The 31st Annual CHI Conference on Human Factors in Computing Systems
27 APRIL - 2 MAY 2013 • PARIS • FRANCE
Additional maps are available on pages 67-68:
- Detailed map of Hall Maillot with Exhibitor booths and Interactivity hands-on demonstrations
- Map of the area around the Palais des Congrès
Bienvenue and Welcome to CHI 2013

CHI 2013 is located in the Palais des Congrès in central Paris, a few blocks from the Arc de Triomphe. Often described as the most beautiful city in the world, Paris is home to world-class museums, excellent food and breath-taking architecture, just steps away or a short ride on the metro.

CHI is the premier international conference on human-computer interaction, offering a central forum for sharing innovative interactive technologies that shape people’s lives. CHI gathers a multidisciplinary community from around the world. Our great strength is our ability to bring together students and experts, researchers and practitioners, scientists, designers and engineers, drawing from their diverse perspectives to create new visions of human-computer interaction.

This year’s theme, changing perspectives, is symbolized by the Louvre’s elegant pyramid. Its transparency reveals the technical, modern structure within, as it reflects the classic architecture surrounding it, changing color and texture in the shifting Paris light. Our eminent keynote speakers offer similarly contrasting perspectives, from design, engineering and the social sciences. We open with Paola Antonelli, Senior Curator and Architecture & Design Director for Research & Development at MOMA in New York and we close with Bruno Latour, author of *Science in Action* and head of Paris’s Médialab at Sciences Po. Vint Cerf, President of ACM and fondly referred to as the ‘father of the internet’, will give a joint keynote on May 2 with ACM’s First European Computing Research Congress (ECRC), organized in collaboration with CHI 2013. On that day, participants may attend each other’s sessions and discover new perspectives on computing and interaction.

CHI 2013 includes two days of focused workshops and four days of technical content, including CHI’s prestigious technical program, with 16 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: George Robertson, Jacob Nielsen, and Sara Czaja. This year, RepliCHI joins the Honorable Mention and Best Paper awards, to recognize excellence in the research process. We also host student research, design, and game competitions, provocative alt.chi presentations and last-minute SIGs for discussing current topics.

Interactivity hands-on demonstrations showcase the best of interactive technology, with both advances in research and artistic explorations. We also highlight over 300 Work-In-Progress posters. Evening events include the CHI 2013 conference reception, Sponsors and University events, local performances, the Job Fair and the Video Showcase.

We received a record number of submissions (over 3500) and accepted over 1000 that will appear in the ACM Digital Library. To help you navigate through this immense program, we introduce Video Previews, 30-second clips that describe each event in the main program. Before the conference, browse through them on the CHI 2013 website. At the conference, get an overview of the upcoming session on the large Interactive Schedule displays and add your favorites to your Mobile App. Or, browse the videos, papers and extended abstracts on the CHI 2013 USB Key. After the conference, create a video montage to share with colleagues at home or link to them from ACM’s YouTube channel or the ACM Digital Library.

We are deeply indebted to our vast number of volunteers, without whom CHI 2013 would not be possible, including over 2000 reviewers, over 200 senior members of the program committee, over 100 members of the CHI 2013 conference committee and, of course, the more than 150 student volunteers. We thank you all!

We are excited by the opportunity to host CHI 2013 and wish you a productive and enjoyable stay in Paris!

Wendy E. Mackay, Inria, France
CHI 2013 General Conference Chair

Patrick Baudisch, Hasso Plattner Institute, Germany
Michel Beaudouin-Lafon, Université Paris-Sud, France
CHI 2013 Technical Program Co-Chairs
CONFERENCE COMMITTEE

CONFERENCE CHAIR
Wendy E. Mackay
Inria, France

TECHNICAL PROGRAM

Technical Program Chairs
Patrick Baudisch
Hasso Plattner Institute, Germany
Michel Beaudouin-Lafon
Université Paris-Sud, France

Technical Program Chair Assistant
Dominik Schmidt
Hasso Plattner Institute, Germany

Papers and Notes
Stephen Brewster
University of Glasgow, UK
Susanne Bedker

Panels
Gillian Hayes
University of California, Irvine, USA
Jofish Kaye

Case Studies
Jonathan Arnowitz
Google, USA
Michael Aren't
SAP, USA
Dirk-Jan Hoets
Flipside, The Netherlands

Courses
Gregorio Convertino
Xerox Research Centre Europe, France
William Hudson
Syntagm Ltd, UK

Interactivity
Steve Benford
University of Nottingham, UK
Florian 'Floyd' Mueller
RMIT University, Australia
Atau Tanaka
Goldsmiths College, UK
Danielle Wilde
RMIT University, Australia

Video Showcase
Jeffrey Bardzell
Indiana University, Bloomington, USA
Nicolas Roussel
Inria, France

SIGs
Albrecht Schmidt
University of Stuttgart, Germany
Kaisa Vääränen-Vainio-Mattila
Tampere University of Technology, Finland

Doctoral Consortium
Martti Hearst
University of California, Berkeley, USA

Workshops
Ido Guy
IBM Research, Israel
Nadir Weibel
University of California, San Diego, USA

Works in Progress
Hennette Cramer
Yahoo Labs, USA
Shelly Farnham
Microsoft, USA
Christian Holz
Hasso Plattner Institute, Germany

Student Research Competition
Shaowen Bardzell
Indiana University, Bloomington, USA
Celine Latulipe

Student Design Competition
Thecla Schiphorst
Simon Fraser University, Canada
Carola Zwick
Weissensee Art Academy Berlin, Germany

Student Game Competition
Seth Cooper
University of Washington, USA
Heather Desurvire
User Behaviours Research, Inc., USA
Magy Seif El-Nasr
Northeastern University, USA

alt.chi
Daniela Rosner
University of Washington, USA
Amanda Williams
Wyld Collective Ltd, Canada

TOCHI papers
Jeffrey Nichols
IBM Research, USA

Best of CHI Awards
Scott Hudson
Carnegie Mellon University, USA
Max L. Wilson
University of Nottingham, UK

Industry days
Jonathan Arnowitz
Google, USA
Elizabeth Dykstra-Erickson
Nuance Communications, Inc., USA
Evan Gerber
Fidelity Investments, USA
Scott Weiss
Mysis, UK

COMMUNITIES

Communities Chairs
Bo Begole
Samsung Information Systems, USA
Kristina Höök
KTH, Sweden

Design Community
Patrick Olivier
Newcastle University, UK
Ellen Yi-Luen Do
Georgia Tech, USA

Engineering Community
Philippe Palanque
Université Paul Sabatier, France
Fabio Paterno
CNR-ISTI, Italy

Management Community
Janice A. Rohn
Leads360, USA
Carola Fellenz Thompson
zSpace, USA

Child Computer Interaction Community
Juan Pablo Hourcade
University of Iowa, USA
Janet Read
University of Central Lancashire, UK

Sustainability Community
Samuel Mann
Otago Polytechnic, New Zealand
Lisa P. Nathan
University of British Columbia, Canada

Health Community
Kelly Caine
Oklahoma University, USA
Karen Cheng
University of California, Irvine, USA

Arts Community
David England
Liverpool John Moores University, UK
Jill Fantauzzacoffin
Georgia Tech, USA

User Experience & Usability Community
Arnold Lund
GE Global Research, USA
Virpi Roto
Aalto University, Finland

Entertainment & Games Community
Regina Bernhaupt
ruwido, Austria
Katherine Isbister
NYU Poly, USA

Human-Computer Interaction for Development (HCH4D)
Melissa Densmore
Microsoft Research, India
Matthew Kam
Carnegie Mellon University, USA
Ban Al-Ari
University of California, Irvine, USA

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Virginia Tech, USA
Lindsay Reynolds
Cornell University, USA

Technology Liaison
Sara Drenner
BJ Worldwide, USA
Scooter Morris
University of California, San Francisco, USA

Data
Max von Kleek
MIT, USA

Social Media
Cliff Lampe
University of Michigan, USA
Katie Panciera
Facebook, USA
<table>
<thead>
<tr>
<th>TABLE OF CONTENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome from the Chairs.............................................. 1</td>
</tr>
<tr>
<td>Conference Committee................................................. 2</td>
</tr>
<tr>
<td>CHI 2013 Conference-at-a-Glance..................................... 4</td>
</tr>
<tr>
<td>Monday-Tuesday.......................................................... 4</td>
</tr>
<tr>
<td>Wednesday-Thursday..................................................... 6</td>
</tr>
<tr>
<td>Notes............................................................................ 8</td>
</tr>
<tr>
<td>Sponsor Ads.................................................................... 9</td>
</tr>
<tr>
<td>General Information....................................................... 17</td>
</tr>
<tr>
<td>About ACM/SIGCHI......................................................... 17</td>
</tr>
<tr>
<td>CHI 2013 Overview......................................................... 17</td>
</tr>
<tr>
<td>CHI 2013 Proceedings and Extended Abstracts.................... 18</td>
</tr>
<tr>
<td>Special Daytime and Evening Events............................... 19</td>
</tr>
<tr>
<td>Opening Hours.................................................................. 20</td>
</tr>
<tr>
<td>CHI Information and Policies........................................... 20</td>
</tr>
<tr>
<td>Awards........................................................................... 21</td>
</tr>
<tr>
<td>SIGCHI Awards.............................................................. 21</td>
</tr>
<tr>
<td>CHI Academy.................................................................... 22</td>
</tr>
<tr>
<td>Past Honorees.................................................................. 23</td>
</tr>
<tr>
<td>ACM/SIGCHI 2013 Best of CHI Awards............................... 23</td>
</tr>
<tr>
<td>CHI 2013 RepLiCHI Awards.............................................. 23</td>
</tr>
<tr>
<td>Keynotes and Plenaries..................................................... 24</td>
</tr>
<tr>
<td>Sessions-at-a-Glance....................................................... 26</td>
</tr>
<tr>
<td>Monday.......................................................................... 26</td>
</tr>
<tr>
<td>Tuesday.......................................................................... 32</td>
</tr>
<tr>
<td>Wednesday..................................................................... 40</td>
</tr>
<tr>
<td>Thursday........................................................................ 48</td>
</tr>
<tr>
<td>Workshops...................................................................... 52</td>
</tr>
<tr>
<td>Student Events............................................................... 53</td>
</tr>
<tr>
<td>Doctoral Consortium....................................................... 53</td>
</tr>
<tr>
<td>Research Competition..................................................... 53</td>
</tr>
<tr>
<td>Design Competition....................................................... 54</td>
</tr>
<tr>
<td>Games Competition....................................................... 54</td>
</tr>
<tr>
<td>Courses.......................................................................... 55</td>
</tr>
<tr>
<td>Videos............................................................................ 55</td>
</tr>
<tr>
<td>Works In Progress......................................................... 56</td>
</tr>
<tr>
<td>First Rotation - Monday-Tuesday.................................... 57</td>
</tr>
<tr>
<td>Second Rotation - Wednesday-Thursday.......................... 60</td>
</tr>
<tr>
<td>Exhibits......................................................................... 63</td>
</tr>
<tr>
<td>Interactivity.................................................................... 65</td>
</tr>
<tr>
<td>Exhibits and Interactivity Map........................................ 67</td>
</tr>
<tr>
<td>Around the Palais des Congrès....................................... 68</td>
</tr>
</tbody>
</table>
CONFERENCE AT A GLANCE

