Innovative Game Design. Students demonstrate their games on Wednesday (10:00 – 14:00, Exhibit Hall E). The final presentations and ceremony is held on Wednesday (16:00 – 17:20, Room 717AB). Winners are also announced at the Closing Plenary.

■ INDUSTRY DAY

Thursday, 8:30 – 17:20

CHI has always been a dynamic, vibrant community that mixes up academic researchers with those in industry and others who at the cutting edge of practice. This year, as well as the leading research papers, we have highlights especially attractive to those who do CHI out there, 'in the wild'!

We have designated Thursday as our Industry Focused Day. Come along and hear and see:

- Plenary talk to open the day by Elizabeth Churchill, e-Bay
- Conference closing Keynote from Scott Jenson, Google
- A conversation with Susan Dray, leading practitioner who has worked with many large clients, worldwide
- Hands-on courses covering topics as diverse as speech systems, prototyping in arduino and sketching for design
- A Special Interest Group session on managing UX teams
- Case studies from companies including SAP, Naver, Sandvik and Leadin, Google and NASA

Suggested Sessions

8:30 – 8:50	Plenary: Reasons to be Cheerful, Part 4	(Exhibit Hall G)
9:00 – 10:20	Papers: HCI Paradigms: Past, Present and Future	(801A)
9:00 – 10:20	SIG: Managing UX Teams	(715A)
9:00 – 10:20	Case Studies: Realities of Fieldwork	(716A)
11:00 – 12:20	SIG: Communicating User Research to Drive Design and Product Decisions	(715A)
11:00 – 12:20	Case Studies: Cross-Perspective Collaboration	(716A)
11:00 – 12:20	Papers: Participatory Design	(717AB)
14:00 – 15:20	Panel: Can You Do Good and Do Well? Exploring HCI Careers in Development	(715A)
14:00 – 15:20	Case Studies: Creating Methods	(716A)
14:00 – 15:20	Course: A Conversation with Susan Dray	(713AB)
14:00 – 15:20	Papers: Research and Deployment in the Wild	(801A)
16:00 – 17:20	Closing Keynote: The Physical Web	(Exhibit Hall G)

■ SPECIAL DAYTIME EVENTS

ACM SIGCHI Town Hall Lunch *Room 718AB*

Wednesday, 12:20 – 14:00

SIGCHI officers present ongoing programs and activities, followed by an audience Q&A session. Participants interested in shaping SIGCHI's future are encouraged to attend. An informal lunch is available on a first-come, first-served basis.

Video Previews

Monday: 7:30 – 8:30 Room 801AB
Tue-Thu: 7:00 – 8:20 in Exhibit Hall G

For the early risers! Plan your daily schedule by viewing the 30 second Video Previews for the current day. The video previews for the current day's Papers and Notes will be played through, in a single, back-to-back, playlist.

Wearable Computing Exhibit *Room 803AB*

Monday	*14:00 – 19:00*
Tuesday	*10:00 – 19:30*
Wednesday	*10:00 – 17:20*
Thursday	*10:00 – 13:00*

In the July 2001 issue of IEEE Micro Thad Starner laid out the major challenges of wearable computing. The challenges included Power, Networking, and Interface. In the past 13 years we have come a long way in meeting some of these challenges. Using Thad Starner's extensive collection of on-body and wearable devices we are forming an educational and interactive exhibition to showcase the strides made in wearable computing. We will use this exhibition to present the evolution of electronic textiles, advances in battery life, on-body interfaces, and head mounted displays.

Women's Breakfast *Exhibit Hall F*

Tuesday, 7:00 – 8:30

This breakfast offers participants the opportunity to broaden personal professional networks in the field of HCI and to engage in discussions on such topics as mentoring networks, work-life balance, diverse success paths, and personal-branding. During this program participants share their stories of success and challenge which can inspire CHI women who may be longtime leaders or new to the field.

■ SPECIAL EVENING EVENTS

Conference Reception & Exhibits Grand Opening

Exhibit Hall E

Monday, 17:30 – 19:30

Catch up with old friends and meet new ones at the CHI 2014 Conference Reception! Explore almost 70 hands-on demonstrations and performances at the Grand Opening of Exhibits and Interactivity. The reception features Canadian themed food choices, local beer and live performances! Admission and drinks tickets are included with your conference registration; additional tickets may be purchased at Registration Desk. Tickets are not available at the door.

Job Fair & Recruiting Boards

Exhibit Hall E

Tuesday, 17:30 – 19:30

Recruiters and job candidates are invited to take advantage of the CHI 2014 Job Fair on Tuesday evening. Visit the Recruiting Boards and designated exhibit booths throughout the conference to find out more about available positions.

CHI 2014 Champion Sponsor Recruiters:

Bloomberg	Booths 6 – 7	Recruiting Board
Google	Booths 14 – 15	Recruiting Board
Microsoft	Booths 3 – 5	Recruiting Board

CHI 2014 Contributing Sponsor Recruiters:

Facebook	Booth 36	Recruiting Board
Yahoo Labs!	Booth 10	Recruiting Board

CHI 2014 Other Recruiters:

Samsung Research America	Booth 23	Recruiting Board
Tandem Launch		Recruiting Board

Video Showcase

Room 718AB

Tuesday, 17:30 – 19:00

Join us on Tuesday to watch the CHI 2014 Video Showcase. At the end, join us for the Golden Mouse ceremony to award the best videos.

Joint Hospitality Reception

Mattamy Athletic Centre
(formerly Maple Leaf Gardens)
50 Carlton Street, Toronto

Wednesday, 18:00 – 20:00

Please join us at the Joint Hospitality Reception on Wednesday evening at Toronto's historic Maple Leaf Gardens, now known as the Mattamy Athletic Centre. Referred to as Canada's "Cathedral of Hockey," this site is not only a historical symbol for Canada's on-ice claim to fame, but has also been home to twelve Canadian sports teams since first opening its doors on November 12th, 1931. Recognized as a National Historic Site of Canada in 2007, "the Gardens" is the perfect place to celebrate Toronto and congratulate Canadian colleagues on those recent Olympic gold medals. There will be an exhibition from the Hockey Hall of Fame available, and you can enjoy watching adult men's hockey league teams playing while you meet our hosts and network with colleagues.

This reception is a great prelude to an evening out on the town. Light appetizers and a bar will be available – pick up drink tickets at the door. Your badge is your ticket to enter the reception, so please be sure to wear it. Prominently set in the heart of Toronto and in the heart of Canadians, the former Maple Leaf Gardens is not to be missed. We hope to see you there!

CHI Champion Sponsor Hosts:

Autodesk
Bloomberg
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Microsoft

Friends of CHI Hosts:

Universities Group (Virginia Tech, University of California Irvine, University of Maryland, UMBC)

Subway transportation to Mattamy Athletic Centre

- *It is 10 minutes to 50 Carlton Street (at Church Street)*
  - College station is the closest stop to Mattamy Athletic Centre (Maple Leaf Gardens)
  - From southbound & northbound platform, head North on Yonge St. towards College St.
  - Turn right onto Carlton St.
  - Mattamy Athletic Centre (Maple Leaf Gardens) will be on the left on the corner of Church St. and Carlton St.

■ OPENING HOURS

Registration and Merchandise Desk

Register for the CHI 2014 Conference and Courses (subject to availability) at the Registration Desk located on Level 600 of the Metro Toronto Convention Centre. CHI 2014 Merchandise, including mugs, snow globes and additional USB keys, will be available for purchase, subject to availability.

Saturday	07:30 – 12:00
Sunday	07:30 – 17:30
Monday	07:30 – 19:30
Tuesday	07:30 – 19:30
Wednesday	07:30 – 17:30
Thursday	07:30 – 16:30

The Commons *Exhibit Hall E*

Exhibit Hall E is on Level 800 of the Metro Toronto Convention Centre and is where you can enjoy a beverage and light snack during coffee breaks, talk with colleagues or explore Exhibits, Posters and Interactivity demonstrations and performances. Opens on Monday evening.

Monday	17:30 – 19:30	Opening Reception
Tuesday	10:00 – 18:00	(17:30 – 19:30 Job Fair)
Wednesday	10:00 – 18:00	
Thursday	10:00 – 13:00	

Roundtable Meeting Room *Room 715B*

Tue-Thu, 9:00 – 12:20, 14:00 – 17:20

A roundtable room is available this year for participants who need a place to sit and have conversations with other attendees of the conference. The room can accommodate multiple groups at once. The room is for drop-in use and cannot be reserved.

Coffee Breaks

Regularly scheduled morning and afternoon coffee breaks are complimentary for all registered CHI 2014 attendees every day 10:20 – 11:00 and 15:20 – 16:00:

Mon	Level 700 Foyer
Tue-Thu	Exhibit Hall E

Speaker Ready Room *Room 704*

Speakers and session chairs may use this room as a central check-in point and speakers may reserve a projector to prepare materials and rehearse their presentations. Sign up early with the staff person, since appointments are on a first-come, first-served basis and only one projector is available.

Sat-Wed	07:00 – 17:00
Thu	07:00 – 14:00

Media/Press Office *Room 810*

CHI 2014 welcomes members of the media. Please stop by the Media Office to get information on scheduled Media Events this week, and to learn more about CHI 2014, SIGCHI, and future CHI conferences. CHI 2014 media coordinators will be happy to schedule interviews with select authors at the conference. The Media Office hours are the same as the Registration Desk.

■ CHI INFORMATION AND POLICIES

CHI 2014 Information Desk *Exhibit Hall E*

Student Volunteers staff the Information desk during Commons hours. They are happy to help answer your questions or find someone who can. At other times, stop by the Registration Desk for information.

Student Volunteers *Room 703 and 705*

CHI 2014 has over 175 Student Volunteers, easily identified by their bright colored SV t-shirts. Most are graduate students in human-computer interaction and some are seeking jobs or internships.

Name Badges

Your CHI 2014 name badge serves as your admission pass to conference sessions and events. Please wear your name badge at all times while inside the Metro Toronto Conference Center. Conference management reserves the right to deny admission to anyone not wearing a CHI 2014 name badge.

Internet Café *Exhibit Hall E*

Enjoy chatting with colleagues during the breaks at the Internet Café, located next to the Posters area in the. CHI 2014 provides access to power for your mobile devices in addition to wireless access.

Wireless Access

CHI 2014 offers wireless high-speed internet access throughout the Metro Toronto Conference Center including in all meeting rooms. Also, please be considerate of your colleagues and limit your time spent online.

Blogging & Photosharing

CHI encourages conference attendees to blog CHI. Please add the category or keyword "CHI 2014" to your blog entries so that others may find them easily. We encourage photosharing by services such as Flickr, but please add a "CHI 2014" tag to your photos and "#chi2014" to your tweets.

Photography and Recording

Photographing crowd scenes and people interacting with technology is common at CHI and attendees should be aware that their image might be captured. Please use common courtesy when taking photos or video of individuals that are later uploaded to YouTube, Flickr or similar sites and ask permission before posting pictures of identifiable people. The use of any type of audio or video recording device is not permitted during any part of the conference.

Smoking Policy

The Metro Toronto Conference Center is a non-smoking facility and smoking is permitted outside only in designated areas.

SPOTLIGHTS

Spotlights replaces what used to be known as Communities at CHI. Spotlights are a chance for SIGCHI members with a common area of interest to gather and advance their area through the CHI conference. Spotlights emerging through the CHI conference may even spawn new, more specialized conferences in the future. This year we have five exiting research areas that have been selected to appear as Spotlights at CHI 2014: Games & Entertainment, HCI for Development, Interaction Science, Making Cultures, and Art and Interaction. Below you will find a short description of each Spotlight, as well as a list of suggested sessions relevant to these topics. We also welcome you to visit the Works-in-Progress and Student Competitions in Exhibit Hall E for other content related to these Spotlights.

(P) = Paper Session, (C) = Course

Games and Entertainment

The games and entertainment community has been growing rapidly during the past two years with an increasing number of games and entertainment related submissions in all venues and successful student game competition. In 2014 we are planning to make it the best year yet for the Games and Entertainment Community at CHI as a Spotlight. We are planning to continue the Student Games Competition, increase the quality and quantity of submissions from games researchers and practitioners, and increase the involvement and engagement of practitioners within the community. We also invite you to the Special Interest Group (SIG) on Games and Entertainment session scheduled at CHI 2014.

Suggested Sessions

Monday

11:00 – 12:20	(P)	The Third Dimension	(716B)
14:00 – 15:20	(P)	Studying and Designing Gameplay	(716B)
14:00 – 15:20	(C)	HTML5 Game Development (1/2)	(802AB)
16:00 – 17:20	(C)	Novel Approaches to Navigation	(714AB)
16:00 – 17:20	(P)	Interfaces for Care and Support	(716B)
16:00 – 17:20	(C)	HTML5 Game Development (2/2)	(802AB)

Tuesday

9:00 – 10:20	(P)	Understanding and Designing Games	(701B)
9:00 – 10:20	(P)	Mid-Air Gestures	(Exhibit Hall G)
11:00 – 12:20		SIG: Games and Entertainment Community SIG: Reaching beyond CHI	(715A)
11:00 – 12:20	(P)	Navigating Video	(701A)
11:00 – 12:20	(P)	Music, Dance, and Television	(716A)
11:00 – 12:20	(P)	Interactive Whiteboards and Public Display	(718AB)
11:00 – 12:20	(P)	Human-Robot Interaction	(801A)
14:00 – 15:20	(P)	Engage and Educate Children	(801B)
16:00 – 17:20	(P)	Exploring Exergames	(701B)
16:00 – 17:20	(P)	Narratives and Storytelling	(714AB)

Wednesday

9:00 – 10:20	(P)	Telepresence and Connecting over Video	(701A)
9:00 – 10:20	(P)	Exergame Design	(701B)
9:00 – 10:20	(P)	Health and Everyday Life	(716B)
14:00 – 15:20	(P)	Exergaming for Health and Fitness	(716B)
16:00 – 17:20	(P)	Tangible Interactions and Technologies	(Exhibit Hall G)

Thursday

9:00 – 10:20	(P)	Games and Education	(701B)
9:00 – 10:20	(P)	Learning and Games	(701B)
9:00 – 10:20	(P)	Persuasive Technologies and Applications	(716B)
9:00 – 10:20	(P)	Whole Body Sensing and Interaction	(Exhibit Hall G)

HCI for Development (HCI4D)

Information and communication technologies (ICTs) are increasingly used and appropriated by communities and other stakeholders in low-resource contexts around the world to improve education, healthcare, and lives. Yet, we lack a sufficiently rigorous evidence base that policymakers, practitioners and researchers can draw on to design and apply ICTs for maximum positive social impact. Most importantly, over the decades, human-computer interaction (HCI) has successfully contributed to our methodological toolkit for user-centered, data-driven design; and how decisions in technology design influence technology usage, adoption and the resulting social consequences. With a HCI orientation that recognizes the power of "design thinking", we advance the discourse about "ICTs in development" by recognizing that technology is neither culturally-neutral, static nor deterministic.

The HCI4D community welcomes everyone who is interested in the role of technology in diverse domains such as, but not limited to: conflict zones; literacy; infant mortality; rural and urban community development; and marginalized populations in both developing countries and industrialized nations. We expect members to come from various geographic regions and backgrounds such as anthropology, computer science, economics, education, international development, psychology, and sociology, among others. By being inclusive, we look forward to members engaging with one another in a dialogue that builds on our collective diverse experiences, and in turn strengthening the evidence base for ICTs to impact development in more positive ways.

Suggested Sessions

Monday

11:00 – 12:20	(P)	Sustainability and Everyday Practices	(801B)
14:00 – 15:20	(P)	Managing Income	(801B)

Tuesday

8:30 – 8:50		Plenary: Big Data for Social Good	(Exhibit Hall G)
9:00 – 10:20	(P)	Realities of Fieldwork	(716A)
14:00 – 15:20	(P)	Personal Health and Wellbeing	(716B)

Wednesday

11:00 – 12:20	(P)	CHI for Social Development	(801B)
14:00 – 15:20		SIG: Community Centered Collaborative HCI Design / Research in Developing Countries	(715A)
14:00 – 16:20	(P)	Policies and Practice: Doing the Right Thing	(801B)

Thursday

9:00 – 10:20	(P)	HCI Paradigms: Past, Present and Future	(801A)
11:00 – 12:20	(P)	Lost and Found in Translation	(716B)
11:00 – 12:20	(P)	Cross-Perspective Collaboration	(716A)
14:00 – 15:20	(C)	A Conversation with Susan Dray: Uncovering the Ordinary, Inspiring the Extraordinary	(713AB)
14:00 - 15:20		Panel: Can You Do Good and Do Well? Exploring HCI Careers in Development	(715A)

Interaction Science

We want to highlight Interaction Science work and establish a stronger presence of this community within the CHI conference and outside of it. Over the past 30 years science has played a key role in shaping and advancing research in Human-Computer Interaction. Informed in part by methods, theories and findings from the behavioral sciences and from computer science, scientific contributions to HCI have provided explanations of how and why people interact through and with technology. We argue that the contribution of science to HCI could be enhanced if key challenges are met. These challenges are different from those of other disciplines (e.g., engineering, design) that make valuable contributions to HCI.

Suggested Sessions

Tuesday

11:00 – 12:20 Interaction Science SIG: Overcoming Challenges (715A)

We will be maintaining a blog during the conference that will support the discussion of Interaction Science issues. For further information follow us on twitter @Ix_Sci.

Making Cultures

In recent years, HCI researchers have increasingly turned to processes of making, from knitting to digital fabrication, to rethink the digitization of our everyday worlds. Some have studied the rise of community-operated workspaces and blogs that celebrate hands-on practices of hacking, crafting, and tinkering. Others have used reflective modes of making to provoke alternative forms of qualitative inquiry. Through making, such research has probed social responses in participatory design workshops, extended and interrogated existing theory in "critical making" projects, and enacted social change in citizen science initiatives. In all cases, researchers have posed making as a research activity that asks how tactile engagements become tactical within specific socio-technical environments.

The Making Cultures Spotlight includes researchers and practitioners focusing on:

- Empirical study of existing cultures of making, including physical computing, hackerspaces, amateur multimedia production, craft, etc.
- Theory on issues closely related to making, including digital materiality, sustainability, research through design, creativity, and communities of practice and interest
- All aspects of design, development, and deployment of making-focused systems, technologies, technology components, and interfaces
- Use of making as a research method
- Computer science education
- Participatory and democratic design

Suggested Sessions

Monday

14:00 – 15:20 (P) Hackerspaces, Making, and Breaking (718AB)

Tuesday

9:00 – 10:20 alt.chi: Ways of Creating in HCI (717AB)

14:00 – 15:20 (C) Make This! Introduction to Electronics Prototyping using Arduino (802AB)

14:00 – 15:00 (P) DIY & Hacking (718AB)

16:00 – 17:20 (C) Make This! Introduction to Electronics Prototyping using Arduino (802AB)

Wednesday

11:00 – 12:20 Panel: Making Cultures: Empowerment, Participation, and Democracy - or Not (716A)

Thursday

11:00 – 12:20 (P) 3D Printing and Fabrication (718AB)

Art and Interaction

The Arts and Interaction Spotllight brings together researchers, practitioners, and artists whose work is informed by the digital arts. We recognize that many of these individuals are hybrids between HCI and other disciplines, which include digital arts, design, computer science, performance, music, education, arts administration, and science museum exhibition development. The digital arts intersect with traditional CHI topics such as screen-based interaction, embodied interaction, virtual and augmented environments, games, and data visualization.

The digital arts have been consistently represented in the CHI program for the past decade. Many of these activities are integrated within a larger international and interdisciplinary digital arts movement. The goals of the Art and Interaction Spotlight include supporting this work within CHI, building connections between this work and work in other subdomains of CHI, and networking to communities and resources currently outside of the CHI community. The hope is that through this exposure, CHI researchers will gain alternative insights into the interactive process. By participating in academic conferences such as CHI, digital artists gain access to an audience familiar with their technologies. Through CHI, artists can learn of technological advances and engage in discourse about these technologies. By providing a platform for digital arts at CHI, we can facilitate interdisciplinary collaboration between artists and technologists, and additional insights can be gained in turn. A new goal for CHI 2014 will be the development of an Arts Gallery and associated arts catalogue from CHI 2015 onwards.

Suggested Sessions

Monday

11:00 – 12:20 (P) Visualization and Aesthetics (701A)

11:00 – 12:20 (P) Audio Interaction (801A)

14:00 – 15:20 SIG: Art and Interaction: Cataloging The Digital Arts (715A)

16:00 – 17:20 (P) Research through Design (717AB)

Tuesday

9:00 – 10:20 (P) Enabling Interactive Performances (716A)

9:00 – 10:20 alt.chi: Ways of Creating in HCI (717AB)

11:00 – 12:20 (P) Crowds and Creativity (701BA)

11:00 – 12:20 (P) Music, Dance, and Television (716A)

14:00 – 15:20 (P) DIY and Hacking (718AB)

16:00 – 17:20 (P) Critical Design (717AB)

16:00 – 17:20 (P) Narratives and Storytelling (714AB)

Wednesday

9:00 – 10:20 (P) Issues That Matter (801B)

11:00 – 12:20 Panel: Making Cultures: Empowerment, Participation, and Democracy or Not? (716A)

14:00 – 15:20 (P) Sensory Experiences: Smell and Taste (Exhibit Hall G)

16:00 – 17:20 (P) Urban Communities and Social Media (801B)

Thursday

9:00 – 10:20 (P) Whole Body Sensing and Interaction (Exhibit Hall G)

9:00 – 10:20 alt.chi: Intimate Interfaces (717AB)

11:00 – 12:20 Panel: Lost and Found in Translation (716B)

14:00 – 15:20 (P) Computer Mediated Intimacy and Romance (701A)

14:00 – 15:20 (P) Research and Deployment in the Wild (801A)

LIFETIME RESEARCH AWARD

The SIGCHI Lifetime Research Award is presented to individuals for outstanding contributions to the study of human-computer interaction. This award recognizes the very best, most fundamental and influential research contributions. It is awarded for a lifetime of innovation and leadership

Steve Whittaker is Professor in Psychology at University of California at Santa Cruz. His research examines the design and evaluation of technologies to support human memory, productivity, socialising and well-being. His work uses insights from the social sciences to evaluate existing technologies and generate new designs that address important human problems. He has previously worked at Hewlett Packard, Bell Labs, AT&T, and IBM. In 2008 he was elected the Association of Computational Machinery (ACM) Computer Human Interaction Academy for sustained research contributions. He is Editor of Human Computer Interaction. Right now he is working on online communities and digital tools to support human memory that have mental and physical health benefits.

LIFETIME PRACTICE AWARD

The SIGCHI Lifetime Practice Award is presented to individuals for outstanding contributions to the practice and understanding of human-computer interaction. This award recognizes the very best and most influential applications of human-computer interaction. It is awarded for a lifetime of innovation and leadership.

Gillian Crampton Smith studied Philosophy and Art History, then followed her long-standing interest in typography. In 1981 an issue of the typographic magazine Upper & Lower Case, on computers in graphic design, inspired her to buy a computer and write a program to do magazine layouts on screen - very early desktop publishing. Convinced of the potential contribution of artist-designers to the design of human-computer interaction, in 1984 she started a graduate program for practicing graphic designers at St Martin's School of Art in London. In 1990 she moved to the Royal College of Art, Britain's graduate school of art and design, where she became professor and, with a generous grant from the Palo Alto company, Interval Research, founded the Computer Related Design Research Studio. This studio collaborated with many high-tech companies, developing the role of the art and design disciplines in shaping how people interact with electronic tools, products and media. She spent several summers in Silicon Valley collaborating with Apple, IDEO and Interval. In 2000 she became the first Director of Interaction Design Institute Ivrea, a teaching and research institute funded by Telecom Italia and Olivetti. Despite its short life, Interaction-Ivrea remains, though its alumni, a worldwide influence. In 2005 she moved to Iuav University of Venice where, with Philip Tabor, she developed the Interaction Design program within its Masters in Design. A Senior Fellow of the Royal College of Art, she has served on England's Arts and Humanities Research Council, the start-up program of the UK National Endowment for Science Technology and the Arts, and the advisory boards of Copenhagen Institute of Interaction Design, Fabrica, and MIT's SENSEable City Laboratory.

LIFETIME SERVICE AWARD

The SIGCHI Lifetime Service Award goes to individuals who have contributed to the growth of SIGCHI in a variety of capacities. This award is for extended services to the community at large over a number of years.

Wendy Mackay is currently Research Director, Classe Exceptionnelle, at Inria in France where she heads the In|Situ| research group in Human-Computer Interaction, which includes 7 faculty and 20 students and research staff from Inria, CNRS and Université Paris-Sud. She is a member of the CHI Academy and a recipient of a prestigious European Research Council Advanced grant. She recently served as Vice President of Research for the Computer Science Department at Université Paris-Sud, France and spent two years as Visiting Professor at Stanford University. She received her Ph.D. from M.I.T. and has managed software development groups at Digital Equipment Corporation and research groups at Digital, MIT, Xerox, CENA and Aarhus University. She has been actively involved in SIGCHI since 1983 and has participated in every CHI conference since then. She was elected Chair of ACM/SIGCHI, has served on most other SIGCHI executive positions, co-founded the first SIGCHI local SIG, Greater Boston SIGCHI, and has also served on the ACM Publications Board, ACM SIGBoard and CACM Web Editorial Board. She has published over 150 peer-reviewed research articles in the area of human-computer interaction and has served as program chair or on the program committees of ACM CHI, ACM UIST, ACM CSCW, ACM DIS and ACM Multimedia, among others. She was co-editor in chief of IJHCS and served on the editorial boards of ACM/TOCHI and RIHM. Most recently, she served as general chair of CHI 2013 in Paris, with almost 3500 attendees. Her current research interests include participatory design, creativity, co-adaptive instruments, mixed reality and interactive paper, and multidisciplinary research methods.

Tom Hewett is Professor Emeritus of Psychology and Computer Science at Drexel University. Tom's SIGCHI service activities began with a proposal to the SIGCHI Executive Committee that they fund the creation and work of a Curriculum Development Group to develop the first SIGCHI recommended sample Curriculum for Human Computer Interaction. The final report, with its infamous "lime green" cover, became an official ACM document. After twice serving as SIGCHI Executive Committee Vice Chair for Operations (1989-93), Tom was CHI '94 General Co-Chair. As part of four CHI Conference Committees from CHI '91 to CHI 2006, Tom was Tutorials Chair or Co-Chair. In addition, he has been on the organizing committee of four SIGCHI sponsored Creativity and Cognition conferences, serving as papers program Chair or Co-Chair for three of those conferences. Most recently Tom was papers program chair for the 9th Creativity and Cognition Conference, Sydney, June, 2013.

SOCIAL IMPACT AWARD

This award is given to individuals who promote the application of human-computer interaction research to pressing social needs.

Richard E. Ladner is a Professor in the Department of Computer Science and Engineering at the University of Washington with adjunct appointments in the Departments of Electrical Engineering and Linguistics. His current research is in the area of accessible computing which is an important subarea of human-computer interaction (HCI). He entered this research area relatively late in his career after working in theoretical computer science for more than 30 years. His MobileAccessibility project is exploring mobile applications to improve the lives of blind, low-vision, and deaf-blind people. He is the creator of the ASL-STEM Forum which is an on-line community for uploading and discussing sign language for terms in science, technology, engineering, and mathematics. He is the Principal Investigator for the NSF-funded AccessComputing Alliance that has the goal of increasing participation of students with disabilities in computing fields. From 2007 – 2013, he directed the Summer Academy for Advancing Deaf and Hard of Hearing in Computing, a nine week program for students transitioning from high school to college. He served on the NSF Committee on Equal Opportunities in Science and Engineering (CEOSE) from 2006 to 2012. He is a recipient of the 2004 Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring (PAESMEM) and the 2008 Computing Research Association's A. Nico Habermann Award. He is a winner of a 2008 Purpose Prize. He was the Outstanding Service Award winner at the University of Washington in 2009. He is a member of the Board of Trustees of Gallaudet University, a liberal arts university that primarily serves deaf students.

CHI ACADEMY

The CHI Academy is an honorary group of individuals who have made substantial contributions to the field of human-computer interaction. These are the principal leaders of the field, whose efforts have shaped the disciplines and/or industry, and led the research and/or innovation in human-computer interaction.

John C. Tang is a Senior Researcher at Microsoft Research where he designs and studies new tools to support connecting people over distance. His research has focused on supporting remote collaboration, using a range of technologies (video, instant messaging, rhythmic patterns) in diverse contexts (distributed work teams, long-distance social connections). He not only researches distributed collaboration, but also lives it through working with teams at other sites in the U.S. and around the world. John's research approach combines understanding users' needs through social science methods with designing and prototyping new technologies and learning from how they are used. John's career in industry has included previous positions at IBM Research Almaden, Sun Microsystems, and Xerox PARC. He has been active in the CHI and CSCW research communities through research papers, patents, and service on conference committees, including co-chairing CSCW 2011 in Hangzhou, China. John received his Ph.D. from the Design Division at Stanford University.

Jeff A. Johnson is Principal Consultant at UI Wizards, Inc., a product usability consultancy. He also is a principal at Wiser Usability, Inc., a consultancy focused on usability and accessibility for adults 50+. After earning B.A. and Ph.D. degrees from Yale and Stanford Universities, he worked at Cromemco, Xerox, US West, Hewlett-Packard Labs, and Sun Microsystems. In 1990, he co-chaired the first Participatory Design conference, PDC'90. Since 2004 he has served on the SIGCHI U.S. Public Policy Committee. He has taught at Stanford and Mills College, and in 2006 and 2013 taught HCI as an Erskine Fellow at the University of Canterbury in New Zealand. He has authored many articles and chapters on HCI, as well as the books GUI Bloopers, Web Bloopers, GUI Bloopers 2.0, Designing with the Mind in Mind, and (with Austin Henderson) Conceptual Models: Core to Good Design. A second edition of Designing with the Mind in Mind was published in early 2014.

Susan Dray has worked to advance human-centered design since 1979, initially in a human factors research group at Honeywell, and later championing usability of corporate systems at American Express. Since founding her consulting firm in 1993, she has provided user experience research for a long list of clients to help them create innovative products and services that are useful, usable, and desirable. Through her publications, teaching, mentoring, and many speaking engagements, Susan has contributed significantly to the evolution of UX research practice, especially in field research, naturalistic usability evaluation, and international usability and user research. Extensive experience doing research in developing countries led to her involvement in forming a professional community focused on user-centered design for development (UCD4D), applying UCD to technological aspects of economic development. She is currently pursuing this interest as a Fulbright Scholar on the faculty at the Technological University of Panama. Susan is a Fellow of the Human Factors and Ergonomics Society, recipient of the SIGCHI Lifetime Service Award and an ACM Distinguished Engineer. She is a long-time Column/Forum editor for Interactions and served as Director of Publications on the Board of the User Experience Professionals Association. Susan holds a doctorate in Psychology from UCLA.

Jodi L. Forlizzi is an Associate Professor in the Human-Computer Interaction Institute and the School of Design at Carnegie Mellon University. She was the first design professor hired into the HCII and the School of Computer Science at CMU. Jodi has advanced design research in HCI, illustrating to the CHI community that design research, while different than scientific research or research on human behavior, is a critical part of our community. Jodi's early work explored experience design, and understanding how to best design all aspects of product behavior — functional, aesthetic, emotional, and social. Jodi has also conducted research in human-robot interaction, big data and what it means for design, how technology services can better adapt and be personalized to people's needs, and how design research can help to address societal problems, such as our aging population and today's healthcare needs. Jodi has authored or co-authored over 130 papers and book chapters.

Keith Edwards is a Professor of Interactive Computing in the College of Computing at Georgia Tech. His research focuses largely on bringing human concerns to bear on the creation of core computing infrastructure, for example, by exploring human-centered approaches to networking and computer security. Lately his research has expanded into a number of explorations of the social impacts of computing technology, such as understanding how technology can support the work of non-profits and NGOs, or help build stronger communities. Prior to joining Georgia Tech, he was a Principal Scientist at Xerox PARC and managed PARC's Ubiquitous Computing group. He is an ACM Distinguished Scientist, a member of Microsoft's Trustworthy Computing Academic Advisory Board, and has served as the Technical Program Chair for CHI 2010, the Program Chair for UIST 2002, and the General Chair for UIST 2000. While he is a technologist at heart, he enjoys working with designers, social scientists, and others from diverse backgrounds.

Ken Hinckley is a Principal Researcher at Microsoft Research, where he has spent the last 17 years investigating novel input devices, device form-factors, and modalities of interaction. He feels fortunate to have had the opportunity to collaborate with many CHI Academy members while working there, including noted trouble-makers such as Bill Buxton, Patrick Baudisch, and Eric Horvitz—as well as George Robertson, whom he owes a debt of gratitude for hiring him fresh out of grad school. Ken is perhaps best know for his work on sensing techniques, cross-device interaction, and pen computing. He has published over 75 academic papers and is a named inventor on upwards of 150 patents. Ken holds a Ph.D. in Computer Science from the University of Virginia, where he studied with Randy Pausch. He has also published fiction in professional markets including Nature and Fiction River, and prides himself on still being able to hit 30-foot jump shots at age 44. Not too shabby.

Richard H. R. Harper is Principal Researcher at Microsoft Research in Cambridge and co-manages the Socio-Digital Systems group. Richard is a sociologist concerned with how to design for 'being human' in an age when human nature is often caricatured or rendered in oversimplifying ways. His book, Texture: Human expression in the age of communications overload (MIT Press) was awarded the Society of Internet Researcher's 'Book of the Year (2011)'. Amongst his prior books was the IEEE award winning The Myth of the Paperless Office (MIT Press,2002, with Abi Sellen), and Inside the IMF: an ethnography of documents, technology and organisational action (Academic Press, 1997). His latest collection, Trust, Computing and Society ', will be published by CUP in April this year. He is currently working on a monograph (with Dave Randall and Wes Sharrock) called Choice: The science of reason in the 21st Century, (Polity Press).

Gary Marsden was professor of computer science at the University of Cape Town, pioneer and passionate advocate of HCI for development and community builder. He became internationally known for his work in mobile interface design, design, and ICT for development (ICT4D)—for which he was a recipient of the ACM SIGCHI's Social Impact Award in 2007. He went to great lengths to show how mobile technologies were revolutionizing how developing countries were advancing apace. In doing so, he raised the profile of what developing world actually meant. In just a few years, he had managed to put HCI in South Africa and South Africa in HCI. As well as a being a renowned researcher, he received many teaching awards, the last one a prestigious award from his university that only a few ever receive. Gary died suddenly of a heart attack on December 27, 2013, at the age of 42 and is survived by his wife Gil and his two children, Holly and Jake.

PAST HONOREES

SIGCHI Lifetime Research Award

2013 George G. Robertson
2012 Dan Olsen
2011 Terry Winograd
2010 Lucy Suchman

SIGCHI Lifetime Practice Award

2013 Jakob Nielsen
2012 Joy Mountford
2011 Larry Tesler
2010 Karen Holtzblatt

SIGCHI Lifetime Achievement Award

2009 Sara Kiesler
2008 Bill Buxton
2007 James D. Foley
2006 Gary M. Olson, Judith S. Olson
2005 Tom Landauer
2004 Thomas P. Moran
2003 John M. Carroll
2002 Donald A. Norman
2001 Ben Shneiderman
2000 Stuart K. Card
1998 Douglas Engelbart

SIGCHI Lifetime Service Award

2013 Joseph A. Konstan
2012 Mike Atwood, Kevin Schofield
2011 Arnie Lund, Jim Miller
2010 Mary Czerwinski
2009 Clare-Marie Karat, Steven Pemberton
2008 John Karat, Marian Williams
2007 Richard I. Anderson
2006 Susan M. Dray
2005 Sara Bly, John 'Scooter' Morris, Don Patterson, Gary Perlman, Marilyn Mantei Tremaine
2004 Robin Jeffries, Gene Lynch
2003 Lorraine Borman
2002 Dan R. Olsen Jr.
2001 Austin Henderson

SIGCHI Social Impact Award

2013 Sara J. Czaja
2012 Batya Friedman
2011 Alan Newell, Clayton Lewis
2010 Allison Druin, Ben Bederson
2009 Helen Petrie
2008 Vicki Hanson
2007 Gregory Abowd, Gary Marsden
2006 Ted Henter
2005 Gregg Vanderheiden

CHI Academy Members

Class of 2013 Patrick Baudisch, Victoria Bellotti, Clarisse Sieckenius de Souza, Alan Dix, Rebecca E. Grinter, Eric Horvitz, Bonnie Nardi, Thomas S. Tullis

Class of 2012 Ben Bederson, Steve Benford, Hugh Dubberly, Carl Gutwin, Joy Mountford, Alan Newell, Yvonne Rogers

Class of 2011 Ravin Balakrishnan, Steven Feiner, Joseph Konstan, James Landay, Jenny Preece, Abigail (Abi) Sellen, Dennis Wixon

Class of 2010 Susanne Bødker, Mary Czerwinski, Austin Henderson, David Kieras, Arnie Lund, Larry Tesler, Shumin Zhai

Class of 2009 Mark Ackerman, Bill Gaver, Clayton Lewis, Wendy E. Mackay, Aaron Marcus, Elizabeth Mynatt, Tom Rodden

Class of 2008 Gregory Abowd, Paul Dourish, Wendy Kellogg, Randy Pausch, Mary Beth Rosson, Steve Whittaker

Class of 2007 Joëlle Coutaz, Karen Holtzblatt, Gerhard Fischer, Robert J. K. Jacob, Jun Rekimoto, Chris Schmandt

Class of 2006 Scott Hudson, Hiroshi Ishii, Michel Beaudouin-Lafon, Jakob Nielsen, Peter Pirolli, George Robertson

Class of 2005 Ron Baecker, Susan Dumais, John Gould, Saul Greenberg, Bonnie E. John, Andrew Monk

Class of 2004 George Furnas, Jonathan Grudin, Brad Myers, William Newman, Dan R. Olsen Jr., Brian Shackel, Terry Winograd

Class of 2003 Thomas Green, James D. Hollan, Robert E. Kraut, Gary M. Olson, Peter G. Polson

Class of 2002 William A. S. Buxton, John M. Carroll, Douglas C. Engelbart, Sara Kiesler, Thomas K. Landauer, Lucy A. Suchman

Class of 2001 Stuart K. Card, James D. Foley, Morten Kyng, Thomas P. Moran, Judith S. Olson, Ben Shneiderman

ACM/SIGCHI BEST OF CHI AWARDS

The SIGCHI "Best of CHI" awards honor exceptional papers published at the CHI conference. The top 5% of submissions are chosen by the associate chairs to receive an award. Among these, the associate chairs and a separate Best Papers Committee select the very best 1% of submissions to receive a Best Paper award.

The CHI Associate Chairs nominated 5% of the Paper and Notes submissions. 84 papers and notes received Honorable Mention, designated by a medallion logo.

The separate Best Papers committee selected the top 1% of total submissions. 21 Papers and Notes received a Best Paper award, designated by a trophy logo.

Daniel Wigdor (*Chair*), Karyn Moffat (*Chair*), Duncan Brumby, John Canny, Tiago Guerreiro, Steve Harrison, Otmar Hilliges, Lilly Irani, Michal Jacovi, Judy Kay, Kris Luyten, David McGookin, Antti Oulasvirta and Lana Yarosh.

PEOPLE'S CHOICE BEST TALK AWARD

The People's Choice Best Talk Awards are meant to celebrate the very best of in-conference presentations. Did a presenter go the extra mile to make their talk genuinely interesting and informative? Did a speaker make you stop and think about something new? Did a presentation make an otherwise dull topic come alive? Nominate the speaker for a People's Choice Best Talk Award! It takes only a moment, and helps to reward those who spend the extra time to make help make the conference truly memorable and extraordinary.

You may cast as many votes as you wish, provided they don't occupy the same time slot (overlapping sessions are ok). Please, do not wait until the end of the conference to choose a single 'best'. Think of your votes as nominations for awards made to the best that the conference has to offer. Votes are cast using the CHI 2014 mobile application or through the voting site: http://chi2014.acm.org/vote. Your Voter ID is on the back of your name badge. It only takes a few seconds – vote now! The winners of the People's Choice Best Talk Awards will be announced at the CHI 2014 closing plenary!

KEYNOTES

CHI 2014 will open and close with plenaries that will each feature keynotes from distinguished speakers.

The Opening Plenary introduces ACM/SIGCHI and the CHI 2014 Conference, announces the 2014 SIGCHI award winners and offers suggestions for navigating through the CHI 2014 technical program. Awards for Best Papers and Notes and Honorable Mentions are indicated in the Session-at-a-Glance pages.

The Opening Keynote speaker is Booker Prize winning author Margaret Atwood. Write your questions for the keynote speakers on cards distributed by the Student Volunteers.

The Closing Plenary is the last event of CHI 2014. We announce the award winners for the Student Design Competition, the Student Game Competition and the Student Research Competition. The Golden Mouse award is announced on Tuesday evening at the Video Showcase and the Closing Plenary. We will also announce the winners of the inaugural People's Choice Best Talk Awards.

The Closing Keynote is by leading UX designer, Scott Jenson. CHI 2014 ends with the hand-off to the CHI 2015 committee, who will introduce next year's conference taking place in Seoul, Korea.

Opening Keynote: Robotics in My Work and Life

Margaret Atwood

Monday 28 April, 9:00 *Exhibit Hall G*

Biography

Margaret Atwood is a giant of modern literature who refuses to rest on her laurels. She has anticipated, satirized, and even changed the popular pre-conceptions of our time, and is the rare writer whose work is adored by the public, acclaimed by the critics, and read on university campuses. On stage, Atwood is both serious minded and wickedly funny.

A winner of many international literary awards, including the prestigious Booker Prize, Margaret Atwood is the author of more than thirty volumes of poetry, children's literature, fiction, and non-fiction. She is perhaps best known for her novels, which include The Edible Woman, The Handmaid's Tale, The Robber Bride, Alias Grace, The Blind Assassin, Oryx and Crake, and The Year of the Flood. Her non-fiction book Payback: Debt and the Shadow Side of Wealth, part of the Massey Lecture series, was recently made into a documentary. Her new book, Madaddam (the third novel in the Oryx and Crake trilogy), has received rave reviews: "An extraordinary achievement" (The Independent); "A fitting and joyous conclusion" (The New York Times).

Atwood's work has been published in more than forty languages, including Farsi, Japanese, Turkish, Finnish, Korean, Icelandic and Estonian. In 2004, she co-invented the LongPen, a remote signing device that allows someone to write in ink anywhere in the world via tablet PC and the internet. She is also a popular personality on Twitter, with over 300,000 followers.

Atwood was born in 1939 in Ottawa and grew up in northern Ontario, Quebec, and Toronto. She received her undergraduate degree from Victoria College at the University of Toronto and her master's degree from Radcliffe College.

Closing Keynote: The Physical Web

Scott Jenson, *Google, Inc.*

Thursday 1 May, 16:00 *Exhibit Hall G*

Abstract

Too often when we discuss "interaction" we think of it as a desktop vs tablet vs mobile issue. However, with the plummeting cost of both processing and connectivity, our understanding of a 'smart device' is rapidly changing. The challenge is that this new, amazing category of devices will blind side us, requiring entirely new ways of interacting. This talk will discuss the exploding new area of smart devices, how the Internet of things is a UX disaster, and how we are on the verge of an entirely new way of interacting with devices.

Biography

Scott Jenson has been at the forefront of user interface design for over 25 years. He was the first member of the User Interface group at Apple in the late 80s, working on System 7, the Apple Human Interface Guidelines and was on the original Newton team. Following that he was Director of Product Design for Symbian, managed the mobile UX group at Google and was Creative Director at frog design. As a battle scarred veteran of the software industry, Scott has shipped a consumer spreadsheet, been a part of over 10 different OS releases, 4 commercial web site revisions, designed 3 different mobile phone UIs, did the UX for the Google Mobile Maps, and has over 20 patents.

PLENARIES: PROVOKE! WISDOM! IMPACT!

New for CHI 2014, plenary talks first thing each morning on Tuesday, Wednesday and Thursday. Come along, join the crowd and be energised by our speakers who will each bringing their experience of the Big Picture to inspire us. The talks will be short - twenty minutes - and then the rest of the day's program will begin.

Plenary: Big Data for Social Good

Nathan Eagle, *Jana Mobile, Inc.*

Tuesday 29 April, 8:30 – 8:50 *Exhibit Hall G*

Abstract

Petabytes of data about human movements, transactions, and communication patterns are continuously being generated by everyday technologies such as mobile phones and credit cards. This unprecedented volume of information facilitates a novel set of research questions applicable to a wide range of development issues. In a collaboration involving 237 mobile operators across 102 countries, Jana's mobile technology platform can instantly poll and compensate 3.48 billion active mobile subscriptions. This talk will discuss how insights gained from living in Kenya became the genesis of a technology company currently working with global clients in over 50 countries, including P&G, Google, Unilever, Danone, General Mills, Nestle, Johnson & Johnson, Microsoft, the World Bank, and the United Nations. After providing an overview of the mobile and social media landscapes in emerging markets, it will conclude by emphasizing the value of consumer data in underserved and understudied regions of the world.

Biography

Nathan Eagle is the co-founder and CEO of Jana, a company that provides consumers in emerging markets with free mobile phone airtime to incentivize surveys and purchasing. In addition to being CEO of Jana, Eagle holds an Adjunct Assistant Professor appointment at Harvard University.

His MIT PhD was declared one of the "10 Technologies Most Likely to Change the Way We Live," and he's been named one of the world's top mobile application developers and been elected to the TR35, a group of Top Innovators Under 35. Often sought after for his expert commentary, Nathan is regularly featured in such publications as the BBC, New York Times, Wall Street Journal, BusinessWeek and CNN.

Plenary: A CHI Story – Past, Present, and the Next Chapters

Scooter Morris, *University of California, San Francisco*

Wednesday 30 April, 8:30 – 8:50 *Exhibit Hall G*

Abstract

I became part of the CHI community in 1985, when I signed up to be the first AV Chair for the CHI conference. For the CHI 2014 conference…I'm still the AV Chair (we call it "technology liaison" now). Along the way, I've co-chaired a CHI conference, served on the SIGCHI Conference Management Committee for many years, and I'm now the Vice President for Conferences for SIGCHI. What is it about CHI that would induce a bioinformatician and hard-core hacker to become passionate about HCI and devote a significant amount of time and energy to support the field of HCI through service to the CHI conference? In this brief talk, we'll look at the CHI conference through the eyes of a volunteer who has spent time in the lowest levels of conference operations, chaired the conference, and now is responsible for overseeing all of the SIGCHI conferences. I'll try to address some or all of the following questions:

Where did we come from? What is CHI trying to achieve and have we been successful? If we have been successful, what are the key ingredients to that success? Where are going and how are we going to get there without losing what we currently have? And finally, why should you care? Oh, and along the way, it will probably become clear why I care…

Biography

John "Scooter" Morris is the Executive Director of the Resource for Biocomputing, Visualization, and Informatics at the University of California, San Francisco. Before finding his home in academia, he was a Distinguished Systems Architect at Genentech, Inc., where for 19 years, he participated in the joys and trials of life in industry. He received his Ph.D. in Medical Information Science from UCSF in 1990, and has bachelor's degrees in Physics, Biology, and Computer Science from UC Irvine. Scooter is a member of the Cytoscape core development team (an open source system for the visualization and analysis of biological networks), and author of several Cytoscape plugins and core features. In his "spare time" he is the Vice President for Conferences of the ACM Special Interest Group for Computers and Human Interaction (SIGCHI), a long-time CHI conference volunteer, past CHI conference co-chair, and recipient of the SIGCHI Lifetime Service Award. He is also known to voluntarily jump off perfectly good boats near Alcatraz Island for a brisk swim to San Francisco, swim across Lake Tahoe, and generally do silly things in cold water, but that's a different story.

Plenary: Reasons to be Cheerful, Part 4

Elizabeth F. Churchill, *eBay Research Labs*

Thursday 1 May, 8:30 – 8:50 *Exhibit Hall G*

Abstract

Reasons to be Cheerful, Part 3 was a song released by the UK's Ian Dury and the Blockheads in 1979. The song simply enumerates a series of reasons for being cheerful: Summer, Buddy Holly….. 18-wheeler Scammels, Domenecker camels….The list includes sex, generosity and politeness, yellow socks, breakfast cereal, John Coltrane….. and more. In 1979 when the song was released HCI was still in its infancy, starting its 'first wave'. Much focus was on efficiency and on communication as command. Satisfaction was noted, but not central. Frustration was acknowledged but not deeply theorized. Now, in 2014, in the third or perhaps even fourth wave of HCI, we talk about engagement, connection, emotion, enjoyment, delight and joy….. Efficiency is still on the table but not dominant. In this talk, I reflect on cheer, on joy and the human capacity for optimism. I will update the Blockheads' list, to include some reasons I believe we should be cheerful about the emerging landscape of mediated interaction and social connection. My list will offer examples from my own collaborative work in the design and development of engaging Internet experiences.

Biography

Dr. Elizabeth F. Churchill is director of human computer interaction at eBay Research Labs, where she is focusing on human centered commerce. Originally a psychologist by training, she has focused on understanding people's social and collaborative interactions in their everyday digital and physical contexts. Dr. Churchill has over 100 peer-reviewed research publications, over 40 patents filed or in process, five edited books, and has been a regular columnist for ACM Interactions. Her most recent book, co-authored with Frank Ritter and Gordon Baxter, is entitled Foundations for Designing User-Centered Systems. She is the current Executive Vice President of ACM SIGCHI, a Distinguished Scientist of the ACM, a Distinguished Visiting Scholar at Stanford University's Media X, and serves on the advisory board for the Mobile Life Research Center in Kista, Sweden. Dr. Churchill has recently been advising on the creation of a new initiative in Human Data Interaction with scholars in the United Kingdom. Before joining eBay, Dr. Churchill was a principal research scientist at Yahoo! Research, where she founded the Internet Experiences Group. She has also worked at PARC's Computing Science Lab. Prior to that, she formed and led the Social Computing Group at Fuji Xerox's FX Palo Alto Laboratory. Dr. Churchill has a PhD in Cognitive Science from the University of Cambridge in Cambridge, United Kingdom.

MONDAY

7:30 – 8:30 Video Previews *Room 801AB*

Opening Keynote
9:00 – 10:20 **Margaret Atwood**
Exhibit Hall G *Robotics in My Work and Life*

10:20 – 11:00
Coffee Break
LEVEL 700 foyer

701A Papers: Visualization and Aesthetics

CHAIR: ANTONELLA DE ANGELI

Metaphone: Machine Aesthetics Meets Interaction Design
Vygandas Simbelis, Anders Lundstrom, Kristina Hook, Jordi Solsona Belenguer, Vincent J. Lewandowski

Quantifying Visual Preferences Around the World
Katharina Reinecke, Krzysztof Z. Gajos

The Influence of Aesthetics in Usability Testing: The Case of Dual-Domain Products
Andreas Sonderegger, Andreas Uebelbacher, Manuela Pugliese, Juergen Sauer

Extracting References Between Text and Charts via Crowdsourcing
Nicholas Kong, Marti A. Hearst, Maneesh Agrawala

701B Papers: Stress

CHAIR: YUNAN CHEN

Stress and Multitasking in Everyday College Life: An Empirical Study of Online Activity
Gloria Mark, Yiran Wang, Melissa Niiya

Under Pressure: Sensing Stress of Computer Users
Javier Hernandez, Pablo E. Paredes, Asta Roseway, Mary P. Czerwinski

MouStress: Detecting Stress from Mouse Motion
David Sun, Pablo E. Paredes, John F. Canny

Investigating the Effects of Using Biofeedback as Visual Stress Indicator during Video-mediated Collaboration
Chiew Seng Sean Tan, Kris Luyten, Johannes Schöning, Karin Coninx

711 Course: C01

Designing Unbiased Surveys for HCI Research
Hendrik Müller, Aaron Sedley, Elizabeth Ferrall-Nunge

713AB Course: CHInd-A

Sampling & Synthesis: The Two Sides of Experience Sketching
William Buxton

714AB Papers: Social Local Mobile

CHAIR: DAVID K. MCGOOKIN

Let's Do It at My Place Instead? Attitudinal and Behavioral Study of Privacy in Client-Side Personalization
Alfred Kobsa, Bart P. Knijnenburg, Benjamin Livshits

The Effect of Developer-Specified Explanations for Permission Requests on Smartphone User Behavior
Joshua S. Tan, Khanh Nguyen, Michael Theodorides, Heidi Negron-Arroyo, Christopher Thompson, Serge Egelman, David Wagner

Reflection or Action?: How Feedback and Control Affect Location Sharing Decisions
Sameer Patil, Roman Schlegel, Apu Kapadia, Adam J. Lee

Effects of Security Warnings and Instant Gratification Cues on Attitudes toward Mobile Websites
Bo Zhang, Mu Wu, Hyunjin Kang, Eun Go, S. Shyam Sundar

Social Media Participation and Performance at Work: A Longitudinal Study
N. Sadat Shami, Jeffrey Nichols, Jilin Chen

715A Special Interest Group

HCI in Food Product Innovation
Winyu Chinthammit, Henry Been-Lirn Duh, Jun Rekimoto

715B Student Design Competition (Closed Judging)

Students will present their posters in this closed judging session, for the jury and competitors only.

716A Panel

Design Methods for the Future that is NOW: Have Disruptive Technologies Disrupted Our Design Methodologies?
Karen Holtzblatt, Ilpo Koskinen, Janaki Kumar, David Rondeau, John Zimmerman

716B Papers: Coordination and Collaboration

CHAIR: MARK ROUNCEFIELD

The Doing of Doing Stuff: Understanding the Coordination of Social Group-Activities
Richard P. Schuler, Sukeshini A. Grandhi, Julia M. Mayer, Stephen T. Ricken, Quentin Jones

Effects of Implicit Sharing in Collaborative Analysis
Nitesh Goyal, Gilly Leshed, Dan Cosley, Susan R. Fussell

Effects of Simultaneous and Sequential Work Structures on Distributed Collaborative Interdependent Tasks
Paul André, Robert E. Kraut, Aniket Kittur

Necessary, Unpleasant, and Disempowering: Reputation Management in the Internet Age
Allison Woodruff

717AB alt.chi: Ways of Knowing in HCI

CHAIR: BARRY BROWN

Running an HCI Experiment in Multiple Parallel Universes
Pierre Dragicevic, Fanny Chevalier, Stephane Huot

Reliability of NIRS-Based BCIs: A Placebo-Controlled Replication and Reanalysis of Brainput
Megan Strait, Cody Canning, Matthias Scheutz

A Path to Understanding the Effects of Algorithm Awareness
Kevin Hamilton, Karrie Karahalios, Christian Sandvig, Motahhare Eslami

Building Castles in Quicksand: Blueprint for a Crowdsourced Study
Arne Renkema-Padmos, Melanie Volkamer, Karen Renaud

HALL G Papers: Watches and Small Devices

CHAIR: YANG LI

Duet: Exploring Joint Interactions on a Smart Phone and a Smart Watch
Xiang 'Anthony' Chen, Tovi Grossman, Daniel J. Wigdor, George Fitzmaurice

Interaction on the Edge: Offset Sensing for Small Devices
Ian Oakley, DoYoung Lee

More Than Touch: Understanding How People Use Skin as an Input Surface for Mobile Computing
Martin Weigel, Vikram Mehta, Jürgen Steimle

TouchSense: Expanding Touchscreen Input Vocabulary Using Different Areas of Users' Finger Pads
Da-Yuan Huang, Ming-Chang Tsai, Ying-Chao Tung, Min-Lun Tsai, Yen-Ting Yeh, Liwei Chan, Yi-Ping Hung, Mike Y. Chen

Expanding the Input Expressivity of Smartwatches with Mechanical Pan, Twist, Tilt and Click
Robert Xiao, Gierad Laput, Chris Harrison

718AB Papers: The Third Dimension

CHAIR: MARK HANCOCK

The Use of Surrounding Visual Context in Handheld AR: Device vs. User Perspective Rendering
Klen Copic Pucihar, Paul Coulton, Jason Alexander

Altering Gameplay Behavior Using Stereoscopic 3D Vision-Based Video Game Design
Jonas Schild, Joseph J. LaViola Jr., Maic Masuch

Depth Perception with Gaze-contingent Depth of Field
Michael Mauderer, Simone I. Conte, Miguel A. Nacenta, Dhanraj Vishwanath

Imperceptible Depth Shifts for Touch Interaction with Stereoscopic Objects
Dimitar Valkov, Alexander Giesler, Klaus H. Hinrichs

801A Papers: Audio Interaction

CHAIR: SRIRAM SUBRAMANIAN

SonicExplorer: Fluid Exploration of Audio Parameters
Alexander T. Adams, Berto Gonzalez, Celine E. Latulipe

The BoomRoom: Mid-air Direct Interaction with Virtual Sound Sources
Jörg Müller, Matthias Geier, Christina Dicke, Sascha Spors

ISSE: An Interactive Source Separation Editor
Nicholas J. Bryan, Gautham J. Mysore, Ge Wang

Evaluation of Hear-Through Sound Localization
Georgios N. Marentakis, Rudolfs Liepins

801B Papers: Sustainability and Everyday Practices

CHAIR: MIKE HAZAS

Performativity in Sustainable Interaction: The Case of Seasonal Grocery Shopping in EcoFriends
Maria Normark, Jakob Tholander

Negotiating Food Waste: Using a Practice Lens to Inform Design
Eva Ganglbauer, Geraldine Fitzpatrick, Rob Comber

Walking and the Social Life of Solar Charging in Rural Africa
Nicola J. Bidwell, Masbulele Siya, Gary Marsden, William D. Tucker, M. Tshemese, N. Gaven, S. Ntlangano, Simon Robinson, Kristen A. Eglinton

Practices as a Unit of Design: An Exploration of Theoretical Guidelines in a Study on Bathing
Lenneke Kuijer, Annelise M. de Jong, Daan Van Eijk

12:20 – 14:00
Lunch Break

Restaurants, bars & cafés available nearby

701A Papers: Studying Online Communities

CHAIR: ROGERIO DE PAULA

The Impact of Membership Overlap on the Survival of Online Communities
Haiyi Zhu, Robert E. Kraut, Aniket Kittur