MONDAY

8:30-9:00 – Industry Days Introduction (Bordeaux Amphitheater)

Opening Plenary - Grand Amphitheater
Keynote Speaker: Paola Antonelli, MOMA, New York, USA - The New Frontiers of Design

10:20-11:00 – Coffee Break (level 2 & 3 foyers)

Bleu Papers
Managing Social Media

11:00-12:20

12:20-14:00 – Lunch Break • Postsers Rotation 1 (Hall Maillot) • Videos (Bordeaux Amphitheater)

15:20-16:00 – Coffee Break (level 2 & 3 foyers)

16:00-17:20

17:30-19:30 – Conference Reception – Grand Opening of Exhibits and Interactivity (Hall Maillot)

TUESDAY

8:30-9:00 – Industry Days Introduction (Bordeaux Amphitheater)

10:20-11:00 – Coffee Break – Posters Rotation 1 Spotlight Session – Interactivity (Hall Maillot)

12:20-14:00 – Lunch Break • Posters Rotation 1 (Hall Maillot) • Videos (Bordeaux Amphitheater)

15:20-16:00 – Coffee Break – Posters Rotation 1 – Interactivity (Hall Maillot)

16:00-17:20

17:30-19:30 – Joint Hospitality Reception (Hall Havane)
CONFERENCE AT A GLANCE

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Opening Plenary - Grand Amphitheater

Keynote Speaker: Paola Antonelli, MOMA, New York, USA - The New Frontiers of Design

10:20-11:00 – Coffee Break (levels 2 and 3 foyers)

12:20-14:00 – Lunch Break • Posters Rotation 1 (Hall Maillot) • Videos (Bordeaux Amphitheater)

15:20-16:00 – Coffee Break (level 2 & 3 foyers) • Posters Rotation 1 Spotlight Session (Hall Maillot)

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12:20-14:00 – Lunch Break • Posters Rotation 1 (Hall Maillot) • Videos (Bordeaux Amphitheater)

15:20-16:00 – Coffee Break – Posters Rotation 1 – Interactivity (Hall Maillot)

17:30-18:30 – Joint Hospitality Reception (Hall Havane)
### WEDNESDAY

<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30-9:00</td>
<td>Industry Days Introduction (Bordeaux Amphitheater)</td>
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<tr>
<td>9:00-10:20</td>
<td><strong>Papers</strong> Aesthetics and the Web</td>
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<td>10:20-11:00</td>
<td>Coffee Break – Posters Rotation 2 – Interactivity (Hall Maillot)</td>
</tr>
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<td>11:00-12:20</td>
<td>Lunch Break • Posters Rotation 2 (Hall Maillot) • Videos (Bordeaux Amphitheater) • Town Hall Meeting (room 251)</td>
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<td>12:20-13:40</td>
<td>Lunch Break • Posters Rotation 2 Spotlight Session – Interactivity (Hall Maillot)</td>
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<td>Coffee Break – Posters Rotation 2 Spotlight Session – Interactivity (Hall Maillot)</td>
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<td>17:30-19:00</td>
<td>Job Fair (Hall Maillot)</td>
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<td>17:30-18:30</td>
<td>Video Showcase (Bordeaux Amphitheater)</td>
</tr>
</tbody>
</table>

### THURSDAY

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<tr>
<th>Time</th>
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</thead>
<tbody>
<tr>
<td>8:30-9:00</td>
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</tr>
<tr>
<td>9:00-10:20</td>
<td><strong>Papers</strong> Design for Developers</td>
</tr>
<tr>
<td>10:20-11:00</td>
<td>Coffee Break – Posters rotation 2 spotlight session – Interactivity (Hall Maillot)</td>
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<td>17:30-19:00</td>
<td>Job Fair (Hall Maillot)</td>
</tr>
</tbody>
</table>

#### Special Joint Plenary with ACM ECRC 2013 - Grand Amphitheater

- **Keynote Speaker:** Vint Cerf, Google, USA - Conversations with a Computer
CONFERENCE AT A GLANCE

WEDNESDAY

8:30-9:00 – Industry Days Introduction (Bordeaux Amphitheater)

10:20-11:00 – Coffee Break – Posters Rotation 2 – Interactivity (Hall Maillot)

12:20-14:00 – Lunch Break • Posters Rotation 2 (Hall Maillot) • Videos (Bordeaux Amphitheater) • Town Hall Meeting (room 251)

15:20-16:00 – Coffee Break – Posters Rotation 2 Spotlight Session – Interactivity (Hall Maillot)

17:30-19:00 – Job Fair (Hall Maillot)
17:30-18:30 – Video Showcase (Bordeaux Amphitheater)

THURSDAY

8:30-9:00 – Industry Days Introduction (Bordeaux Amphitheater)

10:20-11:00 – Coffee Break – Posters rotation 2 spotlight session – Interactivity (Hall Maillot)

12:20-14:00 – Lunch Break • Posters Rotation 2 (Hall Maillot) • Videos (Bordeaux Amphitheater)

15:20-16:00 – Coffee Break (level 2 & 3 foyers)

Closing Plenary - Grand Amphitheater
Keynote Speaker: Bruno Latour, Sciences Po, Paris, France - From Aggregation to Navigation
See you in Paris!
Visit goo.gl/qk9wd
At Microsoft, we get Design! We know that great design takes a multi-talented team and a multi-faceted approach. Through groundbreaking research science, effective interactive design, and inspirational visual arts, we’re radically transforming user experience.

Supporting CHI and valuing our various UX disciplines is a big part of what we are all about.

Our researchers and designers impact products that touch the lives of a billion global consumers.

Stop by our booth to participate in a variety of demos and discussions on Windows 8, Xbox, Kinect, Office, and more. Learn about the great opportunities for shaping Human Computer Interaction at Microsoft. And pick your own beret and mustache, too!

Bonjour!

Come visit us at booths: 30, 31 & 32

http://aka.ms/chi2013
CHI 2013 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 251 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)  
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Email: acmhelp@acm.org
Write: Association for Computing Machinery, Inc.
General Post Office
P.O. Box 30777 New York, NY
10087-0777, USA

CHI 2013 OVERVIEW
The CHI 2013 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 2013 Proceedings and Extended Abstracts available from the ACM Digital Library and on the CHI 2013 USB key.

INVITATION-ONLY | SATURDAY—SUNDAY

Doctoral Consortium  
Université Paris-Dauphine
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 2013 Extended Abstracts.

Doctoral Consortium Faculty:
Marti Hearst (Chair), Carl Gutwin, Joseph A. Konstan, Zhengjie Liu, Gary M. Olson, Abigail Sellen

Workshops  
Université Paris-Dauphine
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 2013 Extended Abstracts. Some workshops choose to display a poster in the Hall Maillot Poster Area.

TECHNICAL PROGRAM | MONDAY — THURSDAY
CHI 2013 received over 3500 submissions and accepted over 1000 presentations and events distributed across 17 parallel sessions over 4 days. The CHI 2013 Proceedings and Extended Abstracts is over 7500 pages. With so many presentations happening at once, how do you choose? CHI 2013 offers the following resources to help you make the most of your conference experience:

Choosing sessions to attend
1. This CHI 2013 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 2013 USB key provided when you register includes the CHI 2013 Conference Proceedings and Extended Abstracts, also available in the ACM Digital Library, and the CHI 2013 Video Previews (see below). Extra USB keys are available for purchase at the Registration Desk.
3. The free CHI 2013 Mobile App (downloadable from Apple's App Store and Google Play) contains the full CHI 2013 program as well as a personal interactive schedule to help you keep track of events you would like to see. The CHI 2013 Proceedings and Extended Abstracts as well as Video Previews (below) can be loaded into the Mobile App for easy access.
4. New this year! This program and various displays at the conference include 3-letter codes, e.g. IWC. Enter this code in the search box of the CHI 2013 Mobile App to jump directly to the corresponding session or presentation.
5. New this year! The CHI 2013 Video Previews are 30-second video overviews of most presentations in the main technical program. You can browse them on your USB key or load them into the Mobile App. Video Previews are also available on the CHI 2013 web site, except during the conference to prevent overloading the Palais des Congrès wireless network. You can also watch them on large Interactive Schedule displays (below).
6. New this year! The large-screen CHI 2013 Interactive Schedule displays show all the video previews for the upcoming session, organized by room and time. Use the CHI 2013 Mobile App to add the current video to your personal schedule. You can also specify keywords to create customized playlists and show the related videos on the large display.
7. CHI 2013 Student Volunteers (SVs) are available to point you in the right direction or answer questions about the program.
8. Come to the Interacting with CHI session on Wednesday at 11:00, Room 251 to find out about the technologies that volunteers have created to improve your CHI 2013 experience. Give us feedback and consider volunteering for CHI 2014!
CHI 2013 CONFERENCE PROCEEDINGS

The CHI 2013 Conference Proceedings contain Papers and Notes, the most rigorously reviewed and prestigious material in the main technical program. The CHI 2013 Program Committee received almost 2000 submissions. 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 2013 acceptance rate was slightly below 20%.

The CHI 2013 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 2013 EXTENDED ABSTRACTS

The CHI 2013 Extended Abstracts record interactive events designed to provoke, intrigue, teach and inspire the CHI audience and capture a history of HCI practice.

Courses
One to three 80-minute units
List on page 55
Courses provide professional development opportunities for existing and prospective HCI community members. 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 252B
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 241, Bleu Amphitheater
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 252B
10-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 361, 362
80-minute sessions
SIGs offer a forum for conference attendees who share similar interests to discuss a specific topic. Previous SIGs have launched new conferences and publications or generated new CHI activities.

Videos
Bordeaux Amphitheater
60-minute session plus daily lunch sessions
List on page 55
Videos offer a variety of perspectives on human-computer interaction, including novel interfaces, reflective pieces and future environments. Videos are played daily at the lunch break (12:30). The Video Showcase highlights the best videos on Wednesday (17:30) followed by the Golden Mouse award ceremony. People’s Choice Video award winners are announced at the Closing Plenary.

Interactivity
Hall Maillot, Interactivity Areas 1-4
Hands-on demonstrations
List on page 65
Interactivity allows attendees to see, touch and hear interactive visions of the future. Interactivity Research prototypes offer novel interaction techniques and systems while Interactivity Explorations offer interactive performances and art works that stimulate the imagination. Come see Interactivity at the CHI 2013 Conference Reception and Exhibits Grand Opening (17:30, Hall Maillot) and throughout the conference during breaks and as specified by authors.

Works in Progress (WIP)
Hall Maillot, Poster Area
Posters
List on page 56
Works in Progress present work at an early stage that can benefit from one-on-one discussions with colleagues. Rotation 1 posters appear on Monday and Tuesday, authors are available to discuss their work during the Spotlight on Posters on Monday (15:20) and Tuesday (10:20). Rotation 2 posters appear on Wednesday and Thursday; Spotlight sessions on Wednesday (15:20) and Thursday (10:20).

Doctoral Consortium
Hall Maillot, Poster Area
Posters
List on page 53
Doctoral Consortium students are available to discuss their research in the DC Spotlight session on Monday afternoon (15:20).

Student Research Competition
Hall Maillot, Room 261, 252A
Posters and 80-minute session
List on page 53
The Student Research Competition (SRC) is a branch of the ACM Student Research Competition. Students’ posters are on display in the Hall Maillot Poster Area on Tuesday morning (10:20). The SRC jury selects finalists who present their work and answer questions in a closed session on Monday (16:00, room 361). Final presentations are held on Wednesday (11:00, room 252A). Winners are announced at the Closing Plenary.

Student Design Competition
Hall Maillot, Room 251
Posters and 80-minute session
List on page 54
The Student Design Competition (SDC) challenges students to design an object, interface, system, or service related to collaborative crowd experiences. Semi-finalist posters are displayed in the Hall Maillot Poster Area during the first poster rotation. The SDC jury selects four finalists to present on Wednesday at 14:00, room 251. The winner is announced at the Closing Plenary.

Student Game Competition
Neuilly Foyer, Room 251
Demonstrations and 80-minute session
List on page 54
The Student Game Competition (SGC) challenges students to design games in three categories: Games for a Purpose, Innovative Interface or Innovative Game Design. Students demonstrate their games on Wednesday morning (9:00, Neuilly Foyer). The final is held on Wednesday (16:00, room 251). Winners are announced at the Closing Plenary.
SPECIAL DAYTIME EVENTS

Industry Days
Bordeaux Amphitheater
30-minute presentations

New this year! Industry Days identify key themes of interest to attendees from local industry and design firms. The introductory sessions at 8:30 every morning offer an overview of CHI and suggest specific events related to the themes of that day.

Monday:
• Educational Games and Classroom Innovations
• Crowdsourcing: New Ways to Use Community-based Input
• Touch, Don’t Touch, and In Between: Interactive Methods
• Design Process: from Concept to Execution

Tuesday:
• Social Media and Cultural Change
• Emerging Form Factors and Interactions
• Being Mobile: Devices and Usage Patterns
• Programming and Development

Wednesday:
• Being Mobile: Devices and Usage Patterns
• Social Interactions, Social Issues
• Speech: the Next Frontier

Thursday
• Devices: Challenges and Solutions
• The Cutting Edge of Being Social in the Computing World
• On the Drawing Board, Off the Wall: Design Thinking

Interacting with CHI
Room 251
Wednesday, 11:00 – 12:20

New this year! Learn about the CHI 2013 Mobile App, Interactive Schedule, COBI author sourcing and Social Media. Ask questions, give feedback and learn how you can contribute next year.

ACM SIGCHI Town Hall Meeting
Room 251
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.

Last-Minute SIGs
Room 221, Mezzanine
80-minute sessions

Last-minute SIG can be organized at the conference. Coordinators can reserve a time slot at the Conference Office (Room 203) and contact attendees themselves or via CHI 2013's Facebook, Google+ or Twitter feeds.

Videos
Bordeaux Amphitheater
Monday - Thursday, 12:30 – 14:00

Join us in the Bordeaux Amphitheater during the lunch break to watch the complete set of accepted videos, each repeated at least twice over the four days of the technical program. You can also watch them from the CHI 2013 Extended Abstracts on the CHI 2013 USB key. Vote for your favorite video for the People’s Choice award.

SPECIAL EVENING EVENTS

Conference Reception & Exhibits Grand Opening
Hall Mailloot
Monday, 17:30 – 19:30
Catch up with old friends and meet new ones at the CHI 2013 Conference Reception and explore almost 80 hands-on demonstrations and performances at the Grand Opening of Exhibits and Interactivity. The reception features traditional French canapés and delectable pastries, as well as local wines. 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.

Joint Hospitality Reception
Hall Havane
Tuesday, 17:30 – 19:30
Please join us at the Joint Hospitality Reception on Tuesday evening. Your badge is your ticket to enter the reception, so please be sure to wear it. Stop by to meet each of our hosts and network with old and new colleagues as a prelude to your evening out on the town. Light appetizers and a full bar will be available – pick up a drink ticket at the door.

CHI Champion Sponsor Hosts:
Bloomberg LP Google, Inc.
eBay/PayPal Microsoft Corp.

Friend of CHI Host:
IBM

Job Fair & Recruiting Boards
Hall Mailloot
Wednesday, 17:30 – 19:00
Recruiters and job candidates are invited to take advantage of the CHI 2013 Job Fair on Wednesday evening. Visit the Recruiting Boards and designated exhibit booths throughout the conference to find out more about available positions.

CHI 2013 Hero Sponsor Recruiter:
JCDecaux Booth 20 Recruiting Board

CHI 2013 Champion Sponsor Recruiters:
Bloomberg LP Booths 21–22 Recruiting Board
eBay/Paypal Booths 17–19 Recruiting Board
Google Booths 25–26 Recruiting Board
Inria Booth 17A Recruiting Board
Microsoft Booths 30–32 Recruiting Board

CHI 2013 Contributing Sponsor Recruiters:
Autodesk Recruiting Board
Facebook Booth 15 Recruiting Board
Nokia Recruiting Board
Yahoo! Booth 13 Recruiting Board

CHI 2013 Other Recruiters:
Samsung Booth 16 Recruiting Board
SAP Booth 7 Recruiting Board

Video Showcase
Bordeaux Amphitheater
Wednesday, 17:30 – 18:30
Join us in the Bordeaux Amphitheater on Wednesday at 17:30 to watch the best of the over 300 videos submitted to CHI 2013. At the end, join us for the Golden Mouse ceremony to award the best videos. The People’s Choice Video award will be announced at the Closing Plenary.
OPENING HOURS

Registration and Merchandise Desk
Register for the CHI 2013 Conference and Courses (subject to availability) at the Registration Desk located on the ground floor of the Palais des Congrès Conference Center. CHI 2013 Merchandise, including mugs and additional USB keys, will be available for purchase beginning at 12:00 on Monday, subject to availability.

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<th>Day</th>
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<td>Sunday</td>
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Note: Participants in the Doctoral Consortium and Workshops must register at the Université Paris-Dauphine (metro: Dauphine or RER: Avenue Foch) where these events take place (Saturday and Sunday).

The Commons
The Hall Maillot is the large central area at the top of the escalators on level 2 of the Palais des Congrès 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.

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Coffee Breaks
Regularly scheduled morning and afternoon coffee breaks are complimentary for all registered CHI 2013 attendees.

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Speaker Ready Room
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.

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Media/Press Office
CHI 2013 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 2013, SIGCHI, and future CHI conferences. CHI 2013 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 2013 Information Desk
Hall Maillot
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
Bleu Foyer
CHI 2013 has over 150 Student Volunteers, easily identified by their bright blue SV t-shirts. Most are graduate students in human-computer interaction and some are seeking jobs or internships.

Name Badges
Your CHI 2013 name badge serves as your admission pass to conference sessions and events. Please wear your name badge at all times while inside the Palais des Congrès Conference Center. Conference management reserves the right to deny admission to anyone not wearing a CHI 2013 name badge.

Internet Café
Hall Maillot
Enjoy chatting with colleagues during the breaks at the Internet Café, located next to the Exhibits, Interactivity and Posters in the Hall Maillot. CHI 2013 provides access to power for your mobile devices in addition to wireless access.

Wireless Access
CHI 2013 offers wireless high-speed internet access throughout the Palais des Congrès including in all meeting rooms. In order to avoid overloading the network, web access to Video Previews is disabled during the technical program. Please access them from the CHI 2013 USB key. 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 2013” to your blog entries so that others may find them easily. We encourage photosharing by services such as Flickr; but please add a “CHI 2013” tag to your photos and “#chi2013” 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 Palais des Congrès is a non-smoking facility and smoking is permitted outside only in designated areas.

Palais des Congrès Conference Center
The Palais des Congrès is located above a two-floor shopping center open 10:30 - 19:30. The supermarket on level -2, open 9:00 - 21:00, has fresh produce, health and international foods. In addition to clothing and other stores, you will find a pharmacy and a cinema. Films designated 'VO' (original voice) play with the original soundtrack and French subtitles.

Labor Day Holiday
Wednesday May 1st is Labor Day, a major national holiday in France. You will see people selling "muguet" (lilly of the valley flowers) and Parisiens on the streets, relaxing or walking in parades. Most stores and museums are closed, although many restaurants around the Palais des Congrès remain open. See the CHI 2013 website for more details about what is open in the local area.
**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 and carries an honorarium of $5000.

George G. Robertson is an ACM Fellow and a member of the CHI Academy. Before retiring in 2011, he was a Principal Researcher at Microsoft Research, where he led an information visualization research group. Before joining Microsoft, he was a Principal Scientist at Xerox PARC, and worked on 3-D Interactive animation interfaces for intelligent information access. He developed a number of visualization and 3-D user interface systems. He was the architect of the Information Visualizer and invented novel 3-D interaction techniques and a number of visualization techniques. These include Cone Trees, the Perspective Wall, the Spiral Visualization, the Document Lens, the WebBook and the Web Forager; the Data Mountain (a document management visualization), the Task Gallery (a 3-D Windows® operating system shell), the Polyarchy Visualization for interacting with multiple intersecting hierarchies, Scalable Fabric for window and task management, and Schema Mapper for managing mappings between schemas. He also did pioneering work on animated 3-D user interfaces, inventing Point of Interest navigation, Fix and Float, Peripheral Lens, Toolspaces and Glances, and Speed-coupled Flying with Orbiting. He has also been a Senior Scientist at Thinking Machines, a Senior Scientist at Bolt Beranek and Newman, and a faculty member of the Computer Science Department at Carnegie Mellon University. In the past, he has made significant contributions to machine learning, multimedia message systems, hypertext systems, operating systems, and programming languages. Robertson served on the Advisory Board of the Department of Homeland Security National Visualization and Analytics Center from 2004-2011. He was an Associate Editor for the Journal of Information Visualization. He served on the IEEE Information Visualization Steering Committee from 1995-2009. He chaired UIST’97 and InfoVis 2004.