Goals and Perceived Success of Online Enterprise Communities: What Is Important to Leaders & Members?
Tara L. Matthews, Jilin Chen, Steve Whittaker, Aditya Pal, Haiyi Zhu, Hernan Badenes, Barton Smith

Selecting an Effective Niche: An Ecological View of the Success of Online Communities
Haiyi Zhu, Jilin Chen, Tara L. Matthews, Aditya Pal, Hernan Badenes, Robert E. Kraut

Snuggle: Designing for Efficient Socialization and Ideological Critique
Aaron Halfaker, R.Stuart Geiger, Loren G. Terveen

701B Special: Social Impact Award: **Richard Ladner**

CHAIR: JEFFREY P. BIGHAM

Design for User Empowerment

709 Course: C04-1

HTML5 Game Development
Jim Parker

711 Course: C05-1

Empirical Research Methods for Human-Computer Interaction
I. Scott MacKenzie, Steven Castellucci

713AB Course: C02-1

Introduction to Human-Computer Interaction
Jonathan Lazar, Simone Barbosa

714AB Papers: Image and Animation Authoring

CHAIR: TOMER MOSCOVICH

Offline Painted Media for Digital Animation Authoring
Makoto Nakajima, Daisuke Sakamoto, Takeo Igarashi

Supporting Informal Design with Interactive Whiteboards
Nicolas Mangano, Thomas D. LaToza, Marian Petre, André van der Hoek

Juxtapoze: Supporting Serendipity and Creative Expression in Clipart Compositions
William Benjamin, Senthil Chandrasegaran, Devarajan Ramanujan, Niklas L. Elmqvist, S. V. N. Vishwanathan, Karthik Ramani

Draco: Bringing Life to Illustrations with Kinetic Textures
Rubaiat Habib Kazi, Fanny Chevalier, Tovi Grossman, Shengdong Zhao, George Fitzmaurice

715A Special Interest Group

Art and Interaction SIG: Cataloging The Digital Arts
David England, Jocelyn Spence, Celine Latulipe, ernest edmonds, Linda Candy, Thecla Schiphorst, Nick Bryan-Kinns, Kirk Woolford

716A Panel

Designing for the Experiential Body
Helena Mentis, Kristina Höök, Florian Mueller, Katherine Isbister, George Poonkhin Khut, Toni Robertson

716B Papers: Studying and Designing Gameplay

CHAIR: CARL GUTWIN

A User Study of Different Gameplay Visualizations
Simone Kriglstein, Günter Wallner, Margit Pohl

The Influence of Controllers on Immersion in Mobile Games
Paul Cairns, Jing Li, Wendy Wang, A. Imran Nordin

Combining Think-aloud and Physiological Data to Understand Video Game Experiences
Chek Tien Tan, Tuck W. Leong, Songjia Shen

The MOY Framework for Collaborative Play Design in Integrated Shared and Private Interactive Spaces
Wooi Boon Goh, Ming Chen, Cuong H. Trinh, Jacquelyn Tan, Wei Shou

717AB alt.chi: Understanding Interactions

CHAIR: DANIELA ROSNER

Mining Online Software Tutorials: Challenges and Open Problems
Adam Fourney, Michael Terry

HCI Over Multiple Screens
Andy Brown, Michael Evans, Caroline Jay, Maxine Glancy, Rhianne Jones, Simon Harper

A Funny Thing Happened On The Way To The Website: Telling About Browsing
John P. Fass

Translation from Text to Touch -- Touching a "Japanese Old Tale"
yasuhiro suzuki, Rleko Suzuki, Junji Watanabe

HALL G Papers: Force Input and Haptic Feedback

CHAIR: IAN OAKLEY

Transient and Transitional States: Pressure as an Auxiliary Input Modality for Bimanual Interaction
Ross McLachlan, Daniel Boland, Stephen A. Brewster

VacuumTouch: Attractive Force Feedback Interface for Haptic Interactive Surface using Air Suction
Taku Hachisu, masaaki fukumoto

Expressive Touch: Studying Tapping Force on Tabletops
Esben W. Pedersen, Kasper Hornbæk

Presstures: Exploring Pressure-Sensitive Multi-Touch Gestures on Trackpads
Christian Rendl, Patrick Greindl, Kathrin Probst, Martin Behrens, Michael Haller

Gaze Gestures and Haptic Feedback in Mobile Devices
Jari Kangas, Deepak Akkil, Jussi Rantala, Poika M. Isokoski, Päivi H. Majaranta, Roope Raisamo

718AB Papers: Hackerspaces, Making and Breaking

CHAIR: MANFRED TSCHELIGI

Emerging Sites of HCI Innovation: Hackerspaces, Hardware Startups & Incubators
Silvia Lindtner, Garnet D. Hertz, Paul Dourish

Breakdown, Obsolescence and Reuse: HCI and The Art of Repair
Steven J. Jackson, Laewoo Kang

Printing Teddy Bears: A Technique for 3D Printing of Soft Interactive Objects
Scott E. Hudson

Taking Things Apart: Reaching Common Ground and Shared Material Understanding
Martin Murer, Mattias Jacobsson, Siri Skillgate, Petra Sundström

"Now That's Definitely a Proper Hack": Self-Made Tools in Hackerspaces
Jeffrey Bardzell, Shaowen Bardzell, Austin L. Toombs

801A Papers: Activity Recognition

CHAIR: DANIELA BUSSE

Toss 'N' Turn: Smartphone as Sleep and Sleep Quality Detector
Jun-Ki Min, Afsaneh Doryab, Jason Wiese, Shahriyar Amini, John Zimmerman, Jason I. Hong

Persuasive Technology in the Real World: A Study of Long-Term Use of Activity Sensing Devices for Fitness
Thomas Fritz, Elaine M. Huang, Gail C. Murphy, Thomas Zimmermann

Complex Activity Recognition Using Context Driven Activity Theory and Activity Signatures
Saguna Saguna, Arkady Zaslavsky, Dipanjan Chakraborty

Predictors of Life Satisfaction Based on Daily Activities from Mobile Sensor Data
Onur Yürüten, Jiyong Zhang, Pearl H. Pu

801B Papers: Managing Income

CHAIR: SARITA Y. SCHOENEBECK

Pay or Delay: The Role of Technology When Managing a Low Income
John Vines, Paul Dunphy, Andrew F. Monk

Poverty on the Cheap: Estimating Poverty Maps Using Aggregated Mobile Communication Networks
Christopher Smith-Clarke, Afra Mashhadi, Licia Capra

Money Talks: Tracking Personal Finances
Joseph 'Jofish' Kaye, Mary McCuistion, Rebecca Gulotta, David A. Shamma

Fostering Social Capital in Economically Distressed Communities
Tawanna R. Dillahunt

802AB Course: C03-1

Methods of Design Synthesis – Moving from Data to Innovation
Jon Kolko

15:20 – 16:00
Coffee Break
LEVEL 700 foyer

701A Papers: Designing and Understanding Visualizations

CHAIR: PETRA ISENBERG

Automatic Generation of Semantic Icon Encodings for Visualizations
Vidya Setlur, Jock D. Mackinlay

Task-Driven Evaluation of Aggregation in Time Series Visualization
Danielle Albers, Michael A. Correll, Michael Gleicher

Dive In! Enabling Progressive Loading for Real-Time Navigation of Data Visualizations
Michael Glueck, Azam Khan, Daniel J. Wigdor

Sample-Oriented Task-Driven Visualizations: Allowing Users to Make Better, More Confident Decisions
Nivan R. Ferreira, Danyel Fisher, Arnd Christian Konig

701B Papers: Crowdfunding and Crowd Storage

CHAIR: MICHAEL MULLER

Learning to Fail: Experiencing Public Failure Online Through Crowdfunding
Michael D. Greenberg, Elizabeth M. Gerber

Crowdfunding: Motivations and Deterrents for Participation
Elizabeth M. Gerber, Julie S. Hui

Show Me the Money! An Analysis of Project Updates during Crowdfunding Campaigns
Anbang Xu, Xiao Yang, Huaming Rao, Wai-Tat Fu, Shih-Wen Huang, Brian P. Bailey

Crowd Storage: Storing Information on Existing Memories
Jeffrey P. Bigham, Walter S. Lasecki

709 Course: C04-2

HTML5 Game Development
Jim Parker

711 Course: C05-2

Empirical Research Methods for Human-Computer Interaction
I. Scott MacKenzie, Steven Castellucci

713AB Course: C02-2

Introduction to Human-Computer Interaction
Jonathan Lazar, Simone Barbosa

714AB Papers: Novel Approaches to Navigation

CHAIR: YUICHIRO TAKEUCHI

Walk this Way: Musically Guided Walking Experiences
Adrian Hazzard, Steve Benford, Gary E. Burnett

Simplifying Orientation Measurement for Mobile Audio Augmented Reality Applications
Florian Heller, Aaron Krämer, Jan O. Borchers

Gifting Personal Interpretations in Galleries
Lesley Fosh, Steve Benford, Stuart Reeves, Boriana Koleva

Visual Recognition in Museum Guide Apps: Do Visitors Want It?
Leonard Wein

A Billion Signposts: Repurposing Barcodes for Indoor Navigation
Simon Robinson, Jennifer S. Pearson, Matt Jones

716A Panel

Electronic Privacy and Surveillance
Juan Pablo Hourcade, Ann Cavoukian, Ronald Deibert, Lorrie Cranor, Ian Goldberg

716B Papers: Interfaces for Care and Support

CHAIR: JESPER KJELDSKOV

Taking Part: Role-play in the Design of Therapeutic Systems
Mark Matthews, Geri Gay, Gavin Doherty

Staccato Social Support in Mobile Health Applications
Phil Adams, Eric P. Baumer, Geri Gay

My Journey Compass: A Preliminary Investigation of a Mobile Tool for Cancer Patients
Maia L. Jacobs, James Clawson, Elizabeth D. Mynatt

An Assistive Robotic Table for Older and Post-Stroke Adults: Results from Participatory Design and Evaluation Activities with Clinical Staff
Anthony L. Threatt, Jessica Merino, Keith E. Green, Johnell O. Brooks, Ian Walker, Stan Healy

Interactivity *(List on page 64)*
17:30 – 19:30
Exhibit Hall E

717AB Papers: Research through Design

CHAIR: CHRISTINA SATCHELL

Experience Design Theatre: Exploring the Role of Live Theatre in Scaffolding Design Dialogues
John Vines, Tess Denman-Cleaver, Paul Dunphy, Peter C. Wright, Patrick Olivier

Non-Finito Products: A New Design Space of User Creativity for Personal User Experience
Jin-min Seok, Jong-bum Woo, Youn-kyung Lim

Research Through Design Fiction: Narrative in Real and Imaginary Abstracts
Mark A. Blythe

Research on Research: Design Research at the Margins: Academia, Industry and End-Users
Juri Dachtera, Dave Randall, Volker Wulf

HALL G Papers: Pointing and Cursors

CHAIR: POURANG P. IRANI

Impact of Form Factors and Input Conditions on Absolute Indirect-Touch Pointing Tasks
Jérémie Gilliot, Géry Casiez, Nicolas Roussel

Beating the Bubble: Using Kinematic Triggering in the Bubble Lens for Acquiring Small, Dense Targets
Martez E. Mott, Jacob O. Wobbrock

Mouse Pointing Endpoint Prediction Using Kinematic Template Matching
Phillip T. Pasqual, Jacob O. Wobbrock

The Implicit Fan Cursor: A Velocity Dependent Area Cursor
Xiaojun Su, Oscar Kin-Chung Au, Rynson W. Lau

718AB Papers: Always Connected: Email and Social Media

CHAIR: SVETLANA YAROSH

The Product of Availability: Understanding the Economic Underpinnings of Constant Connectivity
Melissa Mazmanian, Ingrid Erickson

Giving up Twitter for Lent: How and Why We Take Breaks from Social Media
Sarita Y. Schoenebeck

MinEMail: SMS Alert System for Managing Critical Emails
Kyle Rector, Joshua M. Hailpern

Overload is Overloaded: Email in the Age of Gmail
Catherine Grevet, David Choi, Debra Kumar, Eric Gilbert

801A Papers: Smart Homes and Sustainability

CHAIR: RON WAKKARY

Practical Trigger-Action Programming in the Smart Home
Blase Ur, Elyse McManus, Melwyn Pak Yong Ho, Michael L. Littman

Doing the Laundry with Agents: A Field Trial of a Future Smart Energy System in the Home
Enrico Costanza, Joel E. Fischer, James A. Colley, Tom A. Rodden, Sarvapali D. Ramchurn, Nicholas R. Jennings

Making Sustainability Sustainable: Challenges in the Design of Eco-Interaction Technologies
Rayoung Yang, Mark W. Newman, Jodi L. Forlizzi

Exploring Sustainable Practices in Workplace Settings through Visualizing Electricity Consumption
Cecilia Katzeff, Loove Broms, Li Jönsson, Ulrika Westholm, Minna Räsänen

801B Papers: Multilingual Communication

CHAIR: HAO-CHUAN WANG

Global Connectivity and Multilinguals in the Twitter Network
Scott A. Hale

Effects of Public vs. Private Automated Transcripts on Multiparty Communication between Native and Non-Native English Speakers
Ge Gao, Naomi Yamashita, Ari M. Hautasaari, Andy Echenique, Susan R. Fussell

Smart Subtitles for Vocabulary Learning
Geza Kovacs, Robert C. Miller

Using Annotations in Online Group Chats
Na Li, Mary Beth Rosson

802AB Course: C03-2

Methods of Design Synthesis – Moving from Data to Innovation
Jon Kolko

Conference Reception and Exhibit Grand Opening *Exhibit Hall E*
17:30 – 19:30

7:00 – 8:20 Video Previews *Exhibit Hall G*

8:30 – 8:50 *Exhibit Hall G*
Provoke! Wisdom! Impact! Plenary – Big Data for Social Good
Nathan Eagle, *Jana Mobile, Inc.*

701A Papers: Interactive Visualization and Visual Elements

CHAIR: EYTAN ADAR

Visualizing Dynamic Networks with Matrix Cubes
Benjamin Bach, Emmanuel Pietriga, Jean-Daniel Fekete

A Table! Improving Temporal Navigation in Soccer Ranking Tables
Charles Perin, Romain Vuillemot, Jean-Daniel Fekete

Kinetica: Naturalistic Multi-touch Data Visualization
Jeffrey M. Rzeszotarski, Aniket Kittur

Traffigram: Distortion for Clarification via Isochronal Cartography
Sungsoo (Ray) Hong, Yea-Seul Kim, Jong-Chul Yoon, Cecilia R. Aragon

701B Papers: Understanding and Designing Games

CHAIR: LENNART NACKE

Understanding Procedural Content Generation: A Design-Centric Analysis of the Role of PCG in Games
Gillian Smith

A Systematic Review of Quantitative Studies on the Enjoyment of Digital Entertainment Games
Elisa D. Mekler, Julia A. Bopp, Alexandre N. Tuch, Klaus Opwis

The Effectiveness (or Lack Thereof) of Aim-Assist Techniques in First-Person Shooter Games
Rodrigo Vicencio-Moreira, Regan L. Mandryk, Carl Gutwin, Scott Bateman

Design Tactics for Authentic Interactive Fiction: Insights from Alternate Reality Game Designers
Elizabeth M. Bonsignore, Vicki Moulder, Carman Neustaedter, Derek L. Hansen, kari kraus, Allison Druin

Jump and Shoot! - Prioritizing Primary and Alternative Body Gestures for Intense Gameplay
Chaklam Silpasuwanchai, Xiangshi Ren

709 Course: C06

Improving the User Interface for People with Disabilities
Terrill Thompson

711 Course: C08

Multimodal Detection of Affective States: A Roadmap through Diverse Technologies
Javier Gonzalez-Sanchez, Maria Elena Chavez-Echeagaray, Robert Atkinson, Winslow Burleson

713AB Course: CHInd-F

What HCI Can Do for Citizen Science
Jennifer Preece, Anne Bowser

WIP Posters Rotation I *Exhibit Hall E* List on page 58
Doctoral Consortium *Exhibit Hall E* List on page 54

714AB Papers: Personal Values and Preferences

CHAIR: KATHARINA REINECKE

KnowMe and ShareMe: Understanding Automatically Discovered Personality Traits from Social Media and User Sharing Preferences
Liang Gou, Michelle X. Zhou, Huahai Yang

Faces Engage Us: Photos with Faces Attract More Likes and Comments on Instagram
Saeideh Bakhshi, David A. Shamma, Eric Gilbert

Photo Sharing of the Subject, by the Owner, for the Viewer – Examining the Subject's Preference
Auk Kim, Gahgene Gweon

Does Content Determine Information Popularity in Social Media? A Case Study of YouTube Videos' Content and their Popularity
Flavio Figueiredo, Jussara M. Almeida, Fabrício Benevenuto, Krishna P. Gummadi

You Read What You Value: Understanding Personal Values and Reading Interests
Gary Hsieh, Jilin Chen, Jalal U. Mahmud, Jeffrey Nichols

Gaining Empathy for Non-Routine Mobile Device Use through Autoethnography
Aisling Ann O'Kane, Yvonne Rogers, Ann E. Blandford

715A Special Interest Group

Current Issues in Assessing and Improving Information Usability
Stephanie Rosenbaum, Judith Ramey

716A Papers: Enabling Interactive Performances

CHAIR: CLAIRE O'MALLEY

Designing For Movement: Evaluating Computational Models Using LMA Effort Qualities
Diego Silang Maranan, Sarah Fdili Alaoui, Thecla Schiphorst, Philippe Pasquier, Pattarawut Subyen, Lyn Bartram

The Vocal Chorder - Empowering Opera Singers with a Large Interactive Instrument
Carl E. Unander-Scharin, Åsa J. Unander-Scharin, Kristina Höök

Let Me Catch This! Experiencing Interactive 3D Cinema through Collecting Content with a Mobile Phone
Jonna R. Häkkilä, Maaret Posti, Stefan Schneegass, Florian Alt, Kunter Gultekin, Albrecht Schmidt

Coding Livecoding
Benjamin Swift, Andrew Sorensen, Michael Martin, Henry J. Gardner

Exploring Percussive Gesture on iPads with Ensemble Metatone
Charles Martin, Henry J. Gardner, Ben Swift

716B Papers: Battery Life and Energy Harvesting

CHAIR: NICHOLAS CHEN

How Carat Affects User Behavior: Implications for Mobile Battery Awareness Applications
Kumaripaba M. Athukorala, Eemil Lagerspetz, Maria H. von Kügelgen, Antti Jylhä, Adam J. Oliner, Sasu Tarkoma, Giulio Jacucci

EnergyBugs: Energy Harvesting Wearables for Children
Kimiko Ryokai, Peiqi Su, Eungchan Kim, Bob Rollins

OJAS - Open Source Bi-Directional Inductive Power Link
Jussi V. Mikkonen, Ramyah Gowrishankar, Miia Oksanen, Harri Raittinen, Arto Kolinummi

Using Asymmetric Cores to Reduce Power Consumption for Interactive Devices with Bi-stable Displays
Jaeyeon Kihm, François V. Guimbretière, Julia Karl, Rajit Manohar

717AB alt.chi: Ways of Creating in HCI

CHAIR: SILVIA LINDTNER

Abba-Dabba-Ooga-Booga-Hoojee-Goojee-Yabba-Dabba-Doo: Stupidity, Ignorance & Nonsense as Tools for Nurturing Creative Thinking
Dimitris Grammenos

Gamified Co-design with Cooperative Learning
Gabriella Dodero, Rosella Gennari, Alessandra Melonio, Santina Torello

Teaching Digital Craft
Michael Nitsche, Andrew Quitmeyer, Kate Farina, Samuel Zwaan, Hye Yeon Nam

Designing for the Internet of Things: Prototyping Material Interactions
Tom Jenkins, Ian Bogost

HALL G Papers: Mid-Air Gestures

CHAIR: SHAHRAM IZADI

Consumed Endurance: A Metric to Quantify Arm Fatigue of Mid-Air Interactions
Juan David Hincapié-Ramos, Xiang Guo, Paymahn Moghadasian, Pourang P. Irani

Vulture: A Mid-Air Word-Gesture Keyboard
Anders Markussen, Mikkel R. Jakobsen, Kasper Hornbaek

Understanding Finger Input Above Desktop Devices
Chat Wacharamanotham, Kashyap Todi, Marty Pye, Jan O. Borchers

Exploring the Usefulness of Finger-Based 3D Gesture Menu Selection
Arun Kulshreshth, Joseph J. LaViola Jr.

10:20 – 11:00
Coffee Break
Exhibit Hall E

718AB Papers: Touch and Stylus Interaction

CHAIR: XIANG CAO

In the Blink of an Eye: Investigating Latency Perception during Stylus Interaction
Albert Ng, Michelle K. Annett, Paul Dietz, Anoop Gupta, Walter F. Bischof

Pinch-Drag-Flick vs. Spatial Input: Rethinking Zoom & Pan on Mobile Displays
Martin Spindler, Martin Schuessler, Marcel Martsch, Raimund Dachselt

InkAnchor: Enhancing Informal Ink-Based Note Taking on Touchscreen Mobile Phones
Yi Ren, Yang Li, Edward Lank

Perception of Ultrasonic Haptic Feedback on the Hand: Localisation and Apparent Motion
Graham Wilson, Thomas Carter, Sriram Subramanian, Stephen A. Brewster

801A Papers: Quantified Self

CHAIR: JOHN ZIMMERMAN

Health Mashups: Presenting Statistical Patterns Between Wellbeing Data and Context in Natural Language to Promote Behavior Change
Frank R. Bentley, Konrad Tollmar, Peter Stephenson, Laura M. Levy, Brian Jones, Scott L. Robertson, Ed Price, Richard Catrambone, Jeffrey B. Wilson

Understanding Quantified-Selfers' Practices in Collecting and Exploring Personal Data
Eun Kyoung Choe, Nicole B. Lee, Bongshin Lee, Wanda Pratt, Julie A. Kientz

BodyDiagrams: Improving Communication of Pain Symptoms through Drawing
Amy Jang, Diana L. MacLean, Jeffrey Heer

Personal Tracking as Lived Informatics
John Rooksby, Mattias Rost, Alistair Morrison, Matthew C. Chalmers

801B Papers: Sustainability Perspectives

CHAIR: ELAINE M. HUANG

Uncovering Practices of Making Energy Consumption Accountable: A Phenomenological Inquiry
Tobias Schwartz, Gunnar Stevens, Leonardo Ramirez, Volker Wulf

Applying the Lens of Sensory Ethnography to Sustainable HCI
Sarah Pink, Kerstin Leder Mackley, Val Mitchell, Marcus Hanratty, Carolina Escobar-Tello, Tracy Bhamra, Roxana Morosanu

Towards an Holistic View of the Energy and Environmental Impacts of Domestic Media and IT
Oliver Bates, Mike Hazas, Adrian Friday, Janine Morley, Adrian K. Clear

Beyond Ethnography: Engagement and Reciprocity as Foundations for Design Research Out Here
Margot Brereton, Paul Roe, Ronald Schroeter, Anita Lee Hong

802AB Course: C07

Card Sorting for Navigation Design
William Hudson

701A Papers: Navigating Video

CHAIR: KRZYSZTOF Z. GAJOS

Visualization of Personal History for Video Navigation
Abir Al-Hajri, Gregor Miller, Matthew Fong, Sidney S. Fels

WaaZam! Supporting Creative Play at a Distance in Customized Video Environments
Seth E. Hunter, Pattie Maes, Anthony Tang, Kori M. Inkpen, Susan M. Hessey

LACES: Live Authoring through Compositing and Editing of Streaming Video
Dustin E. Freeman, Stephanie Santosa, Fanny Chevalier, Ravin Balakrishnan, Karan Singh

ThumbReels: Query Sensitive Web Video Previews Based on Temporal, Crowdsourced, Semantic Tagging
Barnaby Craggs, Myles Kilgallon Scott, Jason Alexander

Panopticon as an eLearning Support Search Tool
James Nicholson, Mark Huber, Daniel Jackson, Patrick Olivier

701B Papers: Crowds and Creativity

CHAIR: LILLY IRANI

Searching for Analogical Ideas with Crowds
Lixiu Yu, Aniket Kittur, Robert E. Kraut

skWiki: A Multimedia Sketching System for Collaborative Creativity
Zhenpeng Zhao, Sriram Karthik Badam, Senthil Chandrasegaran, Deok Gun Park, Niklas L. Elmqvist, Lorraine Kisselburgh, Karthik Ramani

Distributed Analogical Idea Generation: Inventing with Crowds
Lixiu Yu, Aniket Kittur, Robert E. Kraut

Frenzy: Collaborative Data Organization for Creating Conference Sessions
Lydia B. Chilton, Juho Kim, Paul André, Felicia Cordeiro, James A. Landay, Daniel S. Weld, Steven P. Dow, Robert C. Miller, Haoqi Zhang

709 Course: C06

Improving the User Interface for People with Disabilities
Terrill Thompson

711 Course: C08

Multimodal Detection of Affective States: A Roadmap through Diverse Technologies
Javier Gonzalez-Sanchez, Maria Elena Chavez-Echeagaray, Robert Atkinson, Winslow Burleson

713AB Course: CHInd-C

Reflections on Design
Don Norman

714AB Papers: Interacting with the Web

CHAIR: JENNIFER GOLBECK

End-Users Publishing Structured Information on the Web: An Observational Study of What, Why, and How
Edward O. Benson, David R. Karger

Predicting Whether Users View Dynamic Content on the World Wide Web
Caroline Jay, Andy Brown, Simon Harper

Designing Usable Web Forms – Empirical Evaluation of Web Form Improvement Guidelines
Mirjam Seckler, Silvia Heinz, Javier A. Bargas-Avila, Klaus Opwis, Alexandre N. Tuch

Choice Overload in Search Engine Use?
Pawitra Chiravirakul, Stephen J. Payne

715A Special Interest Group

Games and Entertainment Community SIG: Reaching beyond CHI
Lennart Nacke, Pejman Mirza-Babaei, Magy Seif El-Nasr, Heather Desurvire, Regina Bernhaupt

716A Papers: Music, Dance, and Television

CHAIR: MARK A. BLYTHE

Coming in from the Margins: Amateur Musicians in the Online Age
Michaela Hoare, Steve Benford, Rachel Jones, Natasa Milic-Frayling

Watching the Footwork: Second Screen Interaction at a Dance and Music Performance
Louise Barkhuus, Arvid Engström, Goranka Zoric

Streaming on Twitch: Fostering Participatory Communities of Play within Live Mixed Media
William A. Hamilton, Oliver Garretson, Andruid Kerne

Long Tail TV Revisited: From Ordinary Camera Phone Use to Pro-Am Video Production
Oskar Juhlin, Arvid Engström, Elin Önnevall

716B Papers: Social Media and Health

CHAIR: M.C. SCHRAEFEL

Estimating County Health Statistics with Twitter
Aron Culotta

Unraveling Abstinence and Relapse: Smoking Cessation Reflected in Social Media
Elizabeth L. Murnane, Scott Counts

Weaving Clinical Expertise in Online Health Communities
Jina Huh, Wanda Pratt

Seeking and Sharing Health Information Online: Comparing Search Engines and Social Media
Munmun De Choudhury, Meredith R. Morris, Ryen W. White

717AB alt.chi: Limits and Futures

CHAIR: MORGAN AMES

Never Mind the Bollocks, I Wanna Be AnarCHI: A Manifesto for Punk HCI
Conor Linehan, Ben Kirman

None of a CHInd: Relationship Counselling for HCI and Speech Technology
Matthew P. Aylett, Per O. Kristensson, Steve Whittaker, Yolanda Vazquez-Alvarez

CHI 2039: Speculative Research Visions
Eric P. Baumer, June Ahn, Mei Bie, Elizabeth M. Bonsignore, Ahmet Börütecene, Oğuz Turan Buruk, Tamara Clegg, Allison Druin, Florian Echtler, Dan Gruen, Mona Leigh Guha, Chelsea Hordatt, Antonio Krüger, shachar maidenbaum, Meethu Malu, Brenna McNally, Michael Muller, Leyla Norooz, Juliet Norton, Oguzhan Ozcan, Donald J. Patterson, Andreas Riener, Steven I. Ross, Karen Rust, Johannes Schöning, M. S. Silberman, Bill Tomlinson, Jason Yip

The Minimal Effective Dose of Reminder Technology
Maria K. Wolters

HALL G Papers: On and Above the Surface

CHAIR: NADIR WEIBEL

RetroDepth: 3D Silhouette Sensing for High-Precision Input On and Above Physical Surfaces
David Kim, Shahram Izadi, Jakub Dostal, Christoph Rhemann, Cem Keskin, Christopher Zach, Jamie Shotton, Timothy Large, Steven Bathiche, Matthias Niessner, D. Alex Butler, Sean R. Fanello, Vivek Pradeep

SurfaceLink: Using Inertial and Acoustic Sensing to Enable Multi-Device Interaction on a Surface
Mayank Goel, Brendan Lee, Md. Tanvir Islam Aumi, Shwetak N. Patel, Gaetano Borriello, Stacie Hibino, Bo Begole

Comparing Flat and Spherical Displays in a Trust Scenario in Avatar-Mediated Interaction
Ye Pan, William Steptoe, Anthony Steed