**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 and carries an honorarium of $5000.

Jakob Nielsen is Principal of Nielsen Norman Group (www.nngroup.com), a user experience firm he co-founded with Donald A. Norman in 1998. Nielsen is the founder of the "discount usability engineering" movement, which emphasizes fast and efficient methods for improving the quality of user interfaces. As part of this effort he co-invented the heuristic evaluation method. Nielsen is the author of the best-selling book Designing Web Usability: The Practice of Simplicity, which has sold more than a quarter of a million copies in 22 languages. His other books include Usability Engineering, Usability Inspection Methods, International User Interfaces, Homepage Usability: 50 Websites Deconstructed, Prioritizing Web Usability, Eyetracking Web Usability, and Mobile Usability. Nielsen's Alertbox column on web usability has been published on the Internet since 1995 and has received a cumulative 175 million pageviews. From 1994 to 1998, Nielsen was a Sun Microsystems Distinguished Engineer. His previous affiliations include Bell Communications Research (Bellcore), the Technical University of Denmark, and the IBM User Interface Institute at the T.J. Watson Research Center. He holds 79 United States patents, mainly on ways of making the Internet easier to use.

**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.

Joseph A. Konstan is Distinguished McKnight University Professor and Distinguished University Teaching Professor at the University of Minnesota. His work in HCI started in user interface toolkits, and has included significant work on multimedia authoring, recommender systems, social computing, and computing applications in health and medicine. Prof. Konstan has received significant recognition for his work, including being elected to the CHI Academy in 2011; being elected a Fellow of the ACM, IEEE, and AAAS; and honored as part of a team that won the ACM Software System Award in 2010 for the GroupLens Collaborative Filtering Recommender Systems. At CHI 1994 (his first CHI conference), he volunteered to serve on the CHI 96 committee, and he has been an active volunteer since. Highlights of his SIGCHI service include serving as SIGCHI Bulletin Editor from 1999 through 2003; chairing the UIST 2003, RecSys 2007, and CHI 2012 conferences; serving on SIGCHI’s Executive Committee from 1999-2009, and serving as President of SIGCHI from 2003-2006. Prof. Konstan has also been active on an ACM-wide level, with highlights including serving three terms on ACM’s Council, serving on the SIG Governing Board Executive Committee since 2004 (including as its chair from 2006-2008), and serving on the Publications Board since 2010. While many SIGCHI members came to know Joe through his SIGCHI Presidency and his service as Chair of CHI 2012, his service roots go back much further. He received his M.S. and Ph.D. at the University of California, Berkeley, where he served as Chair of the Computer Science Graduate Students Association (and received much appreciation for leading an effort to eliminate written preliminary exams). He received an A.B. from Harvard where he founded and published the Harvard Computer Review and served as president of the Harvard Computer Society.

**SOCIAL IMPACT AWARD**

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

Sara J. Czaja is a Leonard M. Miller Professor in the Departments of Psychiatry and Behavioral Sciences and Industrial Engineering at the University of Miami. She is also the Scientific Director of the Center on Aging at the University of Miami and the Director of the Center on Research and Education for Aging and Technology Enhancement (CREATE). The focus of CREATE is on making technology more accessible, useful, and usable for older adults. Prof. Czaja has extensive experience in aging research and a long commitment to developing strategies to improve the quality of life for older adults. Her research interests include: aging and cognition, aging and healthcare access, family caregiving, aging and technology, and functional assessment. She is a fellow of the American Psychological Association and the Human Factors and Ergonomics Society and the Gerontological Society of America. She served as a member of the Technical Advisory Panel of the APA Presidential Task Force on Integrative Healthcare for an Aging Population. In addition, she is a member of the National Research Council/National Academy of Sciences Committee on Human Factors and Home Health Care.
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.

Patrick Baudisch is a Professor in Computer Science at Hasso Plattner Institute at Potsdam University and chair of the Human Computer Interaction Lab. After creating interaction techniques for large displays, Patrick spent most of his career creating interactive devices that explore the nature of spatial interaction. His research may today be described as research in natural user interface hardware. It includes miniature mobile devices, touch input, large displays, interactive floors, and most recently interactive fabrication. Driven by the leitmotif of unifying the virtual world of the computer with the physical world of the user into a single non-distorted space, Patrick’s techniques and hardware prototypes are characterized by clarity and simplicity.

Previously, Patrick worked as a research scientist at Microsoft Research and at Xerox PARC. He holds a PhD in Computer Science from Darmstadt University of Technology, Germany. Patrick has received best CHI paper awards in 2007, 2010, and 2013 and he has served as Associate Chair, three-times Sub-Committee Chair, Technical and General Co-Chair at CHI and UIST.

Victoria Bellotti is a principal scientist at the Palo Alto Research Center (PARC) and the developer of PARC’s Opportunity Discovery research and strategic investment targeting program, a systematic approach to identifying the best opportunities for technology-centered, new business ventures. Victoria also studies people to understand their practices, problems, and requirements for future technology, and designs and evaluates human-centered systems, focusing on user experience. Best known for her research on personal information management and task management, Victoria has also conducted research in the domains of context- and activity-aware computing systems, computer-mediated communication, collaboration, ubiquitous computing and persuasive computing. She is a co-inventor on 13 patents and 9 patent applications and an author or co-author on over 50 papers and book chapters. Victoria also serves as an adjunct professor in the Jack Baskin School of Computer Engineering at UC Santa Cruz.

Alan Dix is a Professor in the School of Computer Science, University of Birmingham, and Senior Researcher at Tālis, Birmingham. When not in Birmingham or travelling elsewhere, he lives on Tiree, a small Hebridean island. He is the son of a carpenter; wears sandals and has long hair and a beard, but thereafter all pretensions to sainthood end. Alan’s research interests are varied and eclectic. Although mathematicians was (and is) his first love the majority of his work is focused around the area of human–computer interaction – what happens when people use technology and how to design technology for people. He is the author of one of the key international textbooks in the area as well as other books and over 350 academic papers. Much of his career has been in academia, but in addition he has spent time in agricultural research and hardware prototypes are characterized by clarity and simplicity.

Previously, Patrick worked as a research scientist at Microsoft Research and at Xerox PARC. He holds a PhD in Computer Science from Darmstadt University of Technology, Germany. Patrick has received best CHI paper awards in 2007, 2010, and 2013 and he has served as Associate Chair, three-times Sub-Committee Chair, Technical and General Co-Chair at CHI and UIST.


Clarisse Sieckenius de Souza is Professor of Computer Science at the Pontifical Catholic University of Rio de Janeiro (PUC-Rio), Brazil. Having a PhD in Applied Linguistics, she started her academic career at the Department of Informatics at PUC-Rio in 1987, teaching and doing research in Natural Language Processing and Text Generation. In 1991, when she was a visiting scholar at CSLI Stanford University, she switched from Computational Linguistics to HCI. This was the beginning of her long-term work in Semiotics and HCI, whose outcome is ‘Semiotic Engineering’, the first comprehensive semiotic theory of HCI. Clarisse also played an important role in creating and nurturing the Brazilian HCI community. She has supervised/co-supervised more than 20 PhD students in Brazil, many of which have followed an academic career in Brazilian universities. Clarisse’s major interests in research center on how people communicate and express intent, values, beliefs and culture through computer programs and their user interfaces.

Tom Tullis is Vice President of User Experience Research at Fidelity Investments. He joined Fidelity in 1993 and was instrumental in the development of the company’s usability team and state-of-the-art Usability Labs. Prior to Fidelity, he held positions at Canon Information Systems, McDonnell Douglas, Unisys Corporation, and Bell Laboratories. He is coauthor of the books Measuring the User Experience in the building and using of technologies. In 2010 she was recognized as a Distinguished Alumna of the University of California, Irvine. Before joining the faculty at Georgia Tech, she was a Member of Research Staff in the Computer Science Laboratory of Xerox PARC and a Member of Technical Staff in the Software Production Research Department of Bell Laboratories. She was also a visiting scholar at Rank–Xerox EuroPARC. She holds a Ph.D. and M.S. in Information and Computer Science both from the University of California, Irvine, and a B.Sc. (Hons) in Computer Science from the University of Leeds.

Eric Horvitz is a Distinguished Scientist at Microsoft, where he serves as managing co-director of Microsoft Research’s main Redmond lab. He is recognized for research at the intersection of human-computer interaction and artificial intelligence. He developed methods for using machine learning, perception, and reasoning to enhance human-computer interaction, with studies and prototypes in desktop, mobile, and ubiquitous-computing settings. His contributions include principles of mixed-initiative interaction for interleaving automated services with user actions, methods for predicting intentions and goals of users, advances with spoken dialog systems, and principles for combining the capabilities of human and machine intelligence for joint problem solving. In a line of work on leveraging machine intelligence to understand and augment human cognition, he developed probabilistic models of human attention, memory, and judgment, leading to prototypes that harness inferences about the cost of interruption, the likelihood of forgetting, and users’ forthcoming beliefs and actions. Eric has been elected a fellow of the Association for the Advancement of Artificial Intelligence, the American Academy of Arts and Sciences, and the National Academy of Engineering. He received PhD and MD degrees at Stanford University.
Experience: Collecting, Analyzing, and Presenting Usability Metrics and Beyond the Usability Lab: Conducting Large-scale User Experience Studies. Tom is also an Adjunct Professor in the Human Factors in Information Design program at Bentley University and he holds eight United States patents. He and his usability team at Fidelity have been featured in numerous publications, including The Boston Globe, The New York Times, and Money. In 2011, he was awarded the Lifetime Achievement Award by the Usability Professionals Association.

PAST HONOREES

SIGCHI Lifetime Research Award
- 2012: Dan Olsen
- 2011: Terry Winograd
- 2010: Lucy Suchman

SIGCHI Lifetime Practice Award
- 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
- 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 J. 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
- 2001: Austin Henderson

SIGCHI Social Impact Award
- 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 2012: Ben Bederson, Steve Benford, Hugh Dubberly, Carl Gutwin, Joy Mountford, Alan Newell, Yvonne Rogers
- Class of 2011: Ravi Balakrishnan, Steven Feiner, Joseph Konstan, James Landay, Jenny Preece, Abigail (Abi) Sellen, Dennis Wixon
- Class of 2010: Susanne Baekker, 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 Redden
- 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 Dumas, John Gould, Saul Greenberg, Bonnie E. John, Andrew Monk
- Class of 2003: Thomas Green, James D. Hollan, Robert E. Kraut, Gary M. Olson, Peter G. Polson
- 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 submissions to SIGCHI sponsored conferences.

- The CHI Associate Chairs nominated 5% of the Paper and Notes submissions. 69 papers and notes received Honorable Mention, designated by a medallion logo.
- The separate Best Papers committee selected the top 1% of total submissions. 20 Papers and Notes received a Best Paper award, designated by a trophy logo.

Congratulations to the 2013 award winners and nominees for their outstanding contributions to CHI 2013 and to our field.

SIGCHI Best of CHI 2013 Committee
Scott Hudson (Chair), Marina Jirotka, Darren Gergle, Mark Perry, Mikael Skov, Vanessa Evers, Effie Law, m. c. schraefel, Bill Thies, Géry Casiez, Manfred Tscheligi, Erica Robles-Anderson, Antonio Krüger, Steven Drucker

CHI 2013 REPLICHII AWARDS
CHI 2013 introduces RepliCHI, which recognizes papers and notes that demonstrate best practices in replicating and extending research results or serve as examples of highly replicable experiments. Congratulations to the six RepliCHI award winners!

CHI 2013 RepliCHI Committee
Max L. Wilson (Chair), Bonnie John, Margaret Burnett, Paul Resnick
The New Frontiers of Design

Paola Antonelli
Senior Curator for Architecture & Design; Director for Research & Development, The New York Museum of Modern Art

Abstract
In the past twenty years, design has branched out in new directions that have galvanized young practitioners, sparked business models, and attracted worldwide public attention. A designer today can choose to focus on interactions, interfaces, the web, visualizations, socially-minded infrastructures and products, immersive spaces, bioengineering, sustainability, video games, critical scenarios, and yes, even products and furniture. In the next twenty-five years, I imagine and hope, designers will be at the nexus of things. Like physics, design will be loosely separated between theoretical and applied. Theoretical designers will be exquisite generalists, while applied designers will continue to make objects, but objects will not always be physical; they will often be shared, not owned; they might be starters that people will finish and customize at home using 3D printers and other on-demand services; they will visualize complex infrastructures and systems to make them manageable by scientists, policymakers, and citizens. Design is not about making things, people and places pretty. It is sometimes ugly, and it encompasses all facets of human activity, from science and education to politics and conflict. For a simple reason: one of design's most fundamental tasks is to help people deal with change. Designers stand between revolutions and everyday life. They make innovations manageable and approachable, so that they can be embraced and assimilated into life. And they never forget functionality and elegance.

Biography
Paola Antonelli joined The Museum of Modern Art in 1994 and is a Senior Curator in the Department of Architecture and Design, as well as MoMA’s Director of Research and Development. She has curated many memorable exhibitions at MoMA, including Workspheres (2001), Humble Masterpieces (2004), SAFE: Design Takes On Risk (2005-2006), Design and the Elastic Mind (2008), and Talk to Me: Design and the Communication between People and Objects (2011). The recipient of a Master’s degree in Architecture from the Polytechnic of Milan in 1990, Antonelli has curated several architecture and design exhibitions in Italy, France, and Japan. She is a Senior Fellow with the Royal College of Art, London and received an Honorary Doctorate in Design from Kingston University, London. Paola earned the “Design Mind” Smithsonian Institution’s National Design Award in October 2006, and in 2007, she was named one of the 25 most incisive design visionaries by Time magazine. In 2011, she was inducted in the Art Directors Club Hall of Fame. She is currently working on several shows on contemporary design; and on Design Bites, a book about food from all over the world appreciated as examples of outstanding design.
**SPECIAL CHI-ECRC JOINT PLENARY KEYNOTE**

**Thursday, 9:00, Grand Amphitheater**

Conversations with a Computer

Vint Cerf

Chief Internet Evangelist at Google; ACM President

Abstract

There have been efforts to achieve dialog with computer-based systems since the origins of computing. From the 1960s, serious efforts have been mounted to engage in natural language dialog. There were false starts with simple dictionary-based efforts. Syntactic/Semantic efforts gave way to statistical methods with some successes. The Bayesian approach appears to be reaching an asymptote so it is likely that attention must refocus on syntactic/semantic approaches. Interestingly, efforts to achieve communication between humans and other species have also demonstrated the value of shared experiences. Holding something in common seems a critical element of establishing communication. One wonders to what extent such efforts might also inform any plan to deal with communication between humans and extra-terrestrials, should any ever show up in our vicinity!

Biography

Vinton G. Cerf is vice president and chief Internet evangelist for Google. Cerf has held positions at MCI, the Corporation for National Research Initiatives, Stanford University and UCLA. Vint Cerf served as chairman of the board of the Internet Corporation for Assigned Names and Numbers (ICANN) and was founding president of the Internet Society. He was appointed to the US National Science Board in 2013. Widely known as one of the “Fathers of the Internet,” he received the U.S. National Medal of Technology in 1997, the Marconi Fellowship in 1998 and the ACM Alan M. Turing award in 2004. In November 2005, he was awarded the Presidential Medal of Freedom and in April 2008 the Japan Prize. He is a Fellow of the IEEE, ACM, and AAAS, the American Academy of Arts and Sciences, the American Philosophical Society, the Computer History Museum and the National Academy of Engineering. Cerf holds a Bachelor of Science degree in Mathematics from Stanford University and Master of Science and Ph.D. degrees in Computer Science from UCLA and holds 20 honorary degrees from universities around the world.

***ACM ECRC 2013***

ACM Europe is organizing an event similar to the Federated Computing Research Conference (FCRC) that is held in the US every four years. The goal of the ACM European Computing Research Congress (ACM ECRC, ecrc.acm.org) is to co-locate multiple (ACM) European research conferences, workshops, and research meetings to create a significant gathering of European computing researchers. The ACM ECRC general plenary sessions address important issues in European computing research. The general receptions foster an enhanced level of networking among European researchers, a tangible contribution of ACM Europe to the computing community. To the extent facilities allow, CHI and ECRC participants can attend each other’s sessions following the joint keynote on Thursday, May 2nd.

**CLOSING PLENARY KEYNOTE**

**Thursday, 16:00, Grand Amphitheater**

From Aggregation to Navigation: A Few Challenges for Social Theory

Bruno Latour

Professor at Sciences Po, Paris; Director of the Médialab at Sciences Po

Abstract

The vast amount of data available on singularizing networks (what could be called ‘monads’) raise a new problem for social theorists, statisticians, designers, computer scientists and end users: how to visualize their various components without resorting to the aggregation in which too many details are necessarily lost. The flood of digital traces and the new ways to handle them show that many of the basic epistemological assumptions about what it is to know something in the social science are actually dependent upon data structures and visualizing tools. This presentation will draw a few possible paths in this new situation and propose a few challenges to the audience.

Biography

Bruno Latour is professor at Sciences Po, Paris where he founded the Médialab and developed the mapping of scientific controversies. His work in anthropology of science and social theory, especially the development of Actor Network Theory is especially well adjusted to the harnessing of the power of digital traces now available in vast quantities. He is the 2013 laureate of the Holberg Prize. All references and most articles are available at www.bruno-latour.fr.
MONDAY 11:00-12:20

9:00-10:20 Opening Plenary

Keynote Speaker: Paola Antonelli, MOMA, New York
The New Frontiers of Design

GRAND AMPHITHEATER

Enter these 3-letter codes in the search box of the CHI 2013 Mobile App to go directly to the corresponding session or presentation

IWC

261

251 Papers: Learning

CHAIR: ANDRIUD KERNE

In Search of Learning: Facilitating Data Analysis in Educational Games
Erik Harpstead, Brad A. Myers, Vincent Aleven

Optimizing Challenge in an Educational Game Using Large-Scale Design Experiments
Derek Lomas, Kishan Patel, Jack L. Forlizzi, Kenneth R Koedinger

From Competition to Metacognition: Designing Diverse, Sustainable Educational Games
Stephen R Foster, Sarah Esper, William G Griswold

Why Interactive Learning Environments Can Have It All: Resolving Design Conflicts Between Competing Goals
Martina A Rau, Vincent Aleven, Nikol Rummel, Stacie Rohrbach

252 Course C04 – 1 unit

Chair: AMANDA WILLIAMS

Change Perspectives on Evaluation in HCI: Past, Present, and Future
Craig M. MacDonald, Michael E. Atwood

Personal Informatics and Reflection: A Critical Examination of the Nature of Reflection
Afarin Pirzadeh, Li He, Erik Stolterman

Pattern Language and HCI: Expectations and Experiences
Yue Pan, Erik Stolterman

Comparative Appraisal of Expressive Artifacts
Melanie Feinberg

Sound Design As Human Matter Interaction
Xinwei Shu, Adrian Freed, Navid Navab

Crafting Against Robotic Fakelore: On the Critical Practice of ArtBot Artists
Mattias Jacobsson, Yva Vernaeus, Henriette Cramer, Sara Ljungblad

253 Course C02 – 1 unit

Chair: Six Steps to Successful UX in an Agile World
Hugh Beyer, Karen Holtzblatt

User Interface Design and Adaptation for Multi-Device Environments
Fabio Paternò

Enter these 3-letter codes in the search box of the CHI 2013 Mobile App to go directly to the corresponding session or presentation
BORDEAUX Special Session

CHAIR: MARY CZERWINSKI

LRA Lifetime Research Award: George Robertson
The 2013 SIGCHI Lifetime Research Award is presented to George Robertson, formerly at Microsoft Research and Xerox Palo Alto Research Center; for outstanding contributions to the study of human-computer interaction.