PrintSense: A Versatile Sensing Technique to Support Multimodal Flexible Surface Interaction
Nan-Wei Gong, Jürgen Steimle, Simon Olberding, Steve Hodges, Nicholas E. Gillian, Yoshihiro Kawahara, Joseph A. Paradiso

Let's Kick It: How to Stop Wasting the Bottom Third of Your Large Screen Display
Ricardo Jota, Pedro Lopes, Daniel J. Wigdor, Joaquim A. Jorge

718AB Papers: Interactive Whiteboards and Public Displays

CHAIR: ANDREAS BUTZ

Communiplay: A Field Study of a Public Display Mediaspace
Jörg Müller, Dieter Eberle, Konrad Tollmar

P-LAYERS – A Layered Framework Addressing the Multi-faceted Issues Facing Community-supporting Public Display Deployments
Nemanja Memarovic, Marc Langheinrich, Keith W. Cheverst, Nick Taylor, Florian Alt

Posting for Community and Culture: Considerations for the Design of Interactive Digital Bulletin Boards
Claude Fortin, Carman Neustaedter, Kate Hennessy

I Can Wait a Minute: Uncovering the Optimal Delay Time for Pre-Moderated User-Generated Content on Public Displays
Miriam Greis, Florian Alt, Niels Henze, Nemanja Memarovic

801A Papers: Human-Robot Interaction

CHAIR: WENDY JU

Design Patterns for Exploring and Prototyping Human-Robot Interactions
Allison Sauppé, Bilge Mutlu

Improving Social Presence in Human-Agent Interaction
André T. Pereira, Rui Prada, Ana Paiva

Robot Gestures Make Difficult Tasks Easier: The Impact of Gestures on Perceived Workload and Task Performance
Manja Lohse, Reinier Rothuis, Jorge Gallego-Perez, Daphne E. Karreman, Vanessa Evers

Measuring Operator Anticipatory Inputs in Response to Time-delay for Teleoperated Human-robot Interfaces
Jonathan Bidwell, Alexandra Holloway, Scott Davidoff

Stay on the Boundary: Artifact Analysis Exploring Researcher and User Framing of Robot Design
HEE RIN LEE, Selma Sabanovic, Erik Stolterman

801B Papers: Emergency Response

CHAIR: LORRIE F. CRANOR

Help Beacons: Design and Evaluation of an Ad-Hoc Lightweight S.O.S. System for Smartphones
Amro Al-Akkad, Leonardo Ramirez, Alexander Boden, Dave Randall, Andreas Zimmermann

Upvoting Hurricane Sandy: Event-Based News Production Processes on a Social News Site
Alex Leavitt, Joshua A. Clark

Online Public Communications by Police & Fire Services during the 2012 Hurricane Sandy
Amanda L. L. Hughes, Lise A. A. St. Denis, Leysia Palen, Kenneth M. M. Anderson

EmergencyMessenger: A Text Based Communication Concept for Indoor Firefighting
Matthias Betz, Volker Wulf

802AB Course: C07

Card Sorting for Navigation Design
William Hudson

12:20 – 14:00
Lunch Break
Restaurants, bars & cafés available nearby

TUESDAY

701A Papers: Sensemaking and Information in Use

CHAIR: JEFFREY P. BIGHAM

Odin: Contextual Document Opinions on the Go
Joshua M. Hailpern, Bernardo A. Huberman

Monadic Exploration: Seeing the Whole through Its Parts
Marian Dörk, Rob Comber, Martyn Dade-Robertson

Photographing Information Needs: The Role of Photos in Experience Sampling Method-Style Research
Zhen Yue, Eden Litt, Carrie J. Cai, Jeff Stern, Kathy K. Baxter, Zhiwei Guan, Nikhil Sharma, Guangqiang (George) Zhang

Design Insights for the Next Wave Ontology Authoring Tools
Markel Vigo, Caroline Jay, Robert Stevens

The Role of Interactive Biclusters in Sensemaking
Maoyuan Sun, Lauren Bradel, Chris L. North, Naren Ramakrishnan

701B Lifetime Research Award: **Steve Whittaker**

CHAIR: JUDITH OLSON

Technology and Memory: From Lifelogging to Strategic Reminiscence

709 Course: C09

Conceptual Models: Core to Good Design
Jeff Johnson

711 Course: C11

Online A/B Tests & Experiments: A Practical But Scientifically Informed Introduction
Joseph Williams, Betsy Williams

713AB Course: C12

Mobile HCI
Niels Henze, Enrico Rukzio

714AB Papers: Presentation Technologies

CHAIR: SHENGDONG ZHAO

SmartVoice: A Presentation Support System for Overcoming the Language Barrier
Xiang Li, Jun Rekimoto

PitchPerfect: Integrated Rehearsal Environment for Structured Presentation Preparation
Ha Trinh, Koji Yatani, Darren Edge

DemoWiz: Re-Performing Software Demonstrations for a Live Presentation
Pei-Yu Chi, Bongshin Lee, Steven M. Drucker

TurningPoint: Narrative-Driven Presentation Planning
Larissa Pschetz, Koji Yatani, Darren Edge

715A Special Interest Group

Interaction Science SIG: Overcoming Challenges
Andrew Howes, Benjamin Cowan, Christian Janssen, Anna Cox, Paul Cairns, Anthony Hornof, Stephen Payne, Peter Pirolli

716A Panel

Opportunities and Risks of Discovering Personality Traits from Social Media
Michelle Zhou, Jeffrey Nichols, Tom Dignan, Steve Lohr, Jennifer Golbeck, James Pennebaker

716B Papers: Personal Health and Wellbeing

CHAIR: JINA HUH

Supporting Treatment of People Living with HIV / AIDS in Resource Limited Settings with IVRs
Anirudha N. Joshi, Mandar Rane, Debjani Roy, Nagraj Emmadi, Padma Srinivasan, N. Kumarasamy, Sanjay Pujari, Davidson Solomon, Rashmi Rodrigues, DG Saple, Kamalika Sen, Els Veldeman, Romain Rutten

Reflection through Design: Immigrant Women's Self-Reflection on Managing Health and Wellness
Deana S. Brown, Victoria Ayo, Rebecca E. Grinter

DDF Seeks Same: Sexual Health-Related Language in Online Personal Ads for Men who Have Sex with Men
Oliver L. Haimson, Jed R. Brubaker, Gillian R. Hayes

Support Matching and Satisfaction in an Online Breast Cancer Support Community
Tatiana A. Vlahovic, Yi-Chia Wang, Robert E. Kraut, John M. Levine

717AB Papers: Design Theory

CHAIR: STEVE HARRISON

Between Theory and Practice: Bridging Concepts in HCI Research
Peter Dalsgaard, Christian Dindler

Evolution of Design Competence in UX Practice
Colin M. Gray

Causal Interactions
Adam Darlow, Gideon Goldin, Steven Sloman

Personas is Applicable – A Study on the Use of Personas In Denmark
Lene Nielsen, Kira Storgaard Hansen

HALL G Papers: Novel Keyboards

CHAIR: KENT LYONS

GestKeyboard: Enabling Gesture-Based Interaction on Ordinary Physical Keyboard
Haimo Zhang, Yang Li

Gesture Script: Recognizing Gestures and Their Structure Using Rendering Scripts and Interactively Trained Parts
Hao Lü, James A. Fogarty, Yang Li

Type-Hover-Swipe in 96 Bytes: A Motion Sensing Mechanical Keyboard
Stuart A. Taylor, Cem Keskin, Otmar Hilliges, Shahram Izadi, John Helmes

B#: Chord-based Correction for Multitouch Braille Input
Hugo Nicolau, Kyle Montague, Tiago Guerreiro, João Guerreiro, Vicki L. Hanson

Representatively Memorable: Sampling the Right Phrase Set to Get the Text Entry Experiment Right
Luis A. Leiva, Germán Sanchis-Trilles

718AB Papers: DIY and Hacking

CHAIR: KASPER HORNBAEK

Sketching in Circuits: Designing and Building Electronics on Paper
Jie Qi, Leah Buechley

Do-It-Yourself Cellphones: An Investigation into the Possibilities and Limits of High-Tech DIY
David A. Mellis, Leah Buechley

3D Printed Interactive Speakers
Yoshio Ishiguro, Ivan Poupyrev

Circuit Stickers: Peel-and-Stick Construction of Interactive Electronic Prototypes
Steve Hodges, Nicolas Villar, Nicholas Chen, Tushar Chugh, Jie Qi, Diana Nowacka, Yoshihiro Kawahara

801A Papers: User Models and Prediction

CHAIR: DUNCAN P. BRUMBY

Modeling the Perception of User Performance
Max Nicosia, Antti Oulasvirta, Per Ola Kristensson

Edit Distance Modulo Bisimulation: A Quantitative Measure to Study Evolution of User Models
Himanshu Zade, Santosh Arvind Adimoolam, Sai Gollapudi, Anind K. Dey, Venkatesh Choppella

The Law of Unintended Consequences: The Case of External Subgoal Support
J. G. Trafton, Raj M. Ratwani

Causality – A Conceptual Model of Interaction History
Mathieu Nancel, Andy Cockburn

801B Papers: Engage and Educate Children

CHAIR: JULIE A. KIENTZ

Conversing with Children: Cartoon and Video People Elicit Similar Conversational Behaviors
Jennifer Hyde, Sara Kiesler, Jessica K. Hodgins, Elizabeth J. Carter

Involving Children in Content Control: A Collaborative and Education-Oriented Content Filtering Approach
Yasmeen Hashish, Andrea Bunt, James E. Young

What Did Spot Hide?: A Question-Answering Game for Preschool Children
Anuj Tewari, John Canny

Rafigh: A Living Media Interface for Speech Intervention
Foad Hamidi, Melanie Baljko

A Comparative Study about Children's and Adults' Perception of Targeted Web Search Engines
Tatiana Gossen, Juliane Höbel, Andreas Nürnberger

802AB Course: C10

Computer Vision in Interaction and UX
Jim Parker

WIP Posters Rotation I — *Exhibit Hall E* — List on page 58

- Accessibility
- Making
- Gaming
- Health Care
- Search & Infoviz
- Children & Teens
- Augmented Reality
- Gestures & Eye-based Interactions
- Notifications, Awareness & Distractions
- Interaction Techniques

Student Research Competition — *Exhibit Hall E* — List on page 54

Student Design Competition — *Exhibit Hall E* — List on page 55

15:20 – 16:00
Coffee Break
Exhibit Hall E

701A Papers: Studying Visualization

CHAIR: PIERRE DRAGICEVIC

Structuring the Space: A Study on Enriching Node-Link Diagrams with Visual References
Basak E. Alper, Nathalie Henry Riche, Tobias Hollerer

Highlighting Interventions and User Differences: Informing Adaptive Information Visualization Support
Giuseppe Carenini, Cristina Conati, Enamul Hoque, Ben Steichen, Dereck J. Toker, James T. Enns

Evaluating a Tool for Improving Accessibility to Charts and Graphs
Leonardo Ferres, Gitte Lindgaard, Livia Sumegi, Bruce H. Tsuji

Understand Users' Comprehension and Preferences for Composing Information Visualizations
Huahai Yang, Yunyao Li, Michelle Zhou

701B Papers: Exploring Exergames

CHAIR: DARREN EDGE

Exertion in the Small: Improving Differentiation and Expressiveness in Sports Games with Physical Controls
Mike Sheinin, Carl Gutwin

"Healthifying" Exergames: Improving Health Outcomes through Intentional Priming
Frank X. Chen, Abby C. King, Eric B. Hekler

Human Factors of Speed-based Exergame Controllers
Taiwoo Park, Uichin Lee, Scott MacKenzie, Miri Moon, Inseok Hwang, Junehwa Song

Establishing Design Guidelines in Interactive Exercise Gaming: Preliminary Data from Two Posing Studies
Monica Zaczynski, Anthony D. Whitehead

709 Course: C09

Conceptual Models: Core to Good Design
Jeff Johnson

711 Course: C11

Online A/B Tests & Experiments: A Practical but Scientifically Informed Introduction
Joseph Williams, Betsy Williams

713AB Course: C12

Mobile HCI
Niels Henze, Enrico Rukzio

714AB Papers: Narratives and Storytelling

CHAIR: AISLING KELLIHER

The Department of Hidden Stories: Playful Digital Storytelling for Children in a Public Library
Gavin Wood, John Vines, Madeline Balaam, Nick Taylor, Thomas Smith, Clara Crivellaro, Juliana Mensah, Helen Limon, John Challis, Linda Anderson, Adam Clarke, Peter C. Wright

Sharing Stories "in the Wild": A Mobile Storytelling Case Study Using StoryKit
Elizabeth M. Bonsignore, Alexander J. Quinn, Allison Druin, Benjamin B. Bederson

Visualizing Interactive Narratives: Employing a Branching Comic to Tell a Story and Show its Readings
Daniel Andrews, Chris Baber

FOCUS: Enhancing Children's Engagement in Reading by Using Contextual BCI Training Sessions
Jin Huang, Chun Yu, Yuntao Wang, Yuhang Zhao, Siqi Liu, Chou Mo, Jie Liu, Lie Zhang, Yuanchun Shi

Sensing a Live Audience
Chen Wang, Erik N. Geelhoed, Phil P. Stenton, Pablo Cesar

715A Special Interest Group

Jogging with Technology: Interaction Design Supporting Sport Activities
Florian Mueller, Joe Marshall, Rohit Khot, Stina Nylander, Jakob Tholander

716B Papers: Designing for Older Adults & Demographic Change

CHAIR: VICKI L. HANSON

Interface Design for Older Adults with Varying Cultural Attitudes toward Uncertainty
Shathel Haddad, Joanna McGrenere, Claudia Jacova

Age Differences in Credibility Judgments of Online Health Information
Q. Vera Liao, Wai-Tat Fu

Social Dependency and Mobile Autonomy – Supporting Older Adults' Mobility with Ridesharing ICT
Johanna Meurer, Martin Stein, David W. Randall, Markus Rohde, Volker Wulf

From Checking On to Checking In: Designing for Low Socio-Economic Status Older Adults
Ingrid Arreola, Zan Morris, Matthew Francisco, Kay Connelly, Kelly Caine, Ginger White

Invisible Connections: Investigating Older People's Emotions and Social Relations Around Objects
Kate L. Vaisutis, Margot Brereton, Toni Robertson, Frank Vetere, Jeannette Durick, Bjorn Nansen, Laurie Buys

17:30 – 19:30	Job Fair & Recruiting Board	*Exhibit Hall E*
17:30 – 19:00	Video Showcase & Golden Mouse Award	*Room 718AB*

717AB Papers: Critical Design

CHAIR: ANDREA G. PARKER

Always Somewhere, Never There: Using Critical Design to Understand Database Interactions
Melanie Feinberg, Daniel Carter, Julia Bullard

Reading Critical Designs: Supporting Reasoned Interpretations of Critical Design
Jeffrey Bardzell, Shaowen Bardzell, Erik Stolterman

Designing for Slowness, Anticipation and Re-visitation: A Long Term Field Study of the Photobox
William T. Odom, Abigail J. Sellen, Richard Banks, David S. Kirk, Tim Regan, Mark Selby, Jodi L. Forlizzi, John Zimmerman

Generating Implications for Design through Design Research
Corina Sas, Steve Whittaker, Steven P. Dow, Jodi L. Forlizzi, John Zimmerman

HALL G Papers: Understanding and Modeling Touch

CHAIR: DANIEL VOGEL

Investigating the Effects of Encumbrance on One- and Two-Handed Interactions with Mobile Devices
Alexander Ng, Stephen A. Brewster, John H. Williamson

Modeling the Functional Area of the Thumb on Mobile Touchscreen Surfaces
Joanna Bergstrom-Lehtovirta, Antti Oulasvirta

Coordination of Tilt and Touch in One- and Two-Handed Use
Theophanis Tsandilas, Caroline Appert, Anastasia Bezerianos, David Bonnet

28 Frames Later: Predicting Screen Touches from Back-of-Device Grip Changes
Mohammad Faizuddin Mohd Noor, Andrew Ramsay, Stephen Hughes, Simon Rogers, John Williamson, Roderick Murray-Smith

Probabilistic Palm Rejection Using Spatiotemporal Touch Features and Iterative Classification
Julia Schwarz, Robert Xiao, Jennifer Mankoff, Scott E. Hudson, Chris Harrison

Orientation Matters: Efficiency of Translation-Rotation Multitouch tasks
Quan Nguyen, Michael Kipp

718AB Papers: 3D Interaction: Modeling and Prototyping

CHAIR: WOLFGANG STUERZLINGER

MotionMontage: A System to Annotate and Combine Motion Takes for 3D Animations
Ankit Gupta, Maneesh Agrawala, Brian Curless, Michael Cohen

History Assisted View Authoring for 3D Models
Hsiang-Ting Chen, Tovi Grossman, Li-Yi Wei, Ryan M. Schmidt, Björn Hartmann, George Fitzmaurice, Maneesh Agrawala

FrameBox and MirrorBox: Tools and Guidelines to Support Designers in Prototyping Interfaces for 3D Displays
Nora Broy, Stefan Schneegass, Florian Alt, Albrecht Schmidt

Direct Drawing on 3D Shapes with Automated Camera Control
Michael Ortega, Thomas Vincent

Interactively Stylizing Camera Motion
Neel S. Joshi, Dan Morris, Michael F. Cohen

801A Papers: The Eyes Have It

CHAIR: JÜRGEN STEIMLE

Stimulating a Blink: Reduction of Eye Fatigue with Visual Stimulus
Tarik Crnovrsanin, Yang Wang, Kwan-Liu Ma

Smart Photo Selection: Interpret Gaze as Personal Interest
Tina C. Walber, Ansgar Scherp, Steffen Staab

Pupil Responses during Discrete Goal-directed Movements
Xianta Jiang, M. Stella Atkins, Geoffrey C. Tien, Roman Bednarik, Bin Zheng

Collocating Interface Objects: Zooming into Maps
Jon May, Tim Gamble

801B Papers: Learning and Education

CHAIR: DEBORAH TATAR

Showing Face in Video Instruction: Effects on Information Retention, Visual Attention, and Affect
René F. Kizilcec, Kathryn Papadopoulos, Lalida Sritanyaratana

Supporting Learners in Collecting and Exploring Data from Immersive Simulations in Collective Inquiry
Michelle Lui, Alex C. Kuhn, Alisa Acosta, Chris Quintana, James D. Slotta

Learning to See the Body: Supporting Instructional Practices in Laparoscopic Surgical Procedures
Helena M. Mentis, Amine Chellali, Steven D. Schwaitzberg

Information-Building Applications: Designing for Data Exploration and Analysis by Elementary School Students
Tia R. Shelley, Leilah B. Lyons, Tom Moher, Chandan Dasgupta, Brenda Lopez Silva, Alexandra Silva

802AB Course: C10

Computer Vision in Interaction and UX
Jim Parker

7:00 – 8:20 Video Previews *Exhibit Hall G*

8:30 – 8:50 *Exhibit Hall G*

Provoke! Wisdom! Impact! Plenary – A CHI Story - Past, Present, and the Next Chapters

Scooter Morris, *University of California, San Francisco*

701A Papers: Telepresence and Connecting over Video

CHAIR: KORI M. INKPEN

Remote Handshaking: Touch Enhances Video-Mediated Social Telepresence
Hideyuki Nakanishi, Kazuaki Tanaka, Yuya Wada

Bodies in Motion: Mobility, Presence, and Task Awareness in Telepresence
Irene Rae, Bilge Mutlu, Leila A. Takayama

Exploring Video Streaming in Public Settings: Shared Geocaching Over Distance Using Mobile Video Chat
Jason Procyk, Carman Neustaedter, Carolyn Pang, Anthony Tang, Tejinder K. Judge

A Gaze-preserving Situated Multiview Telepresence System
Ye Pan, Anthony Steed

OneSpace: Shared Visual Scenes for Active Freeplay
Maayan Cohen, Kody R. Dillman, Haley MacLeod, Seth Hunter, Anthony Tang

701B Papers: Exergame Design

CHAIR: SEAN MUNSON

i-dentity: Innominate Movement Representation as Engaging Game Element
Jayden Garner, Gavin Wood, Sebastiaan Pijnappel, Martin Murer, Florian Mueller

Movement-Based Game Guidelines
Florian Mueller, Katherine Isbister

Effects of Balancing for Physical Abilities on Player Performance, Experience and Self-Esteem in Exergames
Kathrin M. Gerling, Matthew Miller, Regan L. Mandryk, Max V. Birk, Jan D. Smeddinck

Supporting the Creative Game Design Process with Exertion Cards
Florian Mueller, Martin R. Gibbs, Frank Vetere, Darren Edge

709 Course: C15

Rapid Design Labs—A Tool to Turbocharge Design-Led Innovation
Jim Nieters, Carola Fellenz Thompson

711 Course: C13

Agile User Experience and UCD
William Hudson

713AB Course: CHInd-D

How Social Media Design Shapes Society

Judith Donath

714AB Papers: Designing and Modeling GUIs

CHAIR: MICHAEL NEBELING

WADE: Simplified GUI Add-on Development for Third-party Software
Xiaojun Meng, Shengdong Zhao, Yongfeng Huang, Zhongyuan Zhang, James Eagan, Ramanathan Subramanian

Pixel-Based Methods for Widget State and Style in a Runtime Implementation of Sliding Widgets
Morgan E. Dixon, Gierad Laput, James A. Fogarty

The Usability of CommandMaps in Realistic Tasks
Joey Scarr, Andy Cockburn, Carl Gutwin, Andrea Bunt, Jared E. Cechanowicz

Novice Use of a Predictive Human Performance Modeling Tool to Produce UI Recommendations
Kyung Wha Hong, Robert St. Amant

On the Selection of 2D Objects Using External Labeling
Jan Balata, Ladislav Cmolik, Zdenek Mikovec

716A Special Interest Group

Child Computer Interaction SIG: Towards Sustainable Thinking and Being
Janet Read, Juan Pablo Hourcade, Panos Markopoulos, Ole Iversen

716B Papers: Health and Everyday Life

CHAIR: MARIA K. WOLTERS

Real-time Feedback for Improving Medication Taking
Matthew L. Lee, Anind K. Dey

Don't Forget Your Pill! Designing Effective Medication Reminder Apps That Support Users' Daily Routines
Katarzyna Stawarz, Anna L. Cox, Ann E. Blandford

@BabySteps: Design and Evaluation of a System for using Twitter for Tracking Children's Developmental Milestones
Hyewon Suh, John R. Porter, Alexis Hiniker, Julie A. Kientz

DoDo Game, a Color Vision Deficiency Screening Test for Young Children
Linh Chi Nguyen, Ellen Yi-Luen Do, Audrey Chia, Yuan Wang, Henry Been-Lirn Duh

The Influence of Emotion on Number Entry Errors
Paul Cairns, Pratyush Pandab, Christopher D. Power

717AB alt.chi: Navel Gazing

CHAIR: LILLY IRANI

Reflections on a Synergistic Format for Disseminating Research Through Design
Jayne Wallace, Joyce Yee, Abigail Durrant

Quantification in Alt.Chi Open Review: Liking and Ticking on a Likert Scale
Răzvan Rughiniş, Cosima Rughiniş, Alina Petra Marinescu Nenciu

QnDReview: Read 100 CHI Papers in 7 Hours
Ji Soo Yi

Hot Topics in CHI: Trend Maps for Visualising Research
Stefano Padilla, Thomas S. Methven, David W. Corne, Mike J. Chantler

HALL G Papers: Text Entry and Evaluation

CHAIR: ANTTI OULASVIRTA

Both Complete and Correct? Multi-Objective Optimization of Touchscreen Keyboard
Xiaojun Bi, Tom Y. Ouyang, Shumin Zhai

Disambiguation of Imprecise Input with One-dimensional Rotational Text Entry
Will Walmsley, W. Xavier Snelgrove, Khai N. Truong

Complementing Text Entry Evaluations with a Composition Task
Keith Vertanen, Per Ola Kristensson

Uncertain Text Entry on Mobile Devices
Daryl Weir, Henning Pohl, Simon Rogers, Keith Vertanen, Per Ola Kristensson

718AB Papers: Emotions and Mobiles

CHAIR: ANTONIO KRUEGER

Mobile Attachment - Causes and Consequences for Emotional Bonding with Mobile Phones
Alexander Meschtscherjakov, David Wilfinger, Manfred Tscheligi

Hooked on Smartphones: An Exploratory Study on Smartphone Overuse among College Students
Uichin Lee, Joonwon Lee, Minsam Ko, Changhun Lee, Yuhwan Kim, Subin Yang, Koji Yatani, Gahgene Gweon, Kyong-Mee Chung, Junehwa Song

Influence of Personality on Satisfaction with Mobile Phone Services
Rodrigo de Oliveira, Mauro Cherubini, Nuria Oliver

Broken Display = Broken Interface? The Impact of Display Damage on Smartphone Interaction
Florian Schaub, Julian Seifert, Frank D. Honold, Michael Müller, Enrico Rukzio, Michael Weber

801A Papers: Privacy

CHAIR: SAMEER PATIL

Leakiness and Creepiness in App Space: Perceptions of Privacy and Mobile App Use
Irina A. Shklovski, Scott D. Mainwaring, Halla H. Skúladóttir, Höskuldur Borgthorsson

Personalisation and Privacy in Future Pervasive Display Networks
Nigel Davies, Marc Langheinrich, Sarah Clinch, Ivan Elhart, Adrian Friday, Thomas Kubitza, Bholanathsingh Surajbali

A Field Trial of Privacy Nudges for Facebook
Yang Wang, Pedro G. Leon, Alessandro Acquisti, Lorrie F. Cranor, Alain Forget, Norman Sadeh

In Situ with Bystanders of Augmented Reality Glasses: Perspectives on Recording and Privacy-Mediating Technologies
Tamara Denning, Zakariya Dehlawi, Tadayoshi Kohno

801B Papers: Issues That Matter

CHAIR: ROB COMBER

Listening to the Forest and its Curators: Lessons Learnt from a Bioacoustic Smartphone Application Deployment
Stuart Moran, Nadia Pantidi, Tom Rodden, Alan Chamberlain, Chloe Griffiths, Davide Zilli, Geoff Merrett, Alex Rogers

Making Public Things: How HCI Design Can Express Matters of Concern
Carl DiSalvo, Jonathan Lukens, Thomas J. Lodato, Tom Jenkins, Tanyoung Kim

A Sustainable Design Fiction: Green Practices
Ron Wakkary, Audrey Desjardins, Sabrina Hauser, Leah A. Maestri

Just Awful Enough – The Functional Dysfunction of the Something Awful Forums
Jessica A. Pater, Yacin Nadji, Elizabeth D. Mynatt, Amy S. Bruckman

802AB Course: C14

HCI Meets Data Mining: Principles and Tools for Big Data Analytics
Duen Horng (Polo) Chau

WEDNESDAY

10:20 – 11:00
Coffee Break
Exhibit Hall E

10:00 – 14:00	Student Game Competition	*Exhibit Hall E*	List on page 55
10:20 – 11:00	WIP Posters Rotation 2	*Exhibit Hall E*	List on page 61

701A Papers: Understanding and Using Social Media

CHAIR: PATRICK GAGE KELLEY

Everyday Ideation: All of My Ideas Are On Pinterest
Rhema Linder, Clair Snodgrass, Andruid Kerne

Understanding User Adaptation Strategies for the Launching of Facebook Timeline
Pamela J. Wisniewski, Heng Xu, Yunan Chen

Curation through Use: Understanding the Personal Value of Social Media
Xuan Zhao, Siân E. Lindley

Together Alone: Motivations for Live-Tweeting a Television Series
Steven Schirra, Huan Sun, Frank R. Bentley

701B Papers: Working Together

CHAIR: DOMINIC FURNISS

Documentscape: Intertextuality, Sequentiality, & Autonomy at Work
Lars Rune Christensen, Pernille Bjorn

Cloudy Forecast: An Exploration of the Factors Underlying Shared Repository Use
Charlotte Massey, Thomas Lennig, Steve Whittaker

TaskGenies: Automatically Providing Action Plans Helps People Complete Tasks
Nicolas Kokkalis, Thomas Köhn, Johannes Huebner, Moontae Lee, Florian Schulze, Scott R. Klemmer

Designing Information Savvy Societies: An Introduction to Assessability
Andrea Forte, Nazanin Andalibi, Thomas H. Park, Heather Willever-Farr

709 Course: C15

Rapid Design Labs—A Tool to Turbocharge Design-Led Innovation
Jim Nieters, Carola Fellenz Thompson

711 Course: C13

Agile User Experience and UCD
William Hudson

713AB Course: CHInd-E

Designing for Seniors
Ronald Baecker

714AB Papers: Programming and Development Tools

CHAIR: FANNY CHEVALIER

Addressing Misconceptions About Code with Always-On Programming Visualizations
Tom Lieber, Joel R. Brandt, Rob C. Miller

Emergent, Crowd-scale Programming Practice in the IDE
Ethan Fast, Daniel Steffee, Lucy Wang, Joel R. Brandt, Michael S. Bernstein

Design Considerations for Parallel Performance Tools
Roman Atachiants, David Gregg, Kim Jarvis, Gavin Doherty

The Patchworks Code Editor: Toward Faster Navigation with Less Code Arranging and Fewer Navigation Mistakes
Austin Z. Henley, Scott D. Fleming

715A Special Interest Group

The Usability of Text Entry Systems Now and in the Future
James Clawson, Stephen Brewster, Mark Dunlop, Per Ola Kristensson, Poika Isokoski, Antti Oulasvirta, Keith Vertanen, Annalu Waller

716A Panel

Making Cultures: Empowerment, Participation, and Democracy – or Not?
Morgan Ames, Jeffrey Bardzell, Shaowen Bardzell, Silvia Lindtner, David Mellis, Daniela Rosner

716B Papers: Interactive Technologies for Rehabilitation

CHAIR: XIAOMU ZHOU

Novel Knee Rehabilitation System for the Home
Mobolaji Ayoade, Lynne Baillie

GaitAssist: A Daily-life Support and Training System for Parkinson's Disease Patients with Freezing of Gait
Sinziana Mazilu, Ulf Blanke, Michael Hardegger, Gerhard Tröster, Eran Gazit, Jeffrey M. Hausdorff

A Technology Probe of Wearable In-Home Computer-Assisted Physical Therapy
Kevin Huang, Patrick J. Sparto, Sara Kiesler, Asim Smailagic, Jennifer Mankoff, Dan Siewiorek

Exploring the Acceptability of Google Glass as an Everyday Assistive Device for People with Parkinson's
Roisin C. McNaney, John Vines, Daniel Roggen, Madeline Balaam, Pengfei Zhang, Ivan Poliakov, Patrick Olivier

Non-Intrusive Tongue Machine Interface
Qiao Zhang, Shyamnath Gollakota, Ben Taskar, Raj P. Rao

717AB Special: Student Research Competition

CHAIR: CELINE LATULIPE, FLOYD MULLER

The CHI 2014 Student Research Competition (SRC) is a branch of the ACM Student Research Competition. It is a forum for undergraduate and graduate students to showcase their research, exchange ideas, and improve their communication skills.