342A Papers: Interaction in the Wild

SKU CHAIR: MARINA JIROTKA

PDQ Electric Materialities and Interactive Technology
James J Pierce, Eric Paulus

PB A Conversation Between Trees: What Data Feels Like In The Forest
Rachel Jacobs, Steve Benford, Mark Selby, Michael Golombewski, Dominic Price, Gabriella Giannachi

PHC Unlimited Editions: Three Approaches to the Dissemination and Display of Digital Art
Mark Bryne, Jo Briggs, Jonathan Hook, Peter Wright, Patrick Olivier

PRV See Me, Feel Me, Touch Me, Hear Me: Trajectories and Interpretation in a Sculpture Garden
Lesley Fosh, Steve Benford, Stuart Reeves, Banjana Koleva, Patrick Brundell

343 Course C03 – Unit 1/3

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

361 Special Interest Group

GSE Designing Interactive Secure System: CHI 2013 Special Interest Group
Shamal Faily, Lizzie Coles-Kemp, Paul Dunphy, Mike Just, Yoko Akama, Alexander De Luca

362 Special Interest Group

GTL Human Computer Interaction for Development (HCHD)
Ban Al-Ani, Melissa Densmore, Edward Cutrell, Rebecca E. Grinter, John C Thomas, Andy Dearden, Matthew Kam, Anicia N Peters

351 Papers: Crowdsourcing: People Power

SCX CHAIR: TAPAN PARIKH

PFC Form Digitalization in BPO: From Outsourcing to Crowdsourcing!
Jacki O’Neill, Shourya Roy, Antonietta Grasso, David B Martin

PFM Crowdsourcing Performance Evaluations of User Interfaces
Steven Komarov, Katharina Reinecke, Krzysztof Z. Gajos

PRF A Multi-Site Field Study of Crowdsourced Contextual Help: Usage and Perspectives of End Users and Software Teams
Paamit K. Chilana, Andrew J. Ka, Jacob O. Wobbrock, Tovi Grossman

PKK A Pilot Study of Using Crowds in the Classroom
Steven P. Dow, Elizabeth M. Gerber, Audris Wong

352 Papers: Multitouch and Gesture

SFG CHAIR: JAMES FOGARTY

PDE A Multi-touch Interface for Fast Architectural Sketching and Massing
Qun Sun, Juncong Lin, Chi-Wing Fu, Sawako Kajima, Ying He

PPG Gesture Studio: Authoring Multi-Touch Interactions through Demonstration and Declaration
Hao Li, Yang Li

PLY EventHurdle: Supporting Designers’ Exploratory Interaction Prototyping with Gesture-Based Sensors
Ju-Whan Kim, Tek-Jin Nam

NVE Small, Medium, or Large? Estimating the User-Perceived Scale of Stroke Gestures
Radu-Daniel Vatavu, Géry Casiez, Laurent Grisoni

TNG Indirect Shear Force Estimation for Multi-Point Shear Force Operations
Seungkook Hea, Geethyuk Lee

12:30-14:00 Videos

List on page 55

BORDEAUX Lunch Break

Restaurants, bakeries & supermarkets available nearby

Palais des Congrès | CHI 2013, Paris France | 27
Enter these 3-letter codes in the search box of the CHI 2013 Mobile App to go directly to the corresponding session or presentation.

**241 Papers: Gaze**

**Chair:** Lyn Bartram

- Still Looking: Investigating Seamless Gaze-supported Selection, Positioning, and Manipulation of Distant Targets
  - Sophie Stellmach, Raimund Dachselt

- Individual User Characteristics and Information Visualization: Connecting the Dots through Eye Tracking
  - Derek J. Toker, Cristina Conati, Ben Steichen, Giuseppe Carenini

- Study of Polynomial Mapping Functions in Video-Oculography Eye Trackers
  - Juan J. Cerrada, Arantzaz Villanueva, Rafael Cabeza

- EyeContext: Recognition of High-level Contextual Cues from Human Visual Behaviour
  - Andreas Bulling, Christian Weichsel, Hans Gelepersen

- A Preliminary Investigation of Human Adaptations for Various Virtual Eyes in Video See-Through HMDs
  - Joong Ho Lee, Sei-young Kim, Hae cheol Yoon, Bo Kyung Huh, Ji-Hyung Park

**242A Papers: Technologies for Life I**

**Chair:** Jeffrey Bigham

- ‘Digital Motherhood’: How does technology help new mothers?
  - Lorna Gibson, Vicki L. Hanson

- Age-Related Performance Issues for PIN and Face-Based Authentication Systems
  - James Nicholson, Lynne Coventry, Pam Briggs

- The Presentation of Health-Related Search Results and Its Impact on Negative Emotional Outcomes
  - Carolyn Lauckner, Gary Hsieh

- Age-Related Differences in Performance with Touchscreens Compared to Traditional Mouse Input
  - Leah Findlater, Ian E. Froehlich, Kays Fattal, Jacob O. Wobbrock, Tanya Dastyar

- Access Lens: A Gesture-Based Screen Reader for Real-World Documents
  - Shaun K. Kane, Brian Frey, Jacob O. Wobbrock

**251 Papers: Evaluation Methods I**

**Chair:** Anthony Jameson

- LEMtool - Measuring Emotions in Visual Interfaces
  - Gjjs Huisman, Marco Van Hout, Elisabeth M.A.G. van Dijk, Theo M. Van der Geest, Dirk K.J. Heylen

- Exploring Personality-Targeted UI Design in Online Social Participation Systems
  - Oded Nov, Ofer Anzey, Claudia Lopez, Peter Brusilovsky

- Designing and Theorizing Co-located Interactions
  - Thomas Retnaier, Pierre BENZ, Gary Marsden

- Scenario-Based Interactive UI Design
  - Koki Kusana, Moomok Nakatani, Takehiko Ohno

- Regularly Visited Patches in Human Mobility
  - Yan Qu, Jun Zhang

**252A Course C07 – Unit 1/2**

**Chair:** Andrea Parker

- Large-Scale Participation: A Case Study of a Participatory Approach to Developing a New Public Library
  - Peter Datigaard, Eva Eriksson

- Probing Bus Stop for Insights on Transit Co-design
  - Daisy Yoo, John Zimmerman, Tod Hirsh

- A Value Sensitive Action-Reflection Model: Evolving a Co-Design Space with Stakeholder and Designer Prompts
  - Daisy Yoo, Alina Huijtgraen, Jill Polzkill Woelfer, David G Hendry, Batya Friedman

- Configuring Participation: On How We Involve People In Design
  - John Vines, Rachel Clarke, Peter Wright, John McCarthy, Patrick Olivier

**253 Course C06 – Unit 1/2**

- Agile User Experience and UCD
  - William Hudson
BORDEAUX Papers: Language and Translation

**SNK** CHAIR: GAHGENE GWEON

The Efficacy of Human Post-Editing for Language Translation
Spence Green, Jeffrey Heer, Christopher D Manning

Same Translation but Different Experience: The Effects of Highlighting on Machine-Translated Conversations
Ge Gao, Hao-Chuan Wang, Dan Cosley, Susan R. Fussell

Improving Teamwork Using Real-Time Language Feedback
Yia R Tausczik, James W. Pennebaker

**NRS** SpatialEase: Learning Language through Body Motion
Damien Edge, Kai-Yin Cheng, Michael Whitney

342A Papers: Brain Sensing and Analysis

**SPC** CHAIR: PETRA ISENBERG

Using fNIRS Brain Sensing to Evaluate Information Visualization Interfaces
Evan M M Peck, Beste F Yüksel, Avitova Ottley, Robert J K Jacob, Remco Chang

A Predictive Speller Controlled by a Brain-Computer Interface Based on Motor Imagery
Taisiao D’Albis, Rossella Blatt, Roberto Tedesco, Lia Fottlow, Matteo Matteucci

Weighted Graph Comparison Techniques for Brain Connectivity Analysis
Basak Alper, Benjamin Bach, Nathalie Henry Reche, Tobias Isenberg, Jean Daniel Feikete

At the Interface of Biology and Computation
Alex S Taylor, Nir Piterman, Srinivas Cherla, Jasmin Fisher, Byron Cook, Castin Cockerton, Sam Bourton, David Benque

343 Course C03 – Unit 2/3

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

362 Special Interest Group

**GRG** The Role of Engineering Work in CHI
Philippe Palanque, Fabio Paternò, Jeffrey Nichols, Nuno J N Nunes, Brad A Myers

HAVANE Papers: Crowdwork & Online Communities

**SBY** CHAIR: KRZYSZTOF GAJOS

Crowdfunding inside the Enterprise: Employee-Initiatives for Innovation and Collaboration
Michael Muller, Werner Geyer, Todd Soule, Steven Daniels, Li-Tie Cheng

Community Insights: Helping Community Leaders Enhance the Value of Enterprise Online Communities
Tara Matthews, Steve Whittaker, Herman Badenes, Barton A Smith, Michael Muller, Kate Ehrlich, Michelle X Zhou, Tessa Lau

CommunityCompare: Visually Comparing Communities for Online Community Leaders in the Enterprise
Anbang Xu, Jin Chen, Tara L Matthews, Michael Muller, Herman Badenes

Analyzing Crowd Workers in Mobile Pay-for-Answer Q&A
Uichin Lee, Ji Young Kim, Eunhee Y Jyuup Sung, Mario Gerla

351 Papers: Keyboards and Hotkeys

**SMB** CHAIR: MARK DUNLOP

Octopus: Evaluating Touchscreen Keyboard Correction and Recognition Algorithms via “Remulation”
Xiaojun Bi, Shir Azenkot, Kurt Partridge, Shumin Zhai

TapBoard: Making a Touch Screen Keyboard More Touchable
Sungjun Kim, Jeongmin Son, Geethyak Lee, Hwan Kim, Woohun Lee

Métamorphe: Augmenting Hotkey Usage with Actuated Keys
Gilles Bally, Thomas Pietrzak, Jonathan Deber, Daniel J Wigdor

Promoting Hotkey Use through Rehearsal with Expose-HK
Sylvain Malacria, Gilles Bally, Joel Harrison, Andy Cockburn, Carl Gutwin

352 Papers: Flexible Displays

**SHQ** CHAIR: EDWARD LANK

Flexpad: Highly Flexible Bending Interactions for Projected Handheld Displays
Jürgen Steinle, Andreas Jost, Pattie Moxes

MorePoke: A Study of Actuated Shape Deformations for Flexible Thin-Film Smartphone Notifications
Antonio Gomes, Andrea Nesbitt, Roel Vertegaal

Morphees: Toward High “Shape Resolution” in Self-Actuated Flexible Mobile Devices
Anne Rouault, Ahn Jiar Kim, Markus Löchtefeld, Srijan Subramanion

LightCloth: Senseable Illuminating Optical Fiber Cloth for Creating Interactive Surfaces
Sunao Hashimoto, Ryohei Suzuki, Youichi Kamiyama, Masahiko Inami, Takeo Igarashi

Bending the Rules: Bend Gesture Classification for Flexible Displays
Kristen Warren, Jessica Lo, Yuh-Fad Veder, Justin Giraud
Enter these 3-letter codes in the search box of the CHI 2013 Mobile App to go directly to the corresponding session or presentation.

**241 Panel**

Leveraging the Progress of Women in the HCI Field to Address the Diversity Chasm  
Susan M. Dray, Anicia N. Peters, Anke Marei Brock, Andrea J. Peer, Shikah Gita, Pamela Jennings, Jonaki Kumar, Dianne Murray

**251 Papers: Exploring Games**

SCF CHAIR: STEVEN DOW

PMH Turkopticon: Interrupting Worker Invisibility in Amazon Mechanical Turk  
Lily C. Irani, M. Silberman

PBH Don’t Hide in the Crowd! Increasing Social Transparency Between Peer Workers Improves Crowdsourcing Outcomes  
Shih-Wei Lin, Wai-Tet Fu

PIG Combining Crowdsourcing and Google Street View to Identify Street-level Accessibility Problems  
Katara Hara, Vicki Le, Jan Froehlich

PKZ Labor Dynamics in a Mobile Micro-Task Market  
Mohamed Musthag, Deepak Ganesan

**242 Panel**

LXE Leveraging the Progress of Women in the HCI Field to Address the Diversity Chasm  
Susan M. Dray, Anicia N. Peters, Anke Marei Brock, Andrea J. Peer, Shikah Gita, Pamela Jennings, Jonaki Kumar, Dianne Murray

PMG Creativity Support for Novice Digital Filmmaking  
Nicholas Davis, Alexander Zoek, Brian O’Neill, Ashton Grosz, Brandon Headrick, Michael Nitsche, Mark Riedl

PNO AutoGami: A Low-cost Rapid Prototyping Toolkit for Automated Movable Paper Craft  
Kening Zhu, Shengdong Zhao

PRQ HyperSlides: Dynamic Presentation Prototyping  
Damen Edge, Joan Savage, Koji Yatani

NTY SidePoint: A Peripheral Knowledge Panel for Presentation Slide Authoring  
Yefeng Liu, Damen Edge, Koji Yatani

**243 Course C05 – Unit 2/2**

CPQ Practical Statistics for User Experience Part I  
Jeff Sauro, James Lewis

**252B Case studies: Innovating User-Centered Design**

SBK CHAIR: JOHN BOYD

YQT Project Pokerface: Building User-Centered Culture at Scale  
Asif M Baki, Patrick Bowen, Brianna Brekke, Elizabeth Ferrall-Nunge, Gueorgui Kassanets, Jens Riegelberger, Nina Weber, Marissa Mayer

YNM Data-driven Design Process in Adoption of Marking Menus for Large Scale Software  
Ji-Young Oh, Ananth Ugirala

YMU Creating Small Products at a Big Company: Adobe’s “Pipeline” Innovation Process  
Rob J Adams, Bradlee Evans, Joel Brandt

YEN UX Design with International Teams: Challenges and Best Practices  
Charles Yu

**253 Course C06 – Unit 2/2**

CGI Agile User Experience and UCD  
William Hudson
BORDEAUX  Papers: Tables and Floors

**SFL**  CHAIR: SRIRAM SUBRAMANIAN

- GravitySpace: Tracking Users and Their Poses in a Smart Room Using a Pressure-Sensing Floor  
  Alan Bränzel, Christian Holz, Daniel Hoffmann, Dominik Schmidt, Marius Knaut, Patrick Lühne, René Meusel, Stephan Richter, Patrick Baudisch

- Improving Digital Object Handoff Using the Space Above the Table  
  Steven W.T. Satchiffe, Zerja Ikovic, David R. Flattla, Andy Pavlovych, Ian Staness, Carl Gutwin

**PFK**

- An Evaluation of State Switching Methods for Indirect Touch Systems  
  Simon Voelter, Chat Wacharamanotham, Jan Borchers

- Improving Touch Accuracy on Large Tabletops Using Predecessor and Successor  
  Max Möllers, Norbert Dumont, Stefan Ludwig, Jan Borchers

**PXU**

- Touchbugs: Actuated Tangibles on Multi-Touch Tables  
  Diana Nowacka, Karim Lacha, Nils Y. Hammerla, Daniel Jackson, Gassim Lacha, Enrico Rukzio, Patrick Olivier

342A Papers: Design for Classrooms I

**SQZ**  CHAIR: DEBORAH TATAR

- The Effect of Virtual Achievements on Student Engagement  
  Paul Denny

- A Trace-based Framework for Analyzing and Synthesizing Educational Progressions  
  Erik L. Andersen, Sumit Gulwani, Zoran Popovic

- Wikipedia Classroom Experiment: Bidirectional Benefits of Students’ Engagement in Online Production Communities  
  Rosta Farzan, Robert E. Kraut

**SPE**

- TypeRighting: Combining the Benefits of Handwriting and Typeface in Online Educational Videos  
  Andrew Cross, Myshuli Boyapunedi, Edward Cutrell, Anant Agarwal, William Thies

- Tweeting for Class: Co-Construction as a Means for Engaging Students in Lectures  
  Jeremy Binzel, Jeff T Hancock, Daniela Retelny

343 Course C03 – Unit 3/3

**CVZ**

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

361 Special Session

**SR**

- Student Research Competition Judging

362 Special Interest Group

**GVO**

- Enhancing the Research Infrastructure for Child-Computer Interaction  
  Janet C C Read, Juan Pablo Hourcade

HAVANE  Papers: Crowds and Activism

**SNP**  CHAIR: JAIME TEEVAN

- Delivering Patients to Sacré Coeur: Collective Intelligence in Digital Volunteer Communities  
  Kate Starbird

- Does Slacktivism Hurt Activism?: The Effects of Moral Balancing and Consistency in Online Activism  
  Yu-Hao Lee, Gary Hsieh

**PHF**

- Using Crowdsourcing to Support Pro-Environmental Community Activism  
  Elke Masaung, David Coyle, Kirsten F Cater, Marc Jay, Chris Preist

**PKQ**

- A Longitudinal Study of Follow Predictors on Twitter  
  C.J. Hutto, Eric Gilbert, Sarta Yardi Schoenebeck

351 Papers: Large and Public Displays

**SLE**  CHAIR: XIANG CAO

- High-Precision Pointing on Large Wall Displays using Small Handheld Devices  
  Mathieu Nancel, Olivier Chopuis, Emmanuel Prieur, Xing Deng Yang, Pourang P Irani, Michel Beaudouin-Lafon

**PZU**

- Window Brokers: Collaborative Display Space Control  
  Richard B Arthur, Dan R Olsen

**PEZ**

- StrikeAPose: Revealing Mid-Air Gestures on Public Displays  
  Robert Walter, Giles Ball, Jörg Müller

**POM**

- SideWays: A Gaze Interface for Spontaneous Interaction with Situated Displays  
  Yanxia Zhang, Andreas Bulling, Hans W Gellersen

352 Papers: Embodied Interaction I

**SEL**  CHAIR: ANTONIO KRÜGER

- Interaction Design for and with the Lived Body: Some Implications of Merleau-Ponty’s Phenomenology  
  Dag Svanaes

- On the Naturalness of Touchless: Putting the “Interaction” Back into NUI  
  Kenton P O’Hora, Richard Harper, Helena M. Mentis, Abigail J Sellen, Alex S Taylor

- Moving and Making Strange: An Embodied Approach to Movement-based Interaction Design  
  Lian Lake, Toni Robertson

- Embodied Cognition And The Magical Future Of Interaction Design  
  David Kirsh
Enter these 3-letter codes in the search box of the CHI 2013 Mobile App to go directly to the corresponding session or presentation.

### Papers: Design for the Home

**RENE** CHAIR: NADIR WEIBEL

- **PLK** Designing Web-Connected Physical Artefacts for the ‘Aesthetic’ of the Home

- **PKA** On the Relation of Ordinary Gestures to TV Screens: General Lessons for the Design of Collaborative Interactive Techniques
  - Oskar Juhlin, Elin Omnell

- **PCM** From Codes to Patterns: Designing Interactive Decoration for Tableware
  - Rupert Meese, Shakti Ali, Emily-Clare Thorne, Steve D. Benford, Anthony Quinn, Richard Mortier, Brian Rentfrow, Sharon L. Baurley

- **PNX** Pass the iPad: Collaborative Creating and Sharing in Family Groups
  - Nicola Yull, Yvonne Rogers, Jochen Rick

### Course C08 – Unit 1/2

**CAX** User Experience Evaluation Methods – Which Method to Choose?
- Verpa Rata, Arnold Vermeeren, Kaija Väänänen-Vainio-Mattila, Effie Law, Marianne Obrist

### Papers: Social Creativity

**SCQ** CHAIR: GARY HSIIEH

- **FNE** Revisiting Social Practices Surrounding Music
  - Tuck W. Leong, Peter Wright

- **FNV** Write Here, Write Now!: An Experimental Study of Group Maintenance in Collaborative Writing
  - Jeremy Birnholtz, Stephanie S. Steinhardt, Antonella Pavesse

- **PLC** Machinima Production Tools: A Vernacular History of a Creative Medium
  - Shad D. Gross, Tyler Pace, Jeffrey Bardzell, Shoowen Bardzell

- **PBV** Front-Camera Video Recordings as Emotion Responses to Mobile Photos Shared Within Close-Knit Groups
  - Yangqing Cui, Jan Kangas, Jukka Holm, Guido Grassel

### Course C11 – Unit 1/2

**CLUE** Analyzing Social Media Systems
- Shelly Farnham, Enrie Kocman

### CHI at the Barricades – an Activist Agenda?
- Daniela K. Busse, Lisa P. Nathan, Samuel Mann, Alan Borning, Ben Shneiderman, Andrea Grimes Parker, Tod Hirsch, Bryan Nunez

### Course C09 – Unit 1/2

**CZS** Choice and Decision Making for HCI
- Anthony Jameson

### Course C09 – Unit 1/2

**CAX** Choice and Decision Making for HCI
- Anthony Jameson

### Posters Spotlight 1

- **Accessibility** Computer-Supported Cooperative Work
- **Health** Evaluation & Design Methods
- **Learning** Interaction & Experience Design
- **Multimedia** Music & Audio
- **Privacy** Social Computing
- **Student Research Competition** List on page 57
- **Student Design Competition** List on page 53
- **List on page 54**
BORDEAUX Papers: Design for Classrooms 2

**SQV** CHAIR: JUDY KAY

Building Open Bridges: Collaborative Remixing and Reuse of Open Educational Resources across Organisations
Tim Coughlan, Rebecca Pitt, Patrick McAndrew

ARTful: Adaptive Review Technology for Flipped Learning
Daniel J Szafir, Bilge Mutlu

**PBJ** Challenges and Opportunities for Technology in Foreign Language Classrooms
Katie Kuksonok, Michael Brooks, Qiong Wang, Charlotte P. Lee

**PNE** Tables in the Wild: Lessons Learned from a Large-Scale Multi-Tabletop Deployment
Ahmed Kharrufa, Madeleine Biloam, Phil Heslop, David Leat, Paul Dolan, Patrick Olivier

342A Papers: Reflecting on Phones

**SKG** CHAIR: JOONHWAN LEE

iPhone In Vivo: Video Analysis of Mobile Device Use
Barry Brown, Moira McGregor, Eric Louiier