HALL G Papers: Shape-Changing Interfaces

CHAIR: ABHIJIT KARNIK

Causing Commotion with a Shape-changing Bench - Experiencing Shape-Changing Interfaces in Use
Erik Grönvall, Sofie Kinch, Marianne Graves Petersen, Majken Kirkegaard Rasmussen

Paddle: Highly Deformable Mobile Devices with Physical Controls
Raf Ramakers, Johannes Schöning, Kris Luyten

Is my Phone Alive? A Large-Scale Study of Shape Change in Handheld Devices Using Videos
Esben W. Pedersen, Sriram Subramanian, Kasper Hornbæk

Evaluating the Effectiveness of Physical Shape-Change for In-pocket Mobile Device Notifications
Panteleimon Dimitriadis, Jason Alexander

Changibles: Analyzing and Designing Shape Changing Constructive Assembly
Anne Roudaut, Rebecca Reed, Tianbo Hao, Sriram Subramanian

718AB Papers: Touch Input

CHAIR: DANIEL J. WIGDOR

Expanding Touch Input Vocabulary by Using Consecutive Distant Taps
Seongkook Heo, Jiseong Gu, Geehyuk Lee

LinearDragger: A Linear Selector for Target Acquisition on Touch Screens
Oscar Kin-Chung Au, Xiaojun Su, Rynson W. Lau

Faster Command Selection on Tablets with FastTap
Carl Gutwin, Andy Cockburn, Joey Scarr, Sylvain Malacria, Scott C. Olson

Crossing-Based Selection with Direct Touch Input
Yuexing Luo, Daniel Vogel

801A Papers: Risks and Security

CHAIR: ALEXANDER DE LUCA

Easy Does It: More Usable CAPTCHAs
Elie Bursztein, Angelique Moscicki, Celine Fabry, Steven Bethard, John C. Mitchell, Dan Jurafsky

Using Personal Examples to Improve Risk Communication for Security and Privacy Decisions
Marian Harbach, Markus Hettig, Susanne Weber, Matthew Smith

"My Religious Aunt Asked Why I Was Trying to Sell Her Viagra": Experiences with Account Hijacking
Richard Shay, Iulia Ion, Robert W. Reeder, Sunny Consolvo

Experimenting at Scale with Google Chrome's SSL Warning
Adrienne P. Felt, Robert W. Reeder, Hazim Almuhimedi, Sunny Consolvo

Betrayed By Updates: How Negative Experiences Affect Future Security
Kami E. Vaniea, Emilee Rader, Rick Wash

801B Papers: CHI for Social Development

CHAIR: BAN AL-ANI

Understanding Sustained Community Engagement: A Case Study in Heritage Preservation in Rural Argentina
Mara Balestrini, Jon Bird, Paul Marshall, Alberto Zaro, Yvonne Rogers

Human Values in Curating a Human Rights Media Archive
Abigail C. Durrant, David S. Kirk, Stuart Reeves

Protibadi: A Platform for Fighting Sexual Harassment in Urban Bangladesh
Syed Ishtiaque Ahmed, Steven J. Jackson, Nova Ahmed, Hasan Shahid Ferdous, Md. Rashidujjaman Rifat, A.S.M Rizvi, Shamir Ahmed, Rifat Sabbir Mansur

How Technology Supports Family Communication in Rural, Suburban, and Urban Kenya
Erick Oduor, Carman Neustaedter, Tejinder K. Judge, Kate Hennessy, Carolyn Pang, Serena Hillman

802AB Course: C14

HCI Meets Data Mining: Principles and Tools for Big Data Analytics
Duen Horng (Polo) Chau

WEDNESDAY

12:20 – 14:00
Lunch Break
Restaurants, bars & cafés available nearby

12:20 – 14:00 SIGCHI Town Hall Lunch *Room 718AB*

701A Papers: Question and Answer Systems

CHAIR: JEFFREY NICHOLS

Towards Crowd-based Customer Service: A Mixed-Initiative Tool for Managing Q&A Sites
Tiziano Piccardi, Gregorio Convertino, Massimo Zancanaro, Ji Wang, Cedric Archambeau

Estimating the Social Costs of Friendsourcing
Jeffrey M. Rzeszotarski, Meredith R. Morris

Expert Voices in Echo Chambers: Effects of Source Expertise Indicators on Exposure to Diverse Opinions
Q. Vera Liao, Wai-Tat Fu

Is Anyone Out There? Unpacking Q&A Hashtags on Twitter
Jeffrey M. Rzeszotarski, Emma S. Spiro, Jorge N. Matias, Andrés Monroy-Hernández, Meredith R. Morris

What If We Ask A Different Question?: Social Inferences Create Product Ratings Faster
Eric Gilbert

701B Special: Lifetime Practice Award: **Gillian Crampton Smith**

CHAIR: DON NORMAN

Design: No Longer an Optional Extra

709 Course: C16

Introduction to Designing and Building Musical Interfaces
Michael Lyons, Axel Mulder, Sidney Fels

711 Course: C18

Including Children in Technology Design Processes: Techniques and Practices
Allison Druin, Jerry Fails, Mona Leigh Guha

713AB Course: C19

Interaction Design for Online Video and Television
David Geerts, Pablo Cesar

714AB Papers: Cross-Device Interaction

CHAIR: FABIO PATERNÒ

Smarties: An Input System for Wall Display Development
Olivier Chapuis, Anastasia Bezerianos, Stelios Frantzeskakis

Conductor: Enabling and Understanding Cross-Device Interaction
Peter Hamilton, Daniel J. Wigdor

Panelrama: Enabling Easy Specification of Cross-Device Web Applications
Jishuo Yang, Daniel J. Wigdor

Interactive Development of Cross-Device User Interfaces
Michael Nebeling, Theano Mintsi, Maria Husmann, Moira Norrie

715A Special Interest Group

Community Centered Collaborative HCI Design / Research in Developing Countries
Anicia Peters, Heike Winschiers-Theophilus, Nicola Bidwell, Arun Kumar, Daniel Ochieng, Fatoumata Camara, Susan Dray

716A Panel

CROWDFUNDING: An Emerging Field of Research
Elizabeth Gerber, Michael Muller, Rick Wash, Lilly Irani, Amanda Williams, Elizabeth Churchill

716B Papers: Exergaming for Health and Fitness

CHAIR: DAN MORRIS

Motivating People with Chronic Pain to do Physical Activity: Opportunities for Technology Design
Aneesha Singh, Annina Klapper, Jinni Jia, Antonio Rei Fidalgo, Ana Tajadura-Jiménez, Natalie Kanakam, Nadia B. Bianchi-Berthouze, Amanda Williams

Investigating the Long-Term Use of Exergames in the Home with Elderly Fallers
Stephen Uzor, Lynne Baillie

StepStream: A School-based Pervasive Social Fitness System for Everyday Adolescent Health
Andrew D. Miller, Elizabeth D. Mynatt

Social Fabric Fitness: The Design and Evaluation of Wearable E-Textile Displays to Support Group Running
Matthew Mauriello, Michael Gubbels, Jon E. Froehlich

717AB Special: Student Design Competition

CHAIR: THECLA SCHIPHORST, YOUN-KYUNG LIM

The CHI 2014 Student Design Competition (SDC) challenges students to design an object, interface, system, or service related to bodydata: the qualities of the quantified self.

HALL G Papers: Sensory Experiences: Smell and Taste

CHAIR: JETTIE HOONHOUT

Opportunities for Odor: Experiences with Smell and Implications for Technology
Marianna Obrist, Alexandre N. Tuch, Kasper Hornbaek

Temporal, Affective, and Embodied Characteristics of Taste Experiences: A Framework for Design
Marianna Obrist, Rob Comber, Sriram Subramanian, Betina Piqueras-Fiszman, Carlos Velasco, Charles Spence

SensaBubble: A Chrono-Sensory Mid-Air Display of Sight and Smell
Sue Ann Seah, Diego Martinez Plasencia, Peter D. Bennett, Abhijit Karnik, Vlad S. Otrocol, Jarrod Knibbe, Andy Cockburn, Sriram Subramanian

Food Messaging: Using Edible Medium for Social Messaging
Jun Wei, Xiaojuan Ma, Shengdong Zhao

718AB Papers: Multitouch Interaction

CHAIR: SEBASTIAN BORING

Multi-finger Chords for Hand-held Tablets: Recognizable and Memorable
Julie Wagner, Eric Lecolinet, Ted Selker

Prospective Motor Control on Tabletops: Planning Grasp for Multitouch Interaction
Halla B. Olafsdottir, Theophanis Tsandilas, Caroline Appert

Quantitative Measurement of Virtual vs. Physical Object Embodiment through Kinesthetic Figural After Effects
Ayman Alzayat, Mark Hancock, Miguel Nacenta

TouchTools: Leveraging Familiarity and Skill with Physical Tools to Augment Touch Interaction
Chris Harrison, Robert Xiao, Julia Schwarz, Scott E. Hudson

801A Papers: Authentication and Passwords

CHAIR: SERGE EGELMAN

Passhint: Memorable and Secure Authentication
Soumyadeb Chowdhury, Ron Poet, Lewis Mackenzie

Can Long Passwords be Secure and Usable?
Richard Shay, Saranga Komanduri, Adam L. Durity, Phillip (Seyoung) Huh, Michelle L. Mazurek, Sean M. Segreti, Blase Ur, Lujo Bauer, Nicolas Christin, Lorrie F. Cranor

Now You See Me, Now You Don't - Protecting Smartphone Authentication from Shoulder Surfers
Alexander De Luca, Marian Harbach, Emanuel von Zezschwitz, Max-Emanuel Maurer, Bernhard E. Slawik, Heinrich Hussmann, Matthew Smith

The Presentation Effect on Graphical Passwords
Julie Thorpe, Muath Al-Badawi, Brent MacRae, Amirali Salehi-Abari

An Implicit Author Verification System for Text Messages Based on Gesture Typing Biometrics
Ulrich Burgbacher, Klaus H. Hinrichs

801B Papers: Policies and Practice: Doing the Right Thing

CHAIR: VOLKER WULF

Collapse Informatics and Practice: Theory, Method, and Design
Bill Tomlinson, Eli Blevis, Bonnie Nardi, Donald J. Patterson, M. Six Silberman, Yue Pan

HCI as a Means to Prosociality in the Economy
John Harvey, David Golightly, Andrew Smith

Towards a Closer Dialogue between Policy and Practice: Responsible Design in HCI
Barbara Grimpe, Mark Hartswood, Marina Jirotka

Towards Community-Centered Support for Peer-to-Peer Service Exchange: Rethinking the Timebanking Metaphor
Victoria M. Bellotti, Sara Cambridge, Karen Hoy, Patrick C. Shih, Lisa R. Handalian, Kyungsik Han, John M. Carroll

802AB Course: C17

Make This! Introduction to Electronics Prototyping Using Arduino
David Sirkin, Wendy Ju

WEDNESDAY

WIP Posters Rotation 2 — *Exhibit Hall E* — List on page 61

- E-commerce
- Communities
- Displays
- Learning
- Lifestyle
- Users and UI Design
- Ubicomp, robots & wearables
- Mobile Interactions
- Trust, Privacy & Emotions
- Social Computing

Student Research Competition — *Exhibit Hall E* — List on page 54

Student Design Competition — *Exhibit Hall E* — List on page 55

15:20 – 16:00
Coffee Break
Exhibit Hall E

701A Papers: Journalism and Social News

CHAIR: COYE CHESHIRE

Designing for Dabblers and Deterring Drop-Outs in Citizen Science
Alexandra Eveleigh, Charlene I. Jennett, Ann E. Blandford, Philip Brohan, Anna L. Cox

Utilising Insight Journalism for Community Technology Design
Nick Taylor, David M. Frohlich, Paul Egglestone, Justin Marshall, Jon Rogers, Alicia Blum-Ross, John Mills, Mike Shorter, Patrick Olivier

NewsViews: An Automated Pipeline for Creating Custom Geovisualizations for News
Tong Gao, Jessica R. Hullman, Eytan Adar, Brent Hecht, Nicholas Diakopoulos

Finding "Real People": Trust and Diversity in the Interface Between Professional and Citizen Journalists
Andrew T. Garbett, Rob Comber, Paul Egglestone, Maxine Glancy, Patrick Olivier

701B Papers: Interruptions and Distractions

CHAIR: JASON ALEXANDER

Bored Mondays and Focused Afternoons: The Rhythm of Attention and Online Activity in the Workplace
Gloria Mark, Shamsi T. Iqbal, Mary P. Czerwinski, Paul R. Johns

CRISP - An Interruption Management Algorithm based on Collaborative Filtering
Tammar Shrot, Avi Rosenfeld, Jennifer Golbeck, Sarit Kraus

Interrupted by a Phone Call: Exploring Designs for Lowering the Impact of Call Notifications for Smartphone Users
Matthias Böhmer, Christian Lander, Sven Gehring, Duncan P. Brumby, Antonio Krüger

Large-Scale Assessment of Mobile Notifications
Alireza Sahami Shirazi, Niels Henze, Tilman Dingler, Martin Pielot, Dominik Weber, Albrecht Schmidt

709 Course: C16

Introduction to Designing and Building Musical Interfaces
Michael Lyons, Axel Mulder, Sidney Fels

711 Course: C18

Including Children in Technology Design Processes: Techniques and Practices
Allison Druin, Jerry Fails, Mona Leigh Guha

713AB Course: C19

Interaction Design for Online Video and Television
David Geerts, Pablo Cesar

714AB Papers: Decisions, Recommendations, and Machine Learning

CHAIR: JON E. FROEHLICH

Customization Bias in Decision Support Systems
Jacob Solomon

Structured Labeling for Facilitating Concept Evolution in Machine Learning
Todd Kulesza, Saleema Amershi, Rich Caruana, Danyel Fisher, Denis Charles

Choice-Based Preference Elicitation for Collaborative Filtering Recommender Systems
Benedikt Loepp, Tim Hussein, Juergen Ziegler

Finding Dependencies Between Actions Using the Crowd
Walter S. Lasecki, Leon Weingard, George Ferguson, Jeffrey P. Bigham

Scalable Multi-label Annotation
Jia Deng, Olga Russakovsky, Jonathan Krause, Michael S. Bernstein, Alex Berg, Li Fei-Fei

715A Special Interest Group

Interactions Magazine
Ron Wakkary, Erik Stolterman

716A Panel

The Meaning of Design in Healthcare: Industry, Academia, Visual Design, Clinician, Patient and HF Consultant Perspectives
Svetlena Taneva, Waxberg Sara, Goss Julian, Rossos Peter, Nicholas Emily, Cafazzo Joseph

716B Papers: Accessibility

CHAIR: HIRONOBU TAKAGI

Wearables and Chairables: Inclusive Design of Mobile Input and Output Techniques for Power Wheelchair Users
Patrick A. Carrington, Amy Hurst, Shaun K. Kane

The Last Meter: Blind Visual Guidance to a Target
Roberto Manduchi, James M. Coughlan

Current and Future Mobile and Wearable Device Use by People With Visual Impairments
Hanlu Ye, Meethu Malu, Uran Oh, Leah Findlater

Visually Impaired Users on an Online Social Network
Shaomei Wu, Lada A. Adamic

717AB Special: Student Game Competition

CHAIR: SETH COOPER, ALESSANDRO CANOSSA

The CHI 2014 Student Game Competition (SGC) provides an opportunity for students from a variety of backgrounds (HCI, computer science, game design, fine arts) to participate in CHI and demonstrate their game design and development skills in an international competition.

HALL G Papers: Tangible Interactions and Technologies

CHAIR: ERIN T. SOLOVEY

Let's Jam the Reactable: Peer Learning during Musical Improvisation with a Tabletop Tangible Interface
Anna Xambó, Eva Hornecker, Paul Marshall, Sergi Jordà, Chris Dobbyn, Robin Laney

Kickables: Tangibles for Feet
Dominik Schmidt, Raf Ramakers, Esben W. Pedersen, Johannes Jasper, Sven Köhler, Aileen Pohl, Hannes Rantzsch, Andreas Rau, Patrick Schmidt, Christoph Sterz, Yanina Yurchenko, Patrick Baudisch

GaussBricks: Magnetic Building Blocks for Constructive Tangible Interactions on Portable Displays
Rong-Hao Liang, Liwei Chan, Hung-Yu Tseng, Han-Chih Kuo, Da-Yuan Huang, De-Nian Yang, Bing-Yu Chen

Designing Tangible Video Games: Lessons Learned from the Sifteo Cubes
Clément Pillias, Raphaël Robert-Bouchard, Guillaume Levieux

A Low-cost Transparent Electric Field Sensor for 3D Interaction on Mobile Devices
Mathieu Le Goc, Stuart A. Taylor, Shahram Izadi, Cem Keskin

718AB Papers: Head-Worn Displays

CHAIR: BRIAN P. BAILEY

The Personal Cockpit: A Spatial Interface for Effective Task Switching on Head-Worn Displays
Barrett M. Ens, Rory Finnegan, Pourang P. Irani

Exploring the Use of Hand-To-Face Input for Interacting with Head-Worn Displays
Marcos Serrano, Barrett M. Ens, Pourang P. Irani

Permulin: Mixed-Focus Collaboration on Multi-View Tabletops
Roman Lissermann, Jochen Huber, Martin Schmitz, Jürgen Steimle, Max Mühlhäuser

In-Your-Face, Yet Unseen? Improving Head-Stabilized Warnings to Reduce Reaction Time
Felix Lauber, Andreas Butz

801A Papers: Applications of Body Sensing

CHAIR: SUSAN R. FUSSELL

Kinect-taped Communication: Using Motion Sensing to Study Gesture Use and Similarity in Face-to-Face and Computer-Mediated Brainstorming
Hao-Chuan Wang, Chien-Tung Lai

Is Motion Capture-Based Biomechanical Simulation Valid for HCI Studies? Study and Implications
Myroslav Bachynskyi, Antti Oulasvirta, Gregorio Palmas, Tino Weinkauf

RecoFit: Using a Wearable Sensor to Find, Recognize, and Count Repetitive Exercises
Dan Morris, T. Scott S. Saponas, Andrew Guillory, Ilya Kelner

Improving Automatic Speech Recognition Through Head Pose Driven Visual Grounding
Soroush Vosoughi

801B Papers: Urban Communities and Social Media

CHAIR: N. SADAT SHAMI

Tensions in Scaling-up Community Social Media: A Multi-Neighborhood Study of Nextdoor
Christina A. Masden, Catherine Grevet, Rebecca E. Grinter, Eric Gilbert, W. Keith Edwards

Curated City: Capturing Individual City Guides Through Social Curation
Justin B. Cranshaw, Kurt Luther, Patrick Gage Kelley, Norman Sadeh

ZWERM: a Modular Component Network Approach for an Urban Participation Game
Thomas Laureyssens, Tanguy Coenen, Laurence Claeys, Peter Mechant, Johan Criel, Andrew Vande Moere

Studying Digital Graffiti as a Location-Based Social Network
David K. McGookin, Stephen A. Brewster, Georgi Christov

802AB Course: C17

Make This! Introduction to Electronics Prototyping Using Arduino
David Sirkin, Wendy Ju

7:00 – 8:20 Video Previews *Exhibit Hall G*

8:30 – 8:50 *Exhibit Hall G*
Provoke! Wisdom! Impact! Plenary – Reasons to be Cheerful, Part 4
Elizabeth F. Churchill, *eBay Research Labs*

701A Papers: Social Media Usage

CHAIR: DAVID GEERTS

Social Epistemic Cognition in Online Interactions
Rosanna Yuen-Yan Y. Chan, Silu Li, Diane Hui

Share your View: Impact of Co-Navigation Support and Status Composition in Collaborative Online Shopping
Yanzhen Yue, Xiaojuan Ma, Zhenhui Jiang

Nutriflect: Reflecting Collective Shopping Behavior and Nutrition
Wolfgang H. Reitberger, Wolfgang Spreicer, Geraldine Fitzpatrick

Didn't You See My Message? Predicting Attentiveness to Mobile Instant Messages
Martin Pielot, Rodrigo de Oliveira, Haewoon Kwak, Nuria M. Oliver

701B Papers: Games and Education

CHAIR: JODI L. FORLIZZI

Using Extracted Features to Inform Alignment-Driven Design Ideas in an Educational Game
Erik Harpstead, Christopher J. MacLellan, Vincent Aleven, Brad A. Myers

Brain Points: A Growth Mindset Incentive Structure Boosts Persistence in an Educational Game
Eleanor O'Rourke, Kyla Haimovitz, Christy Ballweber, Carol Dweck, Zoran Popovic

Towards Automatic Experimentation of Educational Knowledge
Yun-En Liu, Travis Mandel, Emma Brunskill, Zoran Popovic

Spending Real Money: Purchasing Patterns of Virtual Goods in an Online Social Game
Donghee Yvette Wohn

711 Course: C21-1

Speech-based Interaction: Myths, Challenges, and Opportunities
Cosmin Munteanu, Gerald Penn

713AB Course: C22-1

The Glass Class: Designing Wearable Interfaces
Mark Billinghurst, Hayes Raffle

715A Special Interest Group

Managing UX Teams
Janice Rohn, Carola Thompson

714AB Papers: Learning and Games

CHAIR: AMY OGAN

CADament: A Gamified Multiplayer Software Tutorial System
Wei Li, Tovi Grossman, George Fitzmaurice

Combining Crowdsourcing and Learning to Improve Engagement and Performance
Mira Dontcheva, Robert R. Morris, Joel R. Brandt, Elizabeth M. Gerber

A Game-Based Learning Approach to Road Safety: The Code of Everand
Ian Dunwell, Sara de Freitas, Panagiotis Petridis, Maurice Hendrix, Sylvester Arnab, Petros Lameras, Craig Stewart

L.IVE: An Integrated Interactive Video-based Learning Environment
Toni-Jan Keith P. Monserrat, Yawen Li, Shengdong Zhao, Xiang Cao

716A Case Studies: Realities of Fieldwork

CHAIR: MICHAEL ARENT

Challenges at the Bottom of the Pyramid: An Ethnographic Study of South African Mobile Users
Susan Dray

Quick and Participatory: Adopting Users' Designs to Improve a Mobile App
Kate Sangwon Lee, Sun Lee, Hyojung Kim

User-Centered Design for More Efficient Drill Rig Control System
Katri Koli, Tuula Kärkkäinen, Jaakko Lehikoinen, Tuomo Pirinen, Sami Hanski, Juha Lassila, Mikko Loimusalo

Questions & Answers and Discussion for All Case Studies

716B Papers: Persuasive Technologies and Applications

CHAIR: ERIN CHERRY

Persuasive Technology for Overcoming Food Cravings and Improving Snack Choices
Anne Hsu, Jing Yang, Yigit Han Yilmaz, Md Sanaul Haque, Cengiz Can, Ann E. Blandford

The Effects of Embodied Persuasive Games on Player Attitudes Toward People Using Wheelchairs
Kathrin M. Gerling, Regan L. Mandryk, Max V. Birk, Matthew Miller, Rita Orji

Spent: Changing Students' Affective Learning Toward Homelessness Through Persuasive Video Game Play
Dana N. Ruggiero

Incentives to Participate in Online Research: An Experimental Examination of "Surprise" Incentives
Andrew T. Fiore, Coye Cheshire, Lindsay Shaw Taylor, G.A. Mendelsohn

717AB alt.chi: Intimate Interfaces

CHAIR: CONOR LINEHAN

Fifty Shades of CHI: The Perverse and Humiliating Human-Computer Relationship
Laura Buttrick, Conor Linehan, Ben Kirman, Dan O'Hara

Brave New Interactions: Performance-Enhancing Drugs for Human-Computer Interaction
Henning Pohl

A Three-dimensional Mirror Augmented by Medical Imaging: Questioning Self-portraying at the Limit of Intimacy
Tom Giraud, Matthieu Courgeon, Marion Tardieu, Alexandra Roatis, Xavier Maitre

Concordance: Design Ideal for Facilitating Situated Negotiations in Out-of-clinic Healthcare
Naveen L. Bagalkot, Erik Grönvall, Tomas Sokoler

HALL G Papers: Whole Body Sensing and Interaction

CHAIR: OTMAR HILLIGES

Combining Body Pose, Gaze, and Gesture to Determine Intention to Interact in Vision-Based Interfaces
Julia Schwarz, Charles C. Marais, Tommer Leyvand, Scott E. Hudson, Jennifer Mankoff

Wave to Me: User Identification Using Body Lengths and Natural Gestures
Eiji Hayashi, Manuel Maas, Jason I. Hong

Haptic Turk: A Motion Platform Based on People
Lung-Pan Cheng, Patrick Lühne, Pedro Lopes, Christoph Sterz, Patrick Baudisch

Audience Experience in Social Videogaming: Effects of Turn Expectation and Game Physicality
John Downs, Frank Vetere, Steve Howard, Steve Loughnan, Wally Smith

718AB Papers: Novel Mobile Displays and Devices

CHAIR: CLIFTON L. FORLINES

Exploiting Thermal Reflection for Interactive Systems
Alireza Sahami Shirazi, Yomna Abdelrahman, Stefan Schneegass, Mohammadreza Khalilbeigi, Niels Henze, Albrecht Schmidt

MisTable: Reach-through Personal Screens for Tabletops
Diego Martinez Plasencia, Edward Joyce, Sriram Subramanian

What is a Device Bend Gesture Really Good for?
Teemu T. Ahmaniemi, Johan Kildal, Merja Haveri

SurfacePhone: A Mobile Projection Device for Single- and Multiuser Everywhere Tabletop Interaction
Christian Winkler, Markus Löchtefeld, David Dobbelstein, Antonio Krüger, Enrico Rukzio

801A Papers: HCI Paradigms: Past, Present and Future

CHAIR: JEFFREY BARDZELL

Is Once Enough? On the Extent and Content of Replications in Human-Computer Interaction
Kasper Hornbæk, Søren S. Sander, Javier A. Bargas-Avila, Jakob Grue Simonsen

Binding the Material and the Discursive with a Relational Approach of Affordances
Huatong Sun, William F. Hart-Davidson

The Turn to Practice in HCI: Towards a Research Agenda
Kari Kuutti, Liam J. Bannon

CHI 1994-2013: Mapping Two Decades of Intellectual Progress through Co-word Analysis
Yong Liu, Jorge A. Goncalves, Denzil S. Ferreira, Bei Xiao, Simo J. Hosio, Vassilis Kostakos

801B Papers: PolitiCHI

CHAIR: DARREN GERGLE

"Narco" Emotions: Affect and Desensitization in Social Media during the Mexican Drug War
Munmun De Choudhury, Andres Monroy-Hernandez, Gloria Mark

A Pool of Dreams: Facebook, Politics and the Emergence of a Social Movement
Clara Crivellaro, Rob Comber, John Bowers, Peter C. Wright, Patrick Olivier

Shared Values/Conflicting Logics: Working Around E-Government Systems
Amy Voida, Lynn S. Dombrowski, Gillian R. Hayes, Melissa Mazmanian

Rethinking Plan A for Sustainable HCI
Bran Knowles, Lynne Blair, Paul Coulton, Mark Lochrie

802AB Course: C20-1

Hands-on Sketching Course
Stephanie Foehrenbach

10:20 – 11:00
Coffee Break
Exhibit Hall E

THURSDAY

701A Papers: Location-Based Services and Navigation

CHAIR: MARK PERRY

HaptiMoto: Turn-by-Turn Haptic Route Guidance Interface for Motorcyclists
Manoj Prasad, Paul Taele, Daniel Goldberg, Tracy A. Hammond