**PFZ** AnyType: Provoking Reflection and Exploration with Aesthetic Interaction
Laura Devendorf, Kimika Ryokai

**PQF** Stories of the Smartphone in Everyday Discourse: Conflict, Tension & Instability
Ellie Harmon, Melissa Mazmanian

**PFC** Emotions, Experiences and Usability in Real-Life Mobile Phone Use
Sari Kujala, Talya Miron-Shatz

343 Course C10 – Unit 1/2

**CSJ** Cognitive Crash Dummies: Predicting Performance from Early Prototypes
Bonnie E John

361 Special Interest Group

**GYU** Consumer Engagement in Health Technologies Special Interest Group
Karen Cheng, Kelly Cairns, Wanda Pratt, Kay Connelly

362 Special Interest Group

**GDG** A new Perspective for the Games and Entertainment Community
Regina Bernhaupt, Katherine Idbister

10:20-11:00 Interactivity

List on page 65

TUESDAY 9:00-10:20
### BLEU Papers: Sustainable Energy

**SML**  
**CHAIR: JOHN ZIMMERMAN**

**PAP**  
At Home with Agents: Exploring Attitudes Towards Future Smart Energy Infrastructures  
Tom A Rodden, Joel E Fischer, Nadia Pontić, Khولة Bachour, Stuart Moran

**PQQ**  
Everyday Activities and Energy Consumption: How Families Understand the Relationship  
Carmen Neustaedter, Lyn Bartram, Leonardo Ramirez, Volker Wulf

**PPF**  
Cultivating Energy Literacy— Results from a Longitudinal Living Lab Study of a Home Energy Management System  
Tobias Schwartz, Sebastian Denef, Gunnar Stevens, Leonardo Ramirez, Volker Wulf

**PG2**  
The Dubuque Electricity Portal: Evaluation of a City-Scale Residential Electricity Consumption Feedback System  
Thomas D Erickson, Ming Li, Younghun Kim, Ajoy Deshpande, Santib Sahu, Tian Chao, Pyawuadtee “Noi” Sukovitya, Milind Naphade

### 241 Panel

**LLC**  
UX Management: Current and Future Trends  
Janice A Rohn, Kathy K Baxter, Catherine Courage, Janaki Kumar, Carola Fellenz Thompson, Steve Rogers

### 242A Papers: Impairment and Rehabilitation

**SSR**  
**CHAIR: KARYN MOFFATT**

**PBG**  
PointAssist: Assisting Individuals with Motor Impairments  
Guarianex J Salvia, Juan Pablo Hourcado

**PJM**  
Analyzing User-Generated YouTube Videos to Understand Touchscreen Use by People with Motor Impairments  
Lisa Anthony, Yiqin Kar, Leah Findlater

**PQM**  
Exploring & Designing Tools to Enhance Falls Rehabilitation in the Home  
Stephen Uzor, Lynne Boillie

**NPE**  
Stroke Rehabilitation with a Sensing Surface  
Cati Boulanger, Adam Boulanger, Lilian de Greef, Andy Kearney, Kiley Sable, Russell Transue, Z Sweedyk, Paul H Dietz, Steven Bathiche

**NPS**  
PT Viz: Towards a Wearable Device for Visualizing Knee Rehabilitation Exercises  
Swamy Ananthananarayan, Miranda Steen, Alice Chien, Halley Profita, Kate A Siek

### 243 Course C08 – Unit 1/2

**CAX**  
User Experience Evaluation Methods – Which Method to Choose?  
Verpi Rota, Arnold Vermeeren, Kasia Väätänen-Vana-Mattila, Effie Law, Marianna Obrist

### 251 Papers: Exergames and Beyond

**SOP**  
**CHAIR: ERIKA POOLE**

**TXL**  
Physical Activity Motivating Games: Be Active and Get Your Own Reward  
Shlomo Berkowsky, Jill Freyne, Mac Coombe

**PQN**  
Understanding Exergame Users’ Physical Activity, Motivation and Behavior Over Time  
Andrew Macvean, Judy Robertson

**PBD**  
Designing Action-based Exergames for Children with Cerebral Palsy  
Hamilton A Hernandez, Zi Ye, T.C. Nicholas Graham, Darcy Fehlings, Lauren Switzer

### 252A Course C11 – Unit 2/2

**CUE**  
Analyzing Social Media Systems  
Shelly Farnham, Ervine Kiciman

### 252B Case studies: Communities of Practice

**SAZ**  
**CHAIR: DIRK-JAN HOETS**

**YKC**  
Don’t Talk to Strangers! Peer Tutoring versus Active Intervention methodologies in interviewing children  
Svetlana Ognjanovic, Jason Ralls

**YHY**  
Leverage User Experience through Social Networking to Improve Health Adherence  
Raymond J Lin, Xinxin Zhu

**YTB**  
The Needs of Early School Children and Their Parents with Respect to the Design of Mobile Service Offers  
Agnieszka (Aga) Szostek, Joanna Kwiatkowska, Olga Gérnicka

**YBD**  
Enhancing Company Communication: The Case of a Social Media Platform  
Alina Kirschikowsky, Astrid Weiss, Sebastian Osswald, Manfred Tscheligi

### 253 Course C09 – Unit 2/2

**CZ5**  
Choice and Decision Making for HCI  
Anthony Jameson

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12:20-14:00  
Lunch Break  
Restaurants, bakeries & supermarkets available nearby

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Enter these 3-letter codes in the search box of the CHI 2013 Mobile App to go directly to the corresponding session or presentation.
**BORDEAUX Papers: Full-Body Interaction**

**CHAIR: KARON MACLEAN**

**PPY**
Make It Move: A Movement Design Method of Simple Standing Products Based on Systematic Mapping of Torso Movements & Product Messages
Jinyung Jung, Seok-Hyung Bae, Joon Hyub Lee, Myung-Suk Kim

**PNZ**
Information Capacity of Full-Body Movements
Artti Outasanta, Teemu Roos, Arttu Aleksio Maidt, Laura Leppänen

**PBT**
Body-centric Design Space for Multi-surface Interaction
Julie Wagner, Mathieu Nancel, Sean G. Gustafson, Stephane Huot, Wendy E. Mackay

**PQL**
MotionMA: Motion Modelling and Analysis by Demonstration
Eduardo Velloso, Andreas Bulling, Hans Geleersen

**342 Papers: Video Communication**

**CHAIR: STEVE HARRISON**

**PKD**
PanorInserts: Mobile Spatial Teleconferencing
Fabrizio Pece, William Steptoe, Fabian Wanner, Simon Julien, Tim Weyrich, Jon Kautz, Anthony Steed

**PRC**
Putting Things in Focus: Establishing Co-Orientation Through Video in Context
James Norris, Holger M Schüdelbach, Paul K Luff

**TLO**
Embedded Interaction: the accomplishment of actions in everyday and video-mediated environments
Paul K Luff, Marina Irajaka, Naomi Yamashita, Hideaki Kuzuoka, Christian Heath, Grace Eden

**NFI**
HomeProxy: Exploring a Physical Proxy for Video Communication in the Home
John C. Tang, Robert Xiao, Aaron Hoff, Gino Venolia, Patrick Therien, Asta Roseway

**343 Course C10 – Unit 2/2**

**CSJ**
Cognitive Crash Dummies: Predicting Performance from Early Prototypes
Bonnie E. John

**361 Special Interest Group**

**GFL**
Research-Practice Interaction: Building Bridges, Closing the Gap
Elizabeth A Buie, Clare J Hooper, Aaron Houssian

**362 Special Interest Group**

**GUN**
Digital Art: Challenging Perspectives
David Englund, Jill Fantauzziacooghin, Thecla Schiporost, Celine E Lutulipe, Linda Candy

**351 Papers: Pointing and Fitts Law**

**CHAIR: TOMER MOSCOVICH**

**PPB**
Fitts Law: Modeling Finger-Touch with Fitts’ Law
Xiaojun Bi, Yong Li, Shumin Zhai

**PRG**
The Effect of Time-based Cost of Error in Target-directed Pointing Tasks
Nikola Banovic, Tom Grossman, George Fitzmaurice

**TGB**
Two-Part Models Capture the Impact of Gain on Pointing Performance
Garth Shoemaker, Takayuki Tsukitani, Yoshiyumi Kitamura, Kellogg S. Booth

**NGB**
How Low Can You Go? Human Limits in Small Unidirectional Mouse Movements
Jonathan Aceituno, Géry Casiez, Nicolas Roussel

**NEE**
Can We Beat the Mouse with MAGIC?
Röbel Fares, Shaomin Fang, Oleg V Kornogortsev

**352 Papers: Sensing Touch**

**CHAIR: CHRIS HARRISON**

**PFH**
GaussBits: Magnetic Tangible Bits for Portable and Occlusion-Free Near-Surface Interactions
Rong-Hao Liang, Kai-Yin Cheng, Liwei Chan, Chuan-Xhyoung Peng, Mike Y Chen, Rung-Huei Liang, De-Nian Yang, Bing-Yu Chen

**PRC**
Swiss-Cheese Extended: An Object Recognition Method for Ubiquitous Interfaces based on Capacitive Proximity Sensing
Tobias Grosse-Ruppendahl, Andreas Braun, Felix Konieth, Arjan Kuijper

**PRR**
HACHIStack: Dual-Layer Photo Touch Sensing for Haptic and Auditory Tapping Interaction
Taku Hachisu, Hiroyuki Kajimoto

**PLE**
LongPad: A TouchPad Using the Entire Area below the Keyboard of a Laptop Computer
Jiseong Gu, Seonglok Heo, Joonhyun Hoon, Sunjun Kim, Geeyhuk Lee
TUESDAY 14:00-15:20

**251 Papers: Game Design**

**SQL**
CHAIR: REGAN MANDRYK

- How Does It Play Better? Exploring User Testing and Biometric Storyboards in Games User Research
  Peyman Mirz-Babaei, Lennart E. Nocke, John Gregory, Nick Collins, Geraldine Fitzpatrick

- Design Metaphors for Procedural Content Generation in Games
  Riko Khosla, Mark J. Nelson, Pippin Barr

**PMC**

- Prototyping in PLACE: A Scalable Approach to Developing Location-Based Apps and Games
  Anne E. Bowser, Derek L. Hansen, Jocelyn Raphael, Matthew Reid, Ryan J. Garrett, Yurong H. He, Dana Rotman, Jennifer J. Preece

**PFL**

- Designing Reusable Alternate Reality Games
  Derek L. Hansen, Elizabeth M. Bonnigane, Marc Rupple, Amanda Visconti, Kari Krauss

**252A Course C15 – Unit