Experimental Evaluation of User Interfaces for Visual Indoor Navigation
Andreas Möller, Matthias Kranz, Stefan Diewald, Luis Roalter, Robert Huitl, Tobias Stockinger, Marion Koelle, Patrick A. Lindemann

Digitally Driven: How Location Based Services Impact the Work Practices of London Bus Drivers
Gary Pritchard, John Vines, Pam Briggs, Lisa Thomas, Patrick Olivier

Smart Flashlight: Map Navigation Using a Bike-Mounted Projector
Alexandru Dancu, Zlatko Franjcic, Morten Fjeld

Partially Intelligent Automobiles and Driving Experience at the Moment of System Transition
Key Jung Lee, Yeon Kyoung Joo, Clifford Nass

701B Papers: Crowdsourcing

CHAIR: STEVEN P. DOW

Slide to X: Unlocking the Potential of Smartphone Unlocking
Khai N. Truong, Thariq Shihipar, Daniel J. Wigdor

Twitch Crowdsourcing: Crowd Contributions in Short Bursts of Time
Rajan Vaish, Keith Wyngarden, Jingshu Chen, Brandon Cheung, Michael S. Bernstein

Crowdsourcing the Future: Predictions Made with a Social Network
Clifton L. Forlines, Sarah Miller, Leslie Guelcher, Robert Bruzzi

Cognitively Inspired Task Design to Improve User Performance on Crowdsourcing Platforms
Harini Alagarai Sampath, Rajeev Rajeshuni, Bipin Indurkhya

711 Course: C21-2

Speech-based Interaction: Myths, Challenges, and Opportunities
Cosmin Munteanu, Gerald Penn

713AB Course: C22-2

The Glass Class: Designing Wearable Interfaces
Mark Billinghurst, Hayes Raffle

714AB Papers: Desktop Search and History

CHAIR: HUAHAI YANG

Searching for Myself: Motivations and Strategies for Self-Search
Catherine C. Marshall, Siân E. Lindley

Finder Highlights: Field Evaluation and Design of an Augmented File Browser
Stephen Fitchett, Andy Cockburn, Carl Gutwin

PIM and Personality: What do our Personal File Systems Say About Us?
Charlotte Massey, Sean TenBrook, Chaconne Tatum, Steve Whittaker

Show Me the Invisible: Visualizing Hidden Content
Thomas Geymayer, Markus Steinberger, Alexander Lex, Marc Streit, Dieter Schmalstieg

715A Special Interest Group

Effectively Communicating User Research in Order to Drive Design and Product Decisions
Karen Holtzblatt, Shoshana Holtzblatt

716A Case Studies: Cross-Perspective Collaboration

CHAIR: CONNOR UPTON

HCI Interventions with Nonprofit Organizations: Tactics for Effective Collaboration
Vicki Moulder, Lorna Boschman, Ron Wakkary, William Odom, Stacey Kuznetsov

Redefinition of Requirements in the Design and Development of the Project Mapocci: From Digital Art to HCI Research
Lilia Villafuerte, Laura Malinverni

An Extended Case Study Methodology for Investigating Influence of Cultural, Organizational, and Automation Factors on Human-Automation Trust
Kolina Koltai, Nhut Ho, Gina Masequesmay, David Niedober, Mark Skoog, Walter Johnson, Artemio Cacanindin, Joseph Lyons

Questions & Answers and Discussion for All Case Studies

716B Papers: Lost and Found in Translation

CHAIR: TIAGO GUERREIRO

"Maybe It Was a Joke" - Emotion Detection in Text-Only Communication by Non-Native English Speakers
Ari M. Hautasaari, Naomi Yamashita, Ge Gao

TransPhoner: Automated Mnemonic Keyword Generation
Manolis Savva, Angel X. Chang, Christopher D. Manning, Pat Hanrahan

AudioCanvas: Internet-Free Interactive Audio Photos
Simon Robinson, Jennifer S. Pearson, Matt Jones

The Impact of Visual Contextualization on UI Localization
Luis A. Leiva, Vicent Alabau

Improving Machine Translation by Showing Two Outputs
Bin Xu, Ge Gao, Susan R. Fussell, Dan Cosley

717AB Papers: Participatory Design

CHAIR: MONA LEIGH GUHA

Diversity for Design: A Framework for Involving Neurodiverse Children in the Technology Design Process
Laura J. Benton, Asimina Vasalou, Rilla Khaled, Hilary Johnson, Daniel Gooch

Canine-Centered Interface Design: Supporting the Work of Diabetes Alert Dogs
Charlotte L. Robinson, Clara Mancini, Janet van der Linden, Claire Guest, Robert Harris

Co-constructing Child Personas for Health-Promoting Services with Vulnerable Children
Pontus Wärnestål, Petra Svedberg, Jens Nygren

Balancing Design Tensions: Iterative Display Design to Support Ad Hoc and Multidisciplinary Medical Teamwork
Diana S. Kusunoki, Aleksandra Sarcevic, Nadir Weibel, Ivan Marsic, Zhan Zhang, Genevieve Tuveson, Randall S. Burd

HALL G Papers: Brain Computer Interfaces

CHAIR: LYNNE BAILLIE

Error Related Negativity in Observing Interactive Tasks
Chi Thanh T. Vi, Izdihar Jamil, David Coyle, Sriram Subramanian

Dynamic Difficulty Using Brain Metrics of Workload
Daniel A. Afergan, Evan M. Peck, Erin T. Solovey, Andrew Jenkins, Samuel W. Hincks, Eli T. Brown, Remco Chang, Robert J. Jacob

Measuring the Effect of Think Aloud Protocols on Workload using fNIRS
Matthew F. Pike, Horia A. Maior, Martin Porcheron, Sarah C. Sharples, Max L. Wilson

An EEG-based Approach for Evaluating Audio Notifications under Ambient Sounds
Yi-Chieh Lee, Wen-Chieh Lin, Jung-Tai King, Li-Wei Ko, Yu-Ting Huang, Fu-Yin Cherng

718AB Papers: 3D Printing and Fabrication

CHAIR: ALEX OLWAL

faBrickation: Fast 3D printing of Functional Objects by Integrating Construction Kit Building Blocks
Stefanie Mueller, Tobias Mohr, Kerstin Guenther, Johannes Frohnhofen, Patrick Baudisch

Understanding Physical Activity through 3D Printed Material Artifacts
Rohit A. Khot, Larissa Hjorth, Florian ' Mueller

Supporting The Design and Fabrication of Physical Visualizations
Saiganesh Swaminathan, Conglei Shi, Yvonne Jansen, Pierre Dragicevic, Lora A. Oehlberg, Jean-Daniel Fekete

MixFab: A Mixed-Reality Environment for Personal Fabrication
Christian Weichel, Manfred Lau, David Kim, Nicolas Villar, Hans W. Gellersen

801A Papers: Modeling Users and Interaction

CHAIR: NIKLAS L. ELMQVIST

Model of Visual Search and Selection Time in Linear Menus
Gilles Bailly, Antti Oulasvirta, Duncan P. Brumby, Andrew Howes

Towards Accurate and Practical Predictive Models of Active-Vision-Based Visual Search
David E. Kieras, Anthony J. Hornof

Understanding Multitasking Through Parallelized Strategy Exploration and Individualized Cognitive Modeling
Yunfeng Zhang, Anthony J. Hornof

How Does Knowing What You Are Looking For Change Visual Search Behavior?
Duncan P. Brumby, Anna L. Cox, Jacqueline Chung, Byron Fernandes

Automated Nonlinear Regression Modeling for HCI
Antti Oulasvirta

801B Papers: Engaging Older Adults Through Technology

CHAIR: JOANNA MCGRENERE

Understanding Digital and Material Social Communications for Older Adults
Alexis Hope, Ted Schwaba, Anne Marie Piper

Never Too Old: Engaging Retired People Inventing the Future With MaKey MaKey
Yvonne Rogers, Jeni Paay, Margot Brereton, Kate L. Vaisutis, Gary Marsden, Frank Vetere

What's on Your Mind? Investigating Recommendations for Inclusive Social Networking and Older Adults
Chris Norval, John L. Arnott, Vicki L. Hanson

Being Senior and ICT: A Study of Seniors Using ICT in China
Yuling Sun, Xianghua Ding, Silvia Lindtner, Tun Lu, Ning Gu

802AB Course: C20-2

Hands-on Sketching Course
Stephanie Foehrenbach

12:20 – 14:00
Lunch Break
Restaurants, bars & cafés available nearby

THURSDAY

701A Papers: Computer Mediated Intimacy and Romance

CHAIR: JOHN THOMAS

The Lonely Raccoon at the Ball: Designing for Intimacy, Sociability, and Selfhood
Jeffrey Bardzell, Shaowen Bardzell, Guo Zhang, Tyler Pace

Room for Interpretation: The Role of Self-Esteem and CMC in Romantic Couple Conflict
Lauren E. Scissors, Michael E. Roloff, Darren Gergle

Exploring Affective Communication Through Variable-Friction Surface Haptics
Joseph M. Mullenbach, Craig Shultz, J. Edward Colgate, Anne Marie Piper

Wrigglo: Shape-Changing Peripheral for Interpersonal Mobile Communication
Joohee Park, Young-Woo Park, Tek-Jin Nam

701B Papers: Network of Care

CHAIR: PATRICK OLIVIER

Recreating Living Experiences from Past Memories through Virtual Worlds for People with Dementia
Panote Siriaraya, Chee Siang Ang

Addressing the Subtleties in Dementia Care: Pre-study & Evaluation of a GPS Monitoring System
Lin Wan, Claudia Müller, Volker Wulf, David W. Randall

Sweet Home: Understanding Diabetes Management via a Chinese Online Community
Xiaomu Zhou, Si Sun, Jiang Yang

Moderated Online Social Therapy: Designing and Evaluating Technology for Mental Health
Reeva M. Lederman, Greg Wadley, John Gleeson, Sarah Bendall, Mario Alvarez-Jimenez

709 Course: C24

How You Could Benefit from Using ISO Standards
Nigel Bevan

711 Course: C25

Evaluating Children's Interactive Products
Janet Read, Panos Markopoulos

713AB Course: CHInd-G

Uncovering the Ordinary, Inspiring the Extraordinary: A Conversation with Susan Dray
Susan Dray, Elizabeth Churchill

714AB Papers: Tutorials

CHAIR: MORGAN E. DIXON

Investigating the Feasibility of Extracting Tool Demonstrations from In-Situ Video Content
Ben Lafreniere, Tovi Grossman, Justin Matejka, George Fitzmaurice

Crowdsourcing Step-by-Step Information Extraction to Enhance Existing How-to Videos
Juho Kim, Phu T. Nguyen, Sarah Weir, Philip J. Guo, Robert C. Miller, Krzysztof Z. Gajos

EverTutor: Automatically Creating Interactive Guided Tutorials on Smartphones by User Demonstration
Cheng-Yao Wang, Wei-Chen Chu, Hou-Ren Chen, Chun-Yen Hsu, Mike Y. Chen

TaggedComments: Promoting and Integrating User Comments in Online Application Tutorials
Andrea Bunt, Patrick Dubois, Ben Lafreniere, Michael A. Terry, David T. Cormack

715A Panel

Can You Do Good and Do Well? Exploring HCI Careers for Societal Impact
Anupam Jain, Matthew Kam, Michael Best, Elizabeth Gerber, Rowena Luk

716A Case Studies: Creating Methods

CHAIR: VICKI MOULDER

Measuring Product "Coolness" -- Developing a Measurement Instrument
Carol Farnsworth, Karen Holtzblatt, Shantanu Pai, Theo Held, Sally Lawler Kennedy, Eli Wylen, Pallavi Kutty, Kelley Wagg

Online Microsurveys for User Experience Research
Victoria Schwanda Sosik, Elie Bursztein, Sunny Consolvo, David Huffaker, Gueorgi Kossinets, Kerwell Liao, Paul McDonald, Aaron Sedley

GREYBOX Scheduling: Designing a Joint Cognitive System for Sustainable Manufacturing
Connor Upton, Fergus Quilligan

Questions & Answers and Discussion for All Case Studies

716B Papers: Driving Interfaces and Evaluations

CHAIR: DAVID S. KIRK

A Smartphone-based Sensing Platform to Model Aggressive Driving Behaviors
Jin-Hyuk Hong, Ben Margines, Anind K. Dey

Designing Interfaces for Multiple-Goal Environments: Experimental Insights from In-Vehicle Speech Interfaces
Sergej Truschin, Michael Schermann, Suparna Goswami, Helmut Krcmar

Classifying Driver Workload Using Physiological and Driving Performance Data: Two Field Studies
Erin T. Solovey, Marin Zec, Enrique A. Abdon Garcia Perez, Bryan Reimer, Bruce Mehler

Evaluating Multimodal Driver Displays under Varying Situational Urgency
Ioannis Politis, Stephen A. Brewster, Frank Pollick

HALL G Papers: Gesture-Based Interaction

CHAIR: JOERG MUELLER

Multi-Viewer Gesture-Based Interaction for Omni-Directional Video
Gustavo A. Rovelo Ruiz, Davy Vanacken, Kris Luyten, Francisco Abad, Emilio Camahort

Making Big Gestures: Effects of Gesture Size on Observability and Identification for Co-Located Group Awareness
Adrian Reetz, Carl Gutwin

A Chair as Ubiquitous Input Device: Exploring Semaphoric Chair Gestures for Focused and Peripheral Interaction
Kathrin Probst, David Lindlbauer, Michael Haller, Bernhard Schwartz, Andreas Schrempf

Exploring the Design Space of Gestural Interaction with Active Tokens through User-Defined Gestures
Consuelo Valdes, Diana Eastman, Casey Grote, Shantanu Thatte, Orit Shaer, Ali Mazalek, Brygg Ullmer, Miriam K. Konkel

718AB Papers: Interactive Surfaces and Pervasive Displays

CHAIR: AARON QUIGLEY

Pervasive Information through Constant Personal Projection: The Ambient Mobile Pervasive Display (AMP-D)
Christian Winkler, Julian Seifert, David Dobbelstein, Enrico Rukzio

Bigger is Not Always Better: Display Size, Performance, and Task Load during Peephole Map Navigation
Roman Rädle, Hans-Christian Jetter, Jens Müller, Harald Reiterer

Mechanical Force Redistribution: Enabling Seamless, Large-Format, High-Accuracy Surface Interaction
Alex M. Grau, Charles Hendee, John-Ross Rizzo, Ken Perlin

Effects of Display Size and Navigation Type on a Classification Task
Can Liu, Olivier Chapuis, Michel Beaudouin-Lafon, Eric Lecolinet, Wendy E. Mackay

801A Papers: Research and Deployment in the Wild

CHAIR: WENDY MONCUR

Performance-led Research In The Wild
Steve Benford, Chris Greenhalgh, Andy Crabtree, Martin Flintham, Brendan Walker, Joe Marshall, Boriana Koleva, Stefan J. Rennick-Egglestone, Gabriella Giannachi, Matt Adams

Wild at Home: The Neighborhood as a Living Laboratory for HCI
John M. Carroll, Mary Beth Rosson

Of Catwalk Technologies and Boundary Creatures
Anne Adams, Elizabeth FitzGerald, Gary Priestnall

A Large Scale Study of Daily Information Needs Captured In-Situ
Karen Church, Mauro Cherubini, Nuria Oliver

801B Papers: Social Media for Relationships

CHAIR: WILLIAM ODOM

Stewarding a Legacy: Responsibilities and Relationships in the Management of Post-mortem Data
Jed R. Brubaker, Lynn S. Dombrowski, Anita M. Gilbert, Nafiri Kusumakaulika, Gillian R. Hayes

Captioned Photographs in Psychosocial Aged Care: Relationship Building and Boundary Work
Jenny Waycott, Hilary Davis, Frank Vetere, Amee Morgans, Alan Gruner, Elizabeth Ozanne, Lars Kulik

The Routines and Needs of Grandparents and Parents for Grandparent-Grandchild Conversations Over Distance
Azadeh Forghani, Carman Neustaedter

Growing Closer on Facebook: Changes in Tie Strength Through Social Network Site Use
Moira Burke, Robert E. Kraut

802AB Course: C23

A Crash Course in Modern Geography for HCI Researchers and Practitioners
Brent Hecht, David Shamma

Closing Keynote
16:00 – 17:20
Exhibit Hall G

Scott Jenson, *Google, Inc.*
The Physical Web

THURSDAY

WORKSHOPS

CHI 2014 workshops take place at the Convention Center levels 700 and 800 except the workshop W01 which will take place at the University of Toronto. Workshops are accessible only to pre-registered attendees.

	2-Day Workshops: Saturday 26 – Sunday 27 April	Room
W01	Critical Making Hackathon: Situated Hacking, Surveillance and Big Data – *K. Tanenbaum, J. Tanenbaum, A. Williams, M. Ratto, G. Resch, A. G. Bari* This workshop will be held at the Critical Making Lab which is located in the Semaphore Research Cluster at the University of Toronto, 7th floor of Robarts Library, 130 St. George Street, on the St. George (downtown) campus. Please take the P4 elevator on the 2nd floor of Robarts – this is the only elevator that goes to the 7th floor.	
W02	Curating the Digital: Spaces for Art and Interaction – *D. England, J. Spence, C. Latulipe, E. Edmonds, L. Candy, T. Schiphorst, N. Bryan-Kinns, K. Woolford*	701B
W03	Game Jam [4 Research] – *M. Deen, R. Cercos, A. Chatman, A. Naseem, R. Bernhaupt, A. Fowler, B. Schouten, F. Mueller*	801A
W04	Interaction and Architectural Space – *N. Dalton, K. Green, R. Dalton, A. Mathew, C. Hoelscher, M. Wiberg, H. Schnädelbach, T. Varoudis*	801B
	1-Day Workshop: Saturday 26 April	**Room**
W06	Autonomy in Technology Design – *R. Calvo, D. Peters, D. Johnson, Y. Rogers*	714B
W07	"Touch me" Workshop on Tactile User Experience Evaluation Methods – *M. Tscheligi, K. Isbister, K. Höök, M. Obrist, M. Busch, C. Hochleitner*	717A
W08	Alternate Endings: Using Fiction to Explore Design Futures – *C. Linehan, B. Kirman, S. Reeves, M. Blythe, J. Tanenbaum, A. Desjardins, R. Wakkary*	716A
W09	Participatory Design with People Living with Cognitive or Sensory Impairments – *K. Slegers, P. Duysburgh, N. Hendriks*	717B
W10	Perspectives on Gender and Product Design – *S. Dray, D. Busse, A. Brock, A. Peters, S. Bardzell, A. Druin, M. Burnett, E. Churchill, G. Williams, K. Holtzblatt, D. Murray*	718A
W12	Gesture-based Interaction Design: Communication and Cognition – *M. L. Maher, T. Clausner, B. Tversky, D. Kirsh, J. Kay, A. Danielescu, K. Grace*	802AB
W13	Refusing, Limiting, Departing: Why We Should Study Technology Non-use – *E. Baumer, M. Ames, J. Brubaker, J. Burrell, P. Dourish*	714A
W14	Socially Engaged Arts Practice in HCI – *R. Clarke, J. Briggs, A. Light, S. Heitlinger, C. Crivellaro*	715A
W15	Designing Speech and Language Interactions – *C. Munteanu, M. Jones, S. Whittaker, S. Oviatt, M. Aylett, G. Penn, S. Brewster, N. d'Alessandro*	715B
W16	Understanding Teen UX: Building a Bridge to the Future – *D. Fitton, B. Bell, J. Read, O. Iversen, L. Little, M. Horton*	713A
W17	Designing Technology for Major Life Events – *M. Massimi, S. Yarosh, M. Smith, J. Kaye*	713B
W18	HCI Research in Healthcare: Evidence to Practice – *K. Sellen, D. Furniss, Y. Chen, S. Taneva, A. A. O'Kane, A. Blandford*	707
W19	Workshop on Inconspicuous Interaction – *D. Marques, L. Carriço, T. Guerreiro, A. De Luca, P. Maes, I. Oakley, E. von Zezschwitz, I. Muslukhov*	709
	1-Day Workshop: Sunday 27 April	**Room**
W20	Beyond Quantified Self: Data for Wellbeing – *J. Meyer, S. Simske, K. Siek, C. Gurrin, H. Hermens*	716B
W21	Peripheral Interaction: Shaping the Research and Design Space – *S. Bakker, D. Hausen, T. Selker, E. van den Hoven, A. Butz, B. Eggen*	718A
W22	Workshop on Assistive Augmentation – *J. Huber, J. Rekimoto, M. Inami, R. Shilkrot, P. Maes, W. Meng, G. Pullin, S. Nanayakkara*	714A
W23	Personalizing Behavior Change Technologies – *G. Hsieh, S. Munson, M. Kaptein, H. Oinas-Kukkonen, O. Nov*	714B
W24	#CHIMoney: Financial Interactions, Digital Cash, Capital Exchange and Mobile Money – *J. Ferreira, J. Vertesi, J. Kaye, B. Brown, M. Perry*	717A
W25	HCI and Sports – *S. Nylander, J. Tholander, F. Mueller, J. Marshall*	717B
W26	Supporting Children with Complex Communication Needs – *J. P. Hourcade, F. Garzotto, A. Rozga, M. Tentori, P. Markopoulos, N. Pares, J. Good, H. Pain, M. Alper*	802A
W27	Biological Rhythms and Technology – *M. Matthews, E. Carroll, S. Abdullah, J. Snyder, M. Kay, T. Choudhury, G. Gay, J. Kientz*	707
W28	Values & Design in HCI Education – *J. A. Koepfler, C. L. Stark, P. Dourish, P. Sengers, K. Shilton*	715A
W29	Learning Innovation at Scale – *J. Williams, R. Kizilcec, S. Klemmer, D. Russell*	709
W30	Developing a Living HCI Curriculum to Support a Global Community – *E. Churchill, J. Preece, A. Bowser*	716A
W31	Enabling Empathy in Health and Care: Design Methods and Challenges – *A. Thieme, J. Vines, J. Wallace, R. Clarke, P. Slovák, J. McCarthy, M. Massimi, A. G. Parker*	715B
W32	What Have We Learned? A SIGCHI HCI & Sustainability Community Workshop – *M. Six Silberman, E. Blevis, E. Huang, B. Nardi, L. Nathan, D. Busse, C. Prei, S. Mann*	713A
W33	Player Experience: Mixed Methods and Reporting Results – *V. Zammitto, P. Mirza-Babaei, I. Livingston, M. Kobayashi, L. Nacke*	713B

DOCTORAL CONSORTIUM

Selected doctoral students present and explore their research topics with senior researchers and other students in a two-day interdisciplinary workshop. Doctoral Consortium posters are displayed in Exhibit Hall E and brief descriptions appear in the CHI 2014 Extended Abstracts.

Saturday – Sunday
Doctoral Consortium (Room 711)

Tuesday
10:20 – 11:00 Meet the poster authors (Exhibit Hall E)

Tuesday – Thursday
Posters on display during opening hours (Exhibit Hall E)

Doctoral Consortium Faculty

Bill Buxton	*Microsoft Research*
Adrian Cheok	*City University London, UK*
Kristina Höök	*Stockholm University & KTH, Sweden*
Katherine Isbister (Co-Chair)	*New York University, USA*
Clifford Nass *(In Memory)*	*Stanford University, USA*
Yvonne Rogers	*University College London , UK*
Manfred Tscheligi (Co-Chair)	*University of Salzburg, Austria*

Participants

A Beep, a Flash, a Rumble? Evaluating Multimodal Displays for Drivers
I. Politis

Making Bare Hand Input More Accurate
C. Wacharamanotham

Digital Naturalism: Designing Holistic Ethological Interaction
A. Quitmeyer

Supporting Teaching and Learning of Situational Empathy by Technology
P. Slovák

Investigating the Adoption of Local Online Communities
C. López

Happy is Pink: Designing for Intuitive Use with Color-to-Abstract Mappings
D. Löffler

The Development of Novel Eyes-Free Exercise Technologies Using Participatory Design
K. Rector

Persistent Workplace Plug-load Energy Savings and Awareness through Energy Dashboards: Eco-feedback, Control, and Automation
R. Yun

User Experience and the Human Spirit
E. A. Buie

Intelligent Sketching Interfaces for Richer Mid-Air Drawing Interactions
P. Taele

The Afterlife of Digital Identity
J. R. Brubaker

Human Interaction with Assistive Free-Flyers
D. J. Szafir

Theory-driven Design for Healthy Eating
J. Hou

Fashion Thinking and Sustainable HCI
Y. Pan

EngageME: A Tool to Simplify the Conveyance of Complicated Data
S. S. S. Darnell

STUDENT RESEARCH COMPETITION

The Student Research Competition (SRC) is a forum for undergraduate and graduate students to showcase their research, exchange ideas, and improve their communication skills while competing for prizes. Sponsored by Microsoft Research, the SRC is a branch of the ACM SRC. Winners are announced at the Closing Plenary.

Monday
16:00 – 17:20 Judging (jury & competitors only) (Room 715B)

Tuesday
15:20 – 16:00 Posters highlighted during the afternoon break (Exhibit Hall E)

Wednesday
11:00 – 12:20 Posters presentations open to all conference attendees (Room 717AB)

Jury

Melanie Feinberg	*Uni. of Texas at Austin, USA*
Mary Czerwinski	*Microsoft Research, USA*
Edward Lank	*University of Waterloo, Canada*

Finalists

A Mobile Point-of-Care Diagnostic System for Low-Resource Settings
Nicola Lee Dell

Cassandra: A Crowdsourced Testbed for Content Assessment of Potential Social Media Posts
Himel Dev

Okinawa in Japanese and English Wikipedia
Scott A. Hale

Designing Ballot Interfaces for Voters with Vision Disabilities
Seunghyun Lee

Shoulder Surfing Susceptibility of Bend Passwords
Sana Maqsood

Low-Income Parents' Perceptions of Technology: Value-based Design Insights
David Munoz

Virtual Inclusion Via Telepresence Robots In The Classroom
Veronica Ahumada Newhart

Flying Display: A Movable Display Pairing Projector and Screen in the Air
Hiroki Nozaki

Exploring Tapping with Thumb Input for Flexible Tablets
Md Riyadh

The Perceptual Benefits of a Tangible Interface Decrease with Users' Expertise
Bertrand Schneider

Autonomy-based Rehabilitation Design: Balancing Capability and Complexity
Kyoungwon Seo

Digital Classroom Magazines: Design Considerations for Young Learners
Jeff Stern

The Agony of Passwords: Can We Learn from User Coping Strategies?
Elizabeth Stobert

VisiStat: Visualization-driven, Interactive Statistical Analysis
Krishna Subramanian

Learnersourcing Subgoal Labels for How-to Videos
Sarah A. Weir

STUDENT DESIGN COMPETITION

This is the 12th year of the CHI Student Design Competition (SDC). This year's conference theme "One of a CHInd" focuses our SDC design challenge on the one of a kind diversity that is made up of the individual selves that create our community. The growing design domain of the Quantified Self has been made possible through the integration of low-cost sensing technologies with proliferating applications available through mobile and internet technologies. There is a context of sensory-rich data from biometric, health, neo-analog, DIY culture and geophysical sensing that expands our ability to augment or shift our perspectives and our knowledge. Self-tracking, self-management and self-awareness are activities that promote agency and transformation of our own growing accumulation of bodydata. How can we transform this overwhelming incoming bodydata into self-knowledge?

Monday

11:00 – 12:20 Judging (jury & competitors only) (Room 715B)

Tuesday

15:20 – 16:00 Meet the poster authors (Exhibit Hall E)

Wednesday

14:00 – 15:20 Finalist presentations (Room 717AB)

Tuesday-Thursday

Posters on display during opening hours (Exhibit Hall E)

Jury

Mark Blythe	*Northumbria University, UK*
Aisling Kelliher	*Carnegie Mellon University, USA*
Tek-Jin Nam	*KAIST, South Korea*
Ilona Posner	*User Experience Consultant, Canada*

Finalists

Oris: Enhance Social Self-Awareness for Visually Impaired People
Xuan Luo, Yu Xu, Clark Mullen

MAES:TRO: A Practice System to Track, Record, and Observe for Novice Orchestral Conductors
Ekaterina Ivanova, Lulu Wang, Yihe Fu, Jeffrey Gadzala

KNEE: An Everyday Wearable Goniometer for Monitoring Physical Therapy Adherence
David Munoz, Andy Pruett, Graceline Williams

Sisyphorest: Maintenance Goal Support by Responding to Trends
William Saunders, Filip Krynicki, Valerie Sugarman

Beam: A Mobile Application to Improve Happiness and Mental Health
Joyce Sakata, Mengdi Zhang, Shi Pu, Jianqi Xing, Kritika Versha

NeckGraffe: A Postural Awareness System
Rushil Khurana, Elena Marinelli, Tulika Saraf, Li Shan

InnoMotion – A Web-Based Rehabilitation System Helping Patients Recover and Gain Self-Awareness of their Body Away from the Clinic
Luxi Chen, Ni Yan, Miranda Kiang, Anna S. Muth, Kruthi Sabnis Krishna

Fitnamo – Exercise Motivation App For Google Glass
Edward Nguyen, Tanmay Modak, Elton Dias, Yang Yu, Liang Huang

Bloom: Fostering Healthy and Peaceful Pregnancies with Personal Analytics
Max S. Wenger, Jarad Bell, Peter McEvoy, Asuka Cherie Yamaguchi, Auriana Shokrpour

DAYA: A System for Monitoring and Enhancing Children's Oral Hygiene
Kejia Shao, Jiye Huang, Huaying Song, Runze Li, Jinxi Wu

Nuwa: Enhancing The Pregnancy Experience for Expectant Parents
Yuan Gao, Xinying Li, Yu-Hsuan Lin, Xin Liu, Lin Pang

Baby Lucent: Pitfalls of Applying Quantified Self to Baby Products
Kevin Gaunt, Júlia Nacsa, Marcel Penz

STUDENT GAME COMPETITION

The Games and Entertainment Special Community created this competition to showcase student work in areas of game design and development that connect strongly to the CHI community of research and practice. Students submitted games as well as extended abstracts clarifying innovative aspects of their work. The jury selected three finalist games in each category—Games for a Purpose, Innovative Interface and Innovative Game Design—and the winner in each category will be announced at the awards session on Wednesday afternoon.

CHI attendees can play the games on Wednesday morning in Exhibit Hall E. The SGC winners are announced at the Closing Plenary.

Games for a Purpose: Games submitted to this category are designed not just to entertain, but also to accomplish some end goal. Examples include games for health, learning games, journalistic games.

Innovative Interface: Games submitted to this category push the boundaries of current interface practice. Examples include the use of gesture, multi-touch, or haptics; voice input; use of sensors such as breathing or heart rate; and augmented reality games for mobile platforms.

Innovative Game Design: Games submitted to this category push the boundaries of current game mechanics and/or design. Examples include games that add novel mechanics that have not been used before, add new visual or audio themes/dynamics, explore new mixes of mechanics, story and character elements, automated techniques for adaptive designs, or explore new forms of interaction that are thought provoking.

Wednesday

10:00 – 14:00 Demonstrations by the finalists (Exhibit Hall E)

16:00 – 17:20 Presentations and awards (Room 717AB)

Jury

Seth Cooper	*University of Washington, USA*
Alessandro Canossa	*Northeastern University, USA*

Finalists

Disguise: A Game that Evaluates Visualization Algorithms
Nafees U. Ahmed

Find the Jackalop: A Game Enhancing Young Children's Spatial Thinking
George Kalmpourtzis

Chorlody: A Music Learning Game
Yang Liu, Ni Yan, Dili Hu

Mute Robot – Cooperative Gameplay through Body Language Communication
Chun-Yen Hsu, Ying-Chao Tung, Wei-Han Wang, Han-Yu Wang

i-dentity: Concealing Movement Representation Associations in Games
Jayden Garner, Gavin Wood

Drunken Ed: A Balance Game for Public Large Screen Displays
Alexander Biskupski, Andreas R. Fender, Tiare M. Feuchtner, Marcel Karsten, Jonas D. Willaredt

Foot Motion Sensing: Augmented Game Interface Based on Foot Interaction for Smartphone
Zhihan Lu

Volcano Salvation: Interaction through Gesture and Head Tracking
Sheila Christian, Júlio Alves, André Ferreira, Dinarte Jesus, Rúben Freitas, Nelson Vieira

COURSES

Courses allow CHI attendees to extend their knowledge beyond their current community and their current areas of expertise. Courses are taught in one to three 80-minute units.

This year, CHI is pleased to offer six "One of a CHInd Courses". These are special invited courses that will be given by distinguished members of the HCI community.

Pre-registration is required. The Course Notes you receive at registration serve as your entry ticket. You may register for courses that have not yet been filled at the Registration Desk in the lobby area on the ground level.

	Monday Courses, 28 April	Room
CHInd-A	Sampling & Synthesis: The Two Sides of Experience Sketching – *W. Buxton* 1-session: 11:00 – 12:20	713AB
C01	Designing Unbiased Surveys for HCI Research – *H. Müller, A. Sedley, E. Ferrall-Nunge* 1-session: 11:00 – 12:20	711
C02	Introduction to Human-Computer Interaction – *Jonathan Lazar, Simone Barbosa* 2-sessions: 14:00 – 15:20 and 16:00 – 17:20	713AB
C03	Methods of Design Synthesis—Moving from Data to Innovation – *J. Kolko* 2-sessions: 14:00 – 15:20 and 16:00 – 17:20	802AB
C04	HTML5 Game Development – *J. Parker* 2-sessions: 14:00 – 15:20 and 16:00 – 17:20	709
C05	Empirical Research Methods for Human-Computer Interaction – *S. MacKenzie, S. Castellucci* 2-sessions: 14:00 – 15:20 and 16:00 – 17:20	711

	Tuesday Courses, 29 April	Room
CHInd-F	What HCI Can Do for Citizen Science – *J. J. Preece* 1-session: 9:00 – 10:20	713AB
CHInd-C	Reflections on Design – *D. Norman* 1-session: 11:00 – 12:20	713AB
C06	Improving the User Interface for People with Disabilities – *T. Thompson* 2-sessions: 9:00 – 10:20 and 11:00 – 12:20	709
C07	Card Sorting for Navigation Design – *W. Hudson* 2-sessions: 9:00 – 10:20 and 11:00 – 12:20	802AB
C08	Multimodal Detection of Affective States: A Roadmap Through Diverse Technologies – *J. Gonzalez-Sanchez, M. E. Chavez-Echeagaray, R. Atkinson, W. Burleson* 2-sessions: 9:00 – 10:20 and 11:00 – 12:20	711
C09	Conceptual Models: Core to Good Design – *J. Johnson* 2-sessions: 14:00 – 15:20 and 16:00 – 17:20	709
C10	Computer Vision in interaction and UX – *J. Parker* 2-sessions: 14:00 – 15:20 and 16:00 – 17:20	802AB
C11	Online A/B Tests & Experiments: A Practical but Scientifically Informed Introduction – *J. Williams, B. Williams* 2-sessions: 14:00 – 15:20 and 16:00 – 17:20	711
C12	Mobile HCI – *N. Henze, E. Rukzio* 2-sessions: 14:00 – 15:20 and 16:00 – 17:20	713AB

	Wednesday Courses, 30 April	Room
CHInd-D	How Social Media Design Reshapes Society – *J. Donath* 1-session: 9:00 – 10:20	713AB
CHInd-E	Designing for Seniors – *R. Baecker* 1-session: 11:00 – 12:20	713AB
C13	Agile User Experience and UCD – *W. Hudson* 2-sessions: 9:00 – 10:20 and 11:00 – 12:20	711
C14	HCI Meets Data Mining: Principles and Tools for Big Data Analytics – *D. H. (Polo) Chau* 2-sessions: 9:00 – 10:20 and 11:00 – 12:20	802AB
C15	Rapid Design Labs—A Tool to Turbocharge Design-Led Innovation – *J. Nieters, C. F. Thompson* 2-sessions: 9:00 – 10:20 and 11:00 – 12:20	709
C16	Introduction to Designing and Building Musical Interfaces – *M. Lyons, A. Mulder, S. Fels* 2-sessions: 14:00 – 15:20 and 16:00 – 17:20	709
C17	Make This! Introduction to Electronics Prototyping Using Arduino – *D. Sirkin, W. Ju* 2-sessions: 14:00 – 15:20 and 16:00 – 17:20	802AB
C18	Including Children in Technology Design Processes: Techniques and Practices – *A. Druin, J. Fails, M. L. Guha* 2-sessions: 14:00 – 15:20 and 16:00 – 17:20	711
C19	Interaction Design for Online Video and Television – *D. Geerts, P. Cesar* 2-sessions: 14:00 – 15:20 and 16:00 – 17:20	713AB

	Thursday Courses, 1 May	Room
CHInd-G	Uncovering the Ordinary, Inspiring the Extraordinary: A Conversation with Susan Dray – *S. Dray, E. F. Churchill* 1-sessions: 14:00 – 15:20	713AB
C20	Hands-on Sketching Course – *S. Foehrenbach* 2-sessions: 9:00 – 10:20 and 11:00 – 12:20	802AB
C21	Speech-based Interaction: Myths, Challenges, and Opportunities – *C. Munteanu, G. Penn* 2-sessions: 9:00 – 10:20 and 11:00 – 12:20	711
C22	The Glass Class: Designing Wearable Interfaces – *M. Billinghurst, H. Raffle* 2-sessions: 9:00 – 10:20 and 11:00 – 12:20	713AB
C23	A Crash Course in Modern Geography for HCI Researchers and Practitioners – *B. Hecht, D. Shamma* 1-session: 14:00 – 15:20	802AB
C24	How You Could Benefit from Using ISO Standards – *N. Bevan* 1-session: 14:00 – 15:20	709
C25	Evaluating Children's Interactive Products – *J. Read, P. Markopoulos* 1-session: 14:00 – 15:20	711

VIDEO SHOWCASE

Video Showcase features engaging videos that offer a variety of perspectives on human-computer interaction, including novel interfaces, reflective pieces and future envisionments. Come and enjoy the videos on Tuesday (17:30) followed by the Golden Mouse award ceremony.

Tuesday

17:30 – 19:00 Video Showcase (718AB)

Videos

The Secret Life of Computers
Jonathan Aceituno, Ludovic Potier

Medi, Human Robot Interaction in Pediatric Health
Setareh Aghel Manesh, Tanya Beran, Ehud Sharlin, Saul Greenberg

Electronic Kit with No Current Flow that Uses Projection Mapping
Yoh Akiyama, Homei Miyashita

How I Found My Research Question
Halimat I. Alabi

Is Anyone Looking? Mediating Shoulder Surfing on Public Displays (The Video)
Frederik Brudy, David Ledo, Saul Greenberg

Paper Generators – Harvesting Energy from Touching, Rubbing and Sliding
Joanna Maria Dauner, Mustafa Emre Karagozler, Ivan Poupyrev

Plenopticon: Video Playback for Dynamically Adaptive Depth-of-Field
David Philip Green, Thomas Smith, Guy Schofield

Learning with CyberPLAYce, a Cyber-Physical Learning Environment for Elementary Students Promoting Computational Expression
Arash Soleimani, Kyle Smith, Jiawei Zeng, Keith E. Green, Danielle Herro, Jessie Santiago, Surya Sharma, Manas Tonapi, Amith Vijaykumar, Ian Walker, Christina Gardner-McCune

TouchSense: Expanding Touch Input Vocabulary Using Different Areas of Users' Finger Pads
Da-Yuan Huang, Ming-Chang Tsai, Ying-Chao Tung, Min-Lun Tsai, Yen-Ting Yeh, Liwei Chan, Mike Y. Chen

Augmented Climbing: Testing Prototypes in Wizard of Oz Experiment
Raine Kajastila, Perttu Hämäläinen

Draco: Living Illustrations
Rubaiat Habib Kazi, Fanny Chevalier, Tovi Grossman, Shengdong Zhao, George Fitzmaurice

SweatAtoms: Understanding Physical Activity through Material Artifacts
Rohit Ashok Khot, Jeewon Lee, Larissa Hjorth, Florian 'Floyd' Mueller

HandyScope: A Remote Control Technique using Pull-out Gesture
Takuro Kuribara, Takuto Yoshikawa, Buntarou Shizuki, Jiro Tanaka

Ziklo: Bicycle Navigation Through Tactile Feedback
Brianna Jean Huxtable, Carlo Ka-Ho Lai, Johnson Wen Jun Zhu, Paulina Mun-Yee Lam, Yeseul Tracy Choi, Carman Neustaedter, Greg J. Corness

Loopo: A Tangible Programming Game For Kids
Paulina Mun-Yee Lam, Carlo Ka-Ho Lai, Yeseul Tracy Choi, Brianna Jean Huxtable, Jan Rainier Castro, Andrew Hawryshkewich, Carman Neustaedter

GaussBricks: Magnetic Building Blocks for Constructive Tangible Interactions on Portable Displays
Rong-Hao Liang, Liwei Chan, Hung-Yu Tseng, Han-Chih Kuo, Da-Yuan Huang, De-Nian Yang, Bing-Yu Chen

ShoeSoleSense: Demonstrating A Wearable Foot Interface For Locomotion In Virtual Environments
Denys Matthies, Franz Müller, Christoph Anthes, Dieter Kranzlmüller

L.IVE: An Integrated Interactive Video-based Learning Environment
Toni-Jan Keith Palma Monserrat, Shengdong Zhao, Yawen Li, Xiang Cao

faBrickation: Fast 3D printing of Functional Objects by Integrating Construction Kit Building Blocks
Stefanie Mueller, Tobias Mohr, Kerstin Guenther, Johannes Frohnhofen, Patrick Baudisch

Wrigglo: Shape-Changing Peripheral for Interpersonal Mobile Communication
Joohee Park, Young-Woo Park, Tek-Jin Nam

Paddle: Highly Deformable Mobile Devices with Physical Controls
Raf Ramakers, Johannes Schöning, Kris Luyten

A Wearable Text-Reading Device for the Visually-Impaired
Roy Shilkrot, Jochen Huber, Connie Liu, Pattie Maes, Suranga Chandima Nanayakkara

GestKeyboard: Enabling Gesture-Based Interaction on Ordinary Physical Keyboard
Haimo Zhang, Yang Li

WORKS IN PROGRESS

Authors are scheduled to stand by their posters during "meet the author" sessions indicated below. Please visit both rotations to see all of the exciting work being done and discuss new ideas with Poster authors.

First Rotation: Tuesday all day

Authors present their posters during the morning and afternoon breaks.

The following poster collections are on display:

Children and Teens	10101 – 10108
Accessibility	10201 – 10212
Augmented Reality	10301 – 10309
Search and InfoViz	10401 – 10410
Making	10501 – 10510
Gaming	10601 – 10614
Gesture and Eye-Based Interactions	10701 – 10715
Healthcare	10801 – 10814
Notifications, Awareness and Distractions	10901 – 10916
Interaction Techniques	11001 – 11016

Second Rotation: Wednesday all day

Authors present their posters during the morning and afternoon breaks.

The following poster collections are on display:

E-Commerce	20101 – 20107
Communities	20201 – 20212
Displays	20301 – 20309
Social Computing	20401 – 20411
Ubicomp, Robots, and Wearables	20501 – 20511
Learning	20601 – 20614
Mobile Interactions	20701 – 20712
Lifestyle	20801 – 20813
Trust, Privacy, and Emotions	20901 – 20913
Users and UI Design	21001 – 21015

FIRST ROTATION – TUESDAY 29 APRIL

CHILDREN AND TEENS 10101 – 10108

Narrative-Based Elicitation: Orchestrating Contributions from Experts and Children
J. Mora Guiard

Find the Jackalop: A Game Enhancing Young Children's Spatial Thinking
G. Kalmpourtzis

SpeakUp in the Classroom: Anonymous Temporary Social Media for Better Interactions
S. Govaerts

How Do Children Adapt Strategies when Drawing on a Tablet?
M. Shukri, S. Rohkmah

Scaffolding Design Sessions with Teenagers: The PDA Approach
D. Fitton

"Smiles, Kids, Happy Songs!": How to Collect Metaphors with Older Adults
S. Panëels

CopyMe: A Portable Real-Time Feedback Expression Recognition Game for Children
C. T. Tan

A Robot with Style, because you are Worth it!
W. Johal

ACCESSIBILITY 10201 – 10212

Designing Games for the Rehabilitation of Functional Vision for Children with Cerebral Visual Impairment
C. Linehan

Supporting Autism Therapists: Co-designing Interventions
C. Duarte

Designing a Multimodal Email Support Tool for Persons with Aphasia
A. Al Mahmud

Use Octopus Launcher Like Your Hands: Joystick-based Smartphone Control Solution for Motor Impaired People in Electric Wheelchairs
H. Ahn

Blind in a Virtual World: Vision-deprived Virtual Navigation Patterns Using Depth Cues and The Effect of Extended Sensory Range
S. Maidenbaum

Design of an Accessible and Portable System for Soccer Players with Visual Impairments
K. McMullen

Design for One: A Game Controller for a Quadriplegic Gamer
H. Lin

Technology to Support Emergent Literacy Skills in Young Children with Visual Impairments
A. Stangl

Making Electronics More Accessible to People with Learning Disabilities
N. Hollinworth

HoverZoom: Making On-screen Keyboards More Accessible
F. Pollmann

Welcoming Gesture Recognition into Autism Therapy
C. Duarte

HamsaTouch: Tactile Vision Substitution with Smartphone and Electro-Tactile Display
H. Kajimoto

AUGMENTED REALITY 10301 – 10309

Augmented Climbing: Interacting With Projected Graphics on a Climbing Wall
R. Kajastila

An Augmented Workplace for Enabling User-Defined Tangibles
M. Funk

Shvil: Collaborative Augmented Reality Land Navigation
N. Li

Really, It's for Your Own Good...Making Augmented Reality Navigation Tools Harder to Use
J. Wen

Enhancing Augmented Reality For Use In Product Design
T. Purdy

Generic Method for Crafting Deformable Interfaces to Physically Augment Smartphones
C. Watanabe

CAPTIVE: A Cube with Augmented Physical Tools
A. Chakraborty

Using 3D Hand Gestures and Touch Input for Wearable AR Interaction
H. Bai

Rubikon: A Highly Reconfigurable Device for Advanced Interaction
A. Roudaut

SEARCH AND INFOVIZ 10401 – 10410

Babywijzer: An Application to Support Women During their Pregnancy
A. Al Mahmud

Lightweight Support for Collaborative Web Browsing Through SpreadVector
T. Gross

Linking External and Internal Search: Investigating the Site Searching Patterns of Referred Searchers
B. Jansen

What People Inquire about Locations? A Study on the Taxonomy of Location-based Questions in Campus
L. Chen

Should I Stay or Should I Go: Two Features to Help People Stop an Exploratory Search Wisely
Y. Jia

Unified Visualization of Quantitative and Qualitative Playtesting Data
P. Mirza-Babaei

Visualizing Vocal Expression
M. Pietrowicz

GLOs: Graph-Level Operations for Exploratory Network Visualization
C. Stolper

Beyond Physical Bar Charts – An Exploration of Designing Physical Visualizations
S. Stusak

Annotation of Graphical Elements in Visualizations for an Efficient Analysis of Visual Tasks
M. Raschke

MAKING 10501 – 10510

Doing Gender in Input Fields
N. Marsden

From DIY Tutorials to DIY Recipes
M. Dalton

Towards an Integrated Methodological Framework for Understanding Embodiment in HCI
A. Xambó

Programming in the Pond: A Tabletop Computer Programming Exhibit
D. Weintrop

The Timeline as a Programming Interface
B. Cardoso

Exploring the Need for Visualizations in System Administration Tools
J. Mahendiran

Making 3D Printed Objects Interactive Using Wireless Accelerometers
J. Hook

NatCut: An Interactive Tangible Editor for Physical Object Fabrication
S. Schneegass

A Half-Implant Device on Fingernails
K. Iwasaki

CapStudio: An Interactive Screencast for Visual Application Development
K. Fukahori

MAKING 10601 – 10614

Gamification of Collaborative Idea Generation and Convergence
A. Moradian

RoVatar: Semi-autonomous Robot Boxing Game by Miniature Avatars
B. Yoo

What Nouns and Adjectives in Online Game Reviews Can Tell Us About Player Experience?
X. Fang

Is 60 FPS Better than 30? The Impact of Frame Rate and Latency on Moving Target Selection
R. Teather

Civic Engagement Meets Pervasive Gaming: Towards Long-term Mobile Participation
M. Baldauf

The Effect of Multiplayer Dynamic Difficulty Adjustment on the Player Experience of Video Games
A. Baldwin

Performance of Modern Gaming Input Devices in First-Person Shooter Target Acquisition
R. Teather

Geo-Sociograms: A Method to Analyze Movement Patterns and Characterize Tasks in Location-Based Multiplayer Games
G. Herkenrath

Playful Science: Deriving Computer Games from Complex Systems
R. Kirkham

Investigating Players' Responses to Wayfinding Cues in 3D Video Games
D. Moura

Common Playability Problems in Social Network Games
J. Paavilainen

A Brief Technical Note on Haptic Jellyfish with Falcon and OpenGL
S. Mokhov

QuoDocs: Improving Developer Engagement in Software Documentation through Gamification
R. Sukale

Improving Guide Dog Team Play with Accessible Dog Toys
S. Hauser

GESTURES AND EYE-BASED INTERACTIONS 10701 – 10715

Multimodal Target Prediction Model
P. Biswas

Suit Up!: Enabling Eyes-Free Interactions on Jacket Buttons
K. Todi

EyeDE: Gaze-enhanced Software Development Environments
F. Raab

Eye Contact over Video
J. Kjeldskov

Multilevel Auditory Displays for Mobile Eyes-Free Location-Based Interaction
Y. Vazquez-Alvarez

Design and Evaluation of a Dwell-free Eye Typing Technique
T. Chakraborty

Dynamic Edge: Finding Eyes-Free Controls on Orientation-Agnostic Devices
J. Kildal

AirAuth: Towards Attack-Resilient Biometric Authentication Using In-Air Gestures
S. Kratz

Robot Conferencing: Physically Embodied Motions Enhance Social Telepresence
K. Tanaka

Glasses with Haptic Feedback of Gaze Gestures
J. Rantala

Error Behaviours in an Unreliable In-air Gesture Recognizer
A. Arif

U-Remo: Projection-assisted Gesture Control for Home Electronics
A. Kadomura

Personal Space: User Defined Gesture Space for GUI Interaction
A. Jude

Using Audio Cues to Support Motion Gesture Interaction on Mobile Devices
S. Morrison-Smith

Trampoline: A Double-sided Elastic Touch Device for Repoussé and Chasing Techniques
G. Lee

HEALTHCARE 10801 – 10814

Evaluating a Clinical Decision Support Interface for End-of-Life Nurse Care
A. Febretti

Comparing Direct and Indirect Interaction in Stroke Rehabilitation
M. Khademi

Point-of-Care Testing for Diabetes Patients: Investigating Diabetes Management by Older Adults
A. Al Mahmud

Physio@Home: Design Explorations to Support Movement Guidance
R. Tang

Supporting Longitudinal Change in Many Health Behaviors
J. Ren

Free-Hand Interaction with Leap Motion Controller for Stroke Rehabilitation
M. Khademi

Afraid to Ask: Proactive Assistance with Healthcare Documents Using Eye Tracking
S. Zhou

Designing Engaging Camera Based Mobile Games for Implicit Heart Rate Monitoring
J. Wang

SensoryPaint: A Natural User Interface Supporting Sensory Integration in Children with Neurodevelopmental Disorders
K. Ringland

Lessons from ICT Design of a Healthcare Worker-Centered System for a Chronic Mental Care Hospital
S. Fels

Automated Virtual Observation Therapy
Y-L. Theng

HeartiSense: A Novel Approach to Enable Effective Basic Life Support Training without an Instructor
W. Kim

VizCom: A Novel Workflow Model for ICU Clinical Decision Support
A. Faiola

The Application of Eye Movement Biometrics in the Automated Detection of Mild Traumatic Brain Injury
C. Holland

NOTIFICATIONS, AWARENESS AND DISTRACTIONS 10901 – 10916

Attention in Mobile Interactions: Gaze Recovery for Large Scale Studies
L. Paletta

Attention Approximation of Mobile Users towards their Environment
J. Schrammel

Studying How Character of Conversation Affects Personal Receptivity to Mobile Notifications
F. Schulze

Understanding Notification Stress of Smartphone Messenger App
S. Yoon

Supporting the Mobile Notification Process through Tactile Cues Selected using a Paired Comparison Task
R. Kuber

Designing a Visual Cue Invocation Scheme to Aid Monitoring Behavior on a Digital Map Display
F. Fortmann

Spatial Perception Orientation Task (SPOT): Developing an Accessible Tool for Measuring Spatial Working Memory.
D. Blasko

Supporting Non-Verbal Visual Communication in Online Group Art Therapy
B. Jones

SomaTech: An Exploratory Interface for Altering Movement Habits
Q. Wang

Leveraging the Design of Child Restraint Systems to Reduce Driver Distraction
O. Mubin

Quantifying Driver Frustration to Improve Road Safety
R. Taib

Exploring Virtual Depth for Automotive Instrument Cluster Concepts
N. Broy

Beyond Eye Tracking Analogies: Cursor Trajectories as Subtle Cues to Detect Distracting UI Elements
J. Hurtienne

Understanding In-Car Smartphone Usage Pattern with an Un-obfuscated Observation
C. Oh

Resumption Lag at Interruptible Timing might not be short in Actual Environment
T. Tanaka

Working With The Television On: An Investigation into Media Multitasking
D. Brumby

INTERACTION TECHNIQUES 11001 – 11016

Output to Input: Concepts for Physical Data Representations and Tactile User Interfaces
S. Szigeti

Interaction Techniques for Co-located Collaborative TV
K. Buchner

ExtendedThumb: A Motion-Based Virtual Thumb for Improving One-Handed Target Acquisition on Touch-Screen Mobile Devices
J. Lai

Chiron: Interpreting Signals from Capacitive Patterns and Inertial Sensors for intuitive Shape Modeling.
A. Verma

Origami Tessellation Display: Interaction Techniques Using Origami-based Deformable Surfaces
Y. Kinoshita

Classifying Physical Strategies in Tangible Tasks: A Video-Coding Framework For Epistemic Actions
A. Esteves

LightBundle: Grasping Light through Plant-Inspired Interactions
H.-L.. Kao

How is Your Laugh Today?
M. Mancini

Place-onas: Shared Resource for Designing Body Tracking Applications
C. Morrison

Understanding Expert-Novice Differences in Geometry Problem-Solving Tasks: A Sensor-based Approach
S. Kim

An Interaction Model for Touch-Aware Tangibles on Interactive Surfaces
S. Voelker

SPad: A Bimanual Interaction Technique for Productivity Applications on Multi-Touch Tablets
C. Foucault

Whirlstools: Kinetic Furniture with Adaptive Affordance
Y. Takeuchi

Extending Interaction for Smart Watches: Enabling Bimanual Around Device Control
J. Knibbe

Empa Talk: A Physiological Data Incorporated Human-Computer Interactions
S. J. Kim

Perceived Distance from Hitting with a Stick Is Altered by Overlapping Vibration to Holding Hand
R. Okazaki

■ SECOND ROTATION – WEDNESDAY 30 APRIL

E-COMMERCE 20101 – 20107

Mobile Payment Systems in North America: User Challenges & Successes
S. Hillman

A Methodological Inquiry into Predictors of Consumer Satisfaction
S. Cavrak

Towards a Novel Digital Household Account Book
F. Kerber

"What do you think of the return of dungarees?": Social Media Interactions between Retail Locations and their Customers
J. Mahoney

BARTER – Promoting Local Spending Behavior
B. Knowles

Exploring the Opportunities of Mobile Technology Use in Nonprofit Organizations
S. Kim

Analyzing Employment Technologies for Economically Distressed Individuals
T. Dillahunt

COMMUNITIES 20201 – 20212

Testing a Grassroots Citizen Science Venture Using Open Design, "the Bee Lab Project"
R. Phillips

Layers of User Expectations of Future Technologies: An Early Framework
T. Olsson

Designing for Neighborhoods: Lessons Learned from Paper-based Bulletin Boards
C. López

Collaborating with Communities in Africa: A Hitchhikers Guide
A. Peters

LocaLudo: Card-based Workshop For Interactive Architecture
J. Huyghe

The Young and the Vulnerable? Perceived Negative Effects of Robots on Youngsters Prevent Older Adults from Adopting Companion Robots
T. Waddell

NewsPad: Designing for Collaborative Storytelling in Neighborhoods
J. Matias

Mixing Languages? Image Schema Inspired Designs for Rural Africa
D. Löffler

'Sometimes it's the Weather's Fault' – Sustainable HCI & Political Activism
S. Prost

Making Sense of Haul Videos: Self-created Celebrities Fill a Fashion Media Gap
S. Sykes

Helping Users Review and Make Sense of Access Policies in Organizations
P. Jaferian

Using Personalized Radio to Enhance Local Music Discovery
D. Turnbull

DISPLAYS 20301 – 20309

Tablet Interaction Techniques for Viewport Navigation on Large Displays
K. Cheng

Midair Displays: Exploring the Concept of Free-Floating Public Displays
S. Schneegass

Assessing the Zone of Comfort in Stereoscopic Displays using EEG
J. Frey

Expanding the Porthole: Leveraging Large, High-Resolution Displays in Exploratory Visual Analysis
K. Reda

Screen Scaling: Effects of Screen Scale on Moving Target Selection
R. Teather

User Centered Design of a Hybrid-Reality Display for Weld Monitoring
W. Seidelman

Towards Understanding Spontaneous Interaction on Curved Displays
H. Palleis

ReflectoSlates: Personal Overlays for Tabletops Combining Camera-projector Systems and Retroreflective Materials
D. Martinez Plasencia

Tangram Theatre: Presenting Children's Creation on Multimodal Tabletops
Z. Qu

SOCIAL COMPUTING 20401 – 20411

Understanding and Leveraging Social Networks for Crowdfunding: Implications for Support Tools
J. Hui

Influence of Dining-Progress Synchrony in Time-Shifted Tele-Dining
T. Inoue

Social Comparison in Social Media: A Look at Facebook and Twitter
G. Panger

International Students' Use of Facebook vs. a Home Country Site
C. W. Yuan

Watchboard: Curated Microblogging for the Enterprise
N. Sultanum

Affordances of Social Technologies as Social Microworlds
A. Parmaxi

Evaluation of Automated Friend Grouping in Online Social Networks
M. Eslami

Pact: Leveraging Social Networks for Goal Achievement
Z. Porges

Predicting Potential Responders in Social Q&A Based on non-QA Features
Z. Liu

I'm Here with My Kids: Investigating Location sharing Preferences of Parents with Young Children
P. Massa

The Laughing Dress: Evoking Prosocial Interaction Among Strangers
S. Lee

UBICOMP, ROBOTS AND WEARABLES 20501 – 20511

Towards Effective Ethical Behavior Design
R. de Oliveira

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AR Browser for Points of Interest in Disaster Response in UAV Imagery
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The Editable Self: A Workbench for Personal Activity Data
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Biosignal Sharing for Affective Connectedness
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Workscape Explorer: Using Group Dynamics to Improve Performance
J-I. Watanabe

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I'd Tap That! Providing Real Time Feedback on Roller Derby Skills
C. Stewart

Human SUGOROKU: Learning Support System of Vegetation Succession with Full-body Interaction Interface
T. Nakayama

Measuring Learned Skill Behaviors Post-MOOC
D. Russell

Wait-Learning: Leveraging Conversational Dead Time for Second Language Education
C. Cai

Supporting Second Language Reading with Picture Note-Taking
C-L. Yang

The Impact of Interactive Visual Simulations on Learning Statistics
G. Iten

Supporting Debates with a Real-Time Feedback System
B. Huber

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B. Schneider

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A. Proaps

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M. Funk

A Study of Direction's Impact on Single-Handed Thumb Interaction with Touch-Screen Mobile Phones
J. Lai

Generating Highlights Automatically from Text-Reading Behaviors on Mobile Devices
J. Oh

MIMIC: Leveraging Sensor-based Interactions in Multimodal Mobile Applications
N. Elouali

MochaTop: Building Ad-hoc Data Spaces with Multiple Devices
P. Woźniak

100 Days of iPhone Use: Mobile Recording in the Wild
M. McGregor

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K. Alharbi

Detection of Tangential Force for a Touch Panel Using Shear Deformation of the Gel
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FingerReader: A Wearable Device to Support Text Reading on the Go
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Sonic Respiration: Controlling Respiration Rate Through Auditory Biofeedback
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Haptics in Remote Collaborative Exercise Systems for Seniors
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AirFlow: Designing Immersive Breathing Training Games for COPD
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Understanding Information Practices of Interactive Personal Genomics Users
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KinChat: Veiling Your Face without Suppressing Facial Expression in Text Communication
A-J. Huang

Using Icon Arrangement for Fallback Authentication on Smartphones
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VibraInput: Two-step PIN Entry System based on Vibration and Visual Information
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Measuring Snooping Behavior with Surveys: It's How You Ask It
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Measuring User Experience through Future Use and Emotion
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Measuring Product Happiness
I. Kamp

Designing Multi-Touch Gestures to Support Emotional Expression in IM
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The Art of Deleting Snapshots
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Who´s the Boss? Requester Transparency and Motivation in a Microtask Marketplace
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Mental Models for Web Objects in Different Cultural Settings
S. Linxen

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Designing for Negative Affect and Critical Reflection
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Improving Data-Driven Design and Exploration of Digital Musical Instruments
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Pdot: Participatory Design Online Tool
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An Aesthetic Perspective to Explore Aesthetic Components of Interactive System: a Case Study on Music Player
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Characteristics of Narrative Textual Data Linked to User Experiences
T. Meneweger

Assisting Older Adults in Assessing the Reliability of Health-Related Websites
C. Stewart

INTERACTIVITY

Interactivity offers hands-on demonstrations that let you see, hear and touch interactive visions of the future. They take the form of prototypes, demonstrations, artworks, design experiences and inspirational technologies. Interactivity offers an alternative to CHI's traditional text format to disseminate advances in the field. Interactivity promotes and provokes discussion about the role of technology by actively engaging attendees one-on-one.

Interactivity demonstrations are available from the Monday evening Conference Reception through the Thursday morning break. Presenters will be stationed at their exhibits throughout the Monday evening session and during coffee breaks all day Tuesday, Wednesday and on Thursday morning.

This year, Interactivity will also include flexible demonstration spaces. These spaces will be used by authors of accepted papers and notes to give a short demonstration of their work during one of the breaks. A schedule of these research demonstrations will be posted in the Interactivity area.

Monday

17:30 – 19:30 Grand opening

Tuesday – Wednesday

10:20 – 11:00 Presenters available during the morning break

15:20 – 16:00 Presenters available during the afternoon break

Thursday

10:20 – 11:00 Presenters available during the morning break

11:30 Interactivity closes

int01 The CBC Newsworld Holodeck – *M. Ladly, G. Penn, C. P. C. Chen, P. Chintraruck, M. Ghaderi, B. A. Ludlow, J. Peter, R. Tanyag, P. Zhou, S. Kazemian*

int02 Interaction Opportunities Around Helmet Design – *W. Walmink, A. D. Chatham, F. Mueller*

int03 zPots: A Virtual Pottery Experience With Spatial Interactions Using the Leap Motion Device – *Vinayak, K. Ramani, K. Lee Jr., R. Jasti*

int04 i-dentity: Innominate Representation as Engaging Movement Game Element – *J. Garner, G. Wood, S. Pijnappel, M. Murer, F. Mueller*

int05 Text Blaster: A Multi-Player Touchscreen Typing Game – *K. Vertanen, J. Emge, H. Memmi, P. O. Kristensson*

int06 The Muses of Poetry – *D. Arellano, V. Helzle*

int07 Exploring the Design Space of Ambient Light Displays – *A. Löcken, H. Müller, W. Heuten, S. CJ Boll*

int08 Scopophobic Kitties in Wonderland: Stories Behind the Scene of a Gaze Contingent Environment – *M. Chen, K-Y. Wu, Y-C. Huang*

int09 SonicExploratorium: An Interactive Exhibit of Sonic Discovery – *B. Gonzalez, A. T. Adams, C. E. Latulipe*

int10 Scale: Human Interactions with Broken and Discarded Technologies – *L. Kang, T. Park, S. Jackson*

int11 Using Mobile Tools in Immersive Environments to Support Science Inquiry – *M. Lui, A. C. Kuhn, A. Acosta, M. Nino-Soto, C. Quintana, J. D. Slotta*

int13 Rafigh: A Living Media Interface for Learning Games – *F. Hamidi, M. Baljko*

int14 Game of Tones: Learning to Play Songs on a Piano Using Projected Instructions and Games – *L. Raymaekers, J. Vermeulen, K. Luyten, K. Coninx*

int15 Haptic Turk: A Motion Platform Based on People – *L-P. Cheng, P. Lühne, P. Lopes, C. Sterz, P. Baudisch*

int16 The New pCubee: Multi-touch Perspective-corrected Cubic Display – *Y. Tang, I. Stavness, S. S. Fels*

int17 Adapting Games From Literature: Edgar Allen Poe Embodied in Players – *L. Grace*

int18 Rainbowfish: Visual Feedback on Gesture-Recognizing Surfaces – *T. Grosse-Puppendahl, S. Beck, D. Wilbers*

int19 HeartiSense: A Novel Approach to Enable Effective Basic Life Support Training without an Instructor – *Y. Kwon, S. Lee, J. Jeong, W. Kim*

int20 TransWall: A Transparent Double-sided Touch Display Facilitating Co-located Face-to-face Interactions – *H. Heo, H. K. Park, S. Kim, J. Chung, G. Lee, W. Lee*

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int25 IntentRadar: Search User Interface that Anticipates User's Search Intents – *T. Ruotsalo, J. Peltonen, M. J. A. Eugster, D. Glowacka, A. Reijonen, G. Jacucci, P. Myllymäki, S. Kaski*

int26 The Talking Plants: an Interactive System for Grassroots Urban Food-Growing Communities – *S. Heitlinger, N. Bryan-Kinns, J. K. Jefferies*

int28 Object and Arm Shadows: Visual Feedback for Cross Device Transfer – *G. Besacier, J. Tournet, N. Goyal, F. Cento, S. D. Scott*

int29 TastyBeats: Making Mocktails with Heartbeats – *R. A. Khot, J. Lee, H. Munz, D. Aggarwal, F. Mueller*

int30 Step Kinnection: A Hybrid Clinical Test for Fall Risk Assessment in Older Adults – *J. A. Garcia, Y. Pisan, C. T. Tan, K. F. Navarro*

int31 PaperDude: A Virtual Reality Cycling Exergame – *J. Bolton, M. Lambert, D. Lirette, B. Unsworth*

int32 Bidirectional Feedback in Motor Imagery BCIs: Learn to Control a Drone within 5 Minutes – *N. Kos'myna, F. Tarpin-Bernard, B. Rivet*

int33 How Far is UP? Encouraging Social Interaction Through Children's Book App Design – *B. Sargeant, F. Mueller*

int34 LinearDragger: a Linear Selector for One-finger Target Acquisition – *O. K-C. Au, X. Su, R. Lau*

int35 BeFaced: a Casual Game to Crowdsource Facial Expressions in the Wild – *C. T. Tan, H. Sapkota, D. Rosser*

int36 Billboard: Interacting with Personal Public Displays – *L. Kleinman, A. Carney, A. Ma*

int37 AirAuth: A Biometric Authentication System using In-Air Hand Gestures – *S. Kratz, M. T. I. Aumi*

int38 CopyMe: an Emotional Development Game for Children – *N. Harrold, C. T. Tan, D. Rosser, T. W. Leong*

int39: Interacting with the Kiwi Move: A Platform for Motion-based Applications – *A. Beattie, D. Chen, J. Chibuk, O. Mayrand, Z. Patel*

int40 Glance: Enabling Rapid Interactions with Data Using the Crowd – *W. S. Lasecki, M. Gordon, S. P. Dow, J. P. Bigham*

int41 Move Your Phone: Spatial Input-based Document Zoom & Pan on Mobile Displays Revisited – *M. Spindler, M. Schuessler, M. Martsch, R. Dachselt*

int42 FishTank Fitts: A Desktop VR Testbed for Evaluating 3D Pointing Techniques – *R. J. Teather, W. Stuerzlinger, A. Pavlovych*

int43 Plant Guild Composer: An Interactive Online System to Support Back Yard Food Production – *J. Norton, S. Nayebaziz, S. Burke, B. J. Pan, B. Tomlinson*

int44 faBrickation: Fast 3D printing of Functional Objects by Integrating Construction Kit Building Blocks – *S. Mueller, T. Mohr, K. Guenther, J. Frohnhofen, P. Baudisch*

int45 Engaging with Virtual Characters Using a Pictorial Interaction Language – *B. Endrass, L. Hall, C. Hume, S. Tazzyman, E. Andre, R. Aylett*

int46 PaperFold: A Shape Changing Mobile Device with Multiple Reconfigurable Electrophoretic Magnetic Display Tiles – *A. Gomes, R. Vertegaal*

int47 "Did you pack your keys?" Smart Objects and Forgetfulness – *C. Farion, M. Purver*

int48 Creating Physical Visualizations With MakerVis – *S. Swaminathan, C. Shi, Y. Jansen, P. Dragicevic, L. A. Oehlberg, J-D. Fekete*

int49 MetaTravels and MetaLonsdale: iPad Apps for Percussive Improvisation – *C. Martin, H. J. Gardner, B. Swift*

int50 Interactive Experiences Designed for Agricultural Communities – *R. C. L. Suen, K. T. T. Chang, M. P-H. Wan, Y. C. Ng, B. C. Y. Tan*

int51 BackPat: Improving One-Handed Touchscreen Operation by Patting the Back of the Device – *K. Seipp, K. Devlin*

int52 InGrid: Interactive Grid Table – *M. Ziat, J. Fridstrom, K. Kilpela, J. Fancher, J. J. Clark*

int53 OJAS – Open Source Bi-Directional Inductive Power Link – *J. Mikkonen, R. Gowrishankar, M. Oksanen, H. Raittinen, A. Kolinummi*

int54 TwitterRadio: Translating Tweets into Music – *F. Morreale, A. Miniukovich, A. De Angeli*

int55 HamsaTouch: Feel the World through Your Palm – *H. Kajimoto, M. Suzuki, Y. Kanno*

int56 Imaginary Reality Basketball: A Ball Game Without a Ball – *P. Baudisch, H. Pohl, S. Reinicke, E. Wittmers, P. Lühne, M. Knaust, S. Köhler, P. Schmidt, C. Holz*

int57 Draco: Bringing Life to Illustrations – *R. H. Kazi, F. Chevalier, T. Grossman, S. Zhao, G. Fitzmaurice*

int58 RunRight – Real-Time Visual and Audio Feedback on Running – *S. Nylander, M. Jacobsson, J. Tholander*

int59 GaussBricks: Magnetic Building Blocks for Constructive Tangible Interactions on Portable Displays – *R-H. Liang, L. Chan, H-Y. Tseng, H-C. Kuo, D-Y. Huang, D-N. Yang, B-Y. Chen*

int60 Cushionware: A Practical Sitting Posture-based Interaction System – *G. Liang, J. Cao, X. Liu, X. Han*

int61 Mechanical Force Redistribution Floor Tiles – *A. M. Grau, C. Hendee, A. S. Karkar, H. Su, M. Cole, K. Perlin*

int62 Wriggle:Shape-Changing Peripheral for Interpersonal Mobile Communication – *J. Park, Y-W. Park, T-J. Nam*

int63 Interacting with The Vocal Chorder – Re-empowering the Opera Diva – *C. E. T. Unander-Scharin, Å. Unander-Scharin, K. Höök, L. Elblaus*

EXHIBITORS ALPHABETICALLY

See the map on page 69 for the location of each booth

Akendi Booth 9
Akendi creates meaningful experiences through intentionally directed efforts in user-centred strategy, research, design and testing. Working with digital and physical products, website and software for any device, we optimize the experience you deliver. Akendi also offers courses and certifications in UX that provide in-depth theory mixed with practical application exercises.

Bloomberg LP Champion Sponsor Booths 6 & 7
Bloomberg connects influential decision makers to a dynamic network of information, people and ideas. Our strength – quickly and accurately delivering data, news and analytics through innovative technology – is at the core of everything we do. With over 15,000 employees in 192 locations, we deliver business and financial information, news and insight around the world.

CHI 2014 Information Booth 28a
Student Volunteers staff the Information Desk when the Commons (exhibit hall) is open. They are happy to help answer your questions or find someone who can. At other times, stop by the Registration Desk for information. The Information Desk will also help deliver resumes submitted in response to job postings from registered recruiters.

CHI 2015 Booth 28
2015 will be the first year that CHI is hosted in Asia - a tremendous opportunity to showcase Asian thought leaders and cutting edge technologies. Visit our booth to meet conference organizers and hear about innovations we'll see in 2015. The conference theme is "Crossings": crossing borders, crossing disciplines, crossing people and technology, crossing art and science, ... crossing me and you.

Elsevier / Morgan Kaufmann Booth 26
Elsevier and Morgan Kaufmann will be presenting key titles across Human-Computer Interaction. Please stop by and visit the booth, meet the publishers and editors in person, and take the opportunity to ask any questions and learn more about our author services and content innovation. www.elsevier.com/computerscience and www.store.elsevier.com/Morgan-Kaufmann

EyeGaze – LC Technologies Booth 25
LC Technologies is passionate about changing lives with cutting-edge eye tracking solutions. Since 1986 our goal has been to create an unobtrusive human-computer interface, revolutionizing the way we interact with computers/devices. Now used in 44 countries, our eye-tracking systems are seamless extensions of the human experience, providing highly accurate eye movement and gaze point measurements.

EyeTracking, Inc. Booth 18
EyeTracking, Inc. is the leading provider of eye tracking services, software and expertise. For over a decade we have been at the forefront of innovation in virtually every area of visual behavior and cognitive workload research. Visit our booth to learn about our software: EyeWorks for eye tracking, Quad Server for physiological sensor integration, Workload RT for cognitive workload measurement.

Facebook Contributing Sponsor Booth 36
Founded in 2004, Facebook's mission is to give people the power to share and make the world more open and connected. People use Facebook to stay connected with friends and family, to discover what's going on in the world, and to share and express what matters to them.

Google Champion Sponsor Booths 14 & 15
Google's mission is to organize the world's information, making it universally accessible and useful. Every day, we bring our spirit of innovation and entrepreneurship to work. Come by our booth, meet our engineers and researchers, demo some new products and learn about some of the great opportunities we have at Google.

GRAND NCE Champion Sponsor Booths 16 & 17
GRAND is a research network and commercialization engine whose goal is to address complex issues in digital media and transform multidisciplinary research into user-centred solutions. GRAND explores the use and application of digital media in a variety of settings including entertainment, healthcare, education, environmental sustainability, and public policy.

Microsoft Champion Sponsor Booths 3, 4 & 5
At Microsoft, we have a passion for HCI. Our Design and Research professions impact the interactions of millions of users around the globe. At Microsoft, you would collaborate with brilliant people on projects with the potential to change the world. Come by our booth to play, pick up free swag, enter to win Microsoft prizes, and chat about the great opportunities for shaping HCI at Microsoft.

MillionShort Booth 37
MillionShort is an exciting new web search engine that allows the user to remove a section of the top websites from their search results to provide a deeper, more exploratory search. Whether you're removing the top million, 100k, 10k, 1k, or 100 sites, MillionShort allows you to see what you can find when you delve underneath an entire slice of the web.

Morgan & Claypool Publishers Booth 13
Morgan & Claypool is publisher of the Synthesis Digital Library, including the HCI series edited by Jack Carroll; the assistive technologies series, edited by Ron Baecker; and the series on information science, edited by Gary Marchionini. Please visit our booth for free eBooks and discounted print copies.

MultiTouch Booth 24
The MultiTaction interactive displays feature the World's first and only 55" Ultra-Thin Bezel LCD with built-in touch and unlimited touch points. MultiTaction displays can be stacked together to create massive multi-user interactive surfaces supporting simultaneous touch, IR pen, Enriched Reality, and user identification. For more information, please visit www.multitaction.com.

now publishers Booth 2
now publishers publishes high quality reference, research and review journals in business and technology. The Foundations and Trends journals publish state-of-the-art review articles written by leading researchers in the field with the references linked to the original articles and allows for updating by the author and community.

Oxford University Press Booth 19
Oxford University Press is pleased to publish Interacting with Computers on behalf of BCS, The Chartered Institute for IT and Interaction, a specialist group from BCS. Visit the Oxford University Press stand for free journal copies and discounted books! For more information visit www.iwc.oxfordjournals.org and look at our related books at www.oup.com.

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Samsung Research America **Booth 23**
Samsung's philosophy is based on perpetual innovation and good corporate citizenship. Our practices have proven successful – we are one of the fastest growing companies in America, and an acknowledged leader in the digital convergence revolution. Samsung Research America and Samsung User Experience Center America welcomes you to CHI 2014!

SAP **Booth 38**
As market leader in enterprise application software, SAP helps companies of all sizes and industries run better. We have more than 251,000 customers in over 188 countries and employ 66,000 people at locations in more than 130 countries. Our UX professionals are working on some of today's hottest applications, stop by our booth and see how SAP is changing the way our customers do business.

SensoMotoric Instruments, Inc. **Booth 39**
SMI is a leading provider of eye and gaze tracking systems to a global market. Our advanced analysis software provides visualizations that simplify the interpretation of eye tracking data. Let us show you how to add an eye tracker to your existing set of tools: smivision.com/egts.

Springer **Booths 11 & 12**
Explore the full range of print and electronic publications in HCI (including the HCI series) at our booth. Get 20% discount on our (e)books, discover our Open Access portfolio (including Journal on Interaction Science, Journal of Trust Management), and don't miss the chance to discuss your book proposal in person with Beverley Ford & Helen Desmond.

Sulon Technologies **Booth 27**
Sulon Technologies engineers, designs and distributes The Cortex, the first-ever fully immersive spatial gaming platform that delivers a contextually aware augmented virtual reality experience. The Cortex is a wireless wear-and-play device that leverages existing mobile devices. It transforms any physical space into a dynamic holodeck-like experience that can be walked through and interacted with.

The MIT Press **Booth 40**
The MIT Press publishes extensively in Human-Computer Interaction.

Tobii Technology **Booth 8**
Tobii Technology is the global leader in eye tracking and gaze interaction. Tobii offers cutting-edge and award-winning products and services that are revolutionizing research, institutions and industries worldwide. Founded in 2001 and based in Sweden, Tobii has a global presence with international offices and a worldwide network of customers and partners.

Toronto University Consortium for Accessibility Research and Education (TUCARE) Champion Sponsor **Booth 20**
Toronto is THE foremost city in the world for research and teaching on inclusive design and on accessible, assistive, and seniors' technology, leveraging strengths of the University of Toronto (Computer Science, Occupational Science), OCAD Univ., Ryerson Univ., and Toronto Rehabilitation Institute. Stop by the booth to learn about opportunities for postdoctoral fellowships and graduate study.

Yahoo! Labs Contributing Sponsor **Booth 10**
Yahoo Labs serves as Yahoo's incubator for bold experimentation, applying its scientific findings to create personalized, delightful experiences for Yahoo's users and enhance value for its advertisers. From idea to product innovation, Yahoo Labs is responsible for the algorithms behind the Web experience for Yahoo's hundreds of millions of users. Stop by our booth to find out how you can join us..

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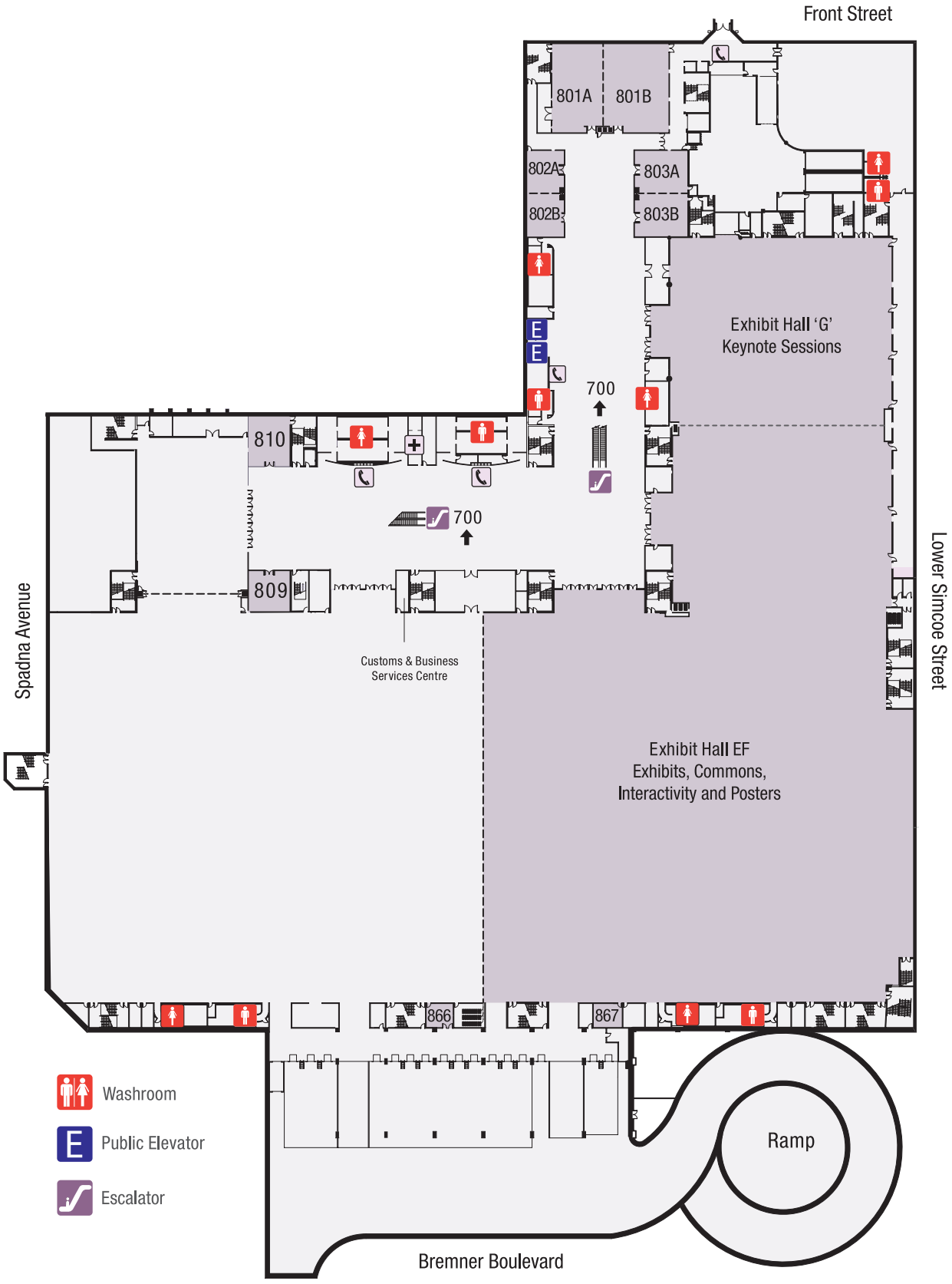
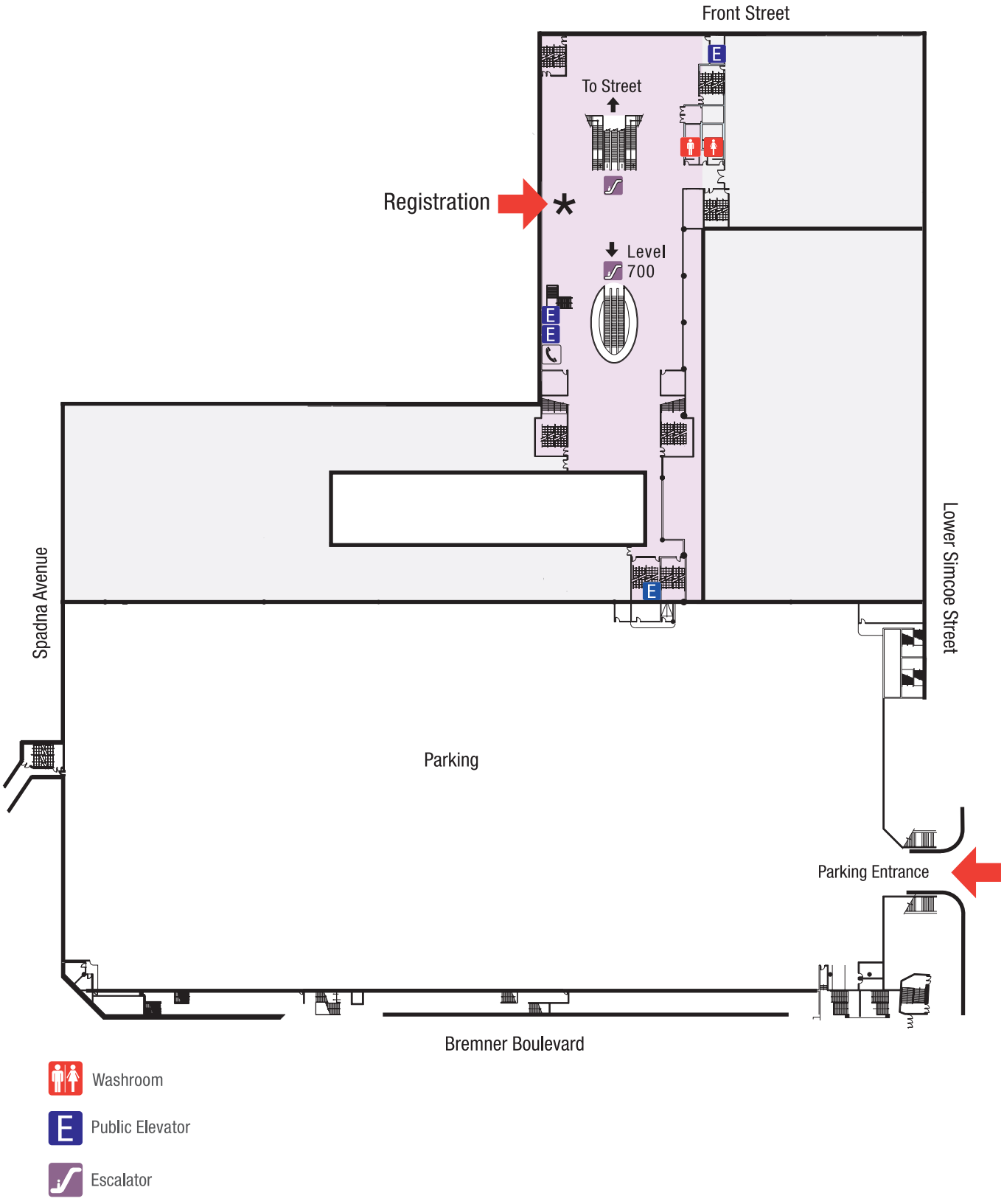
South Building: Level 800



South Building: Level 600



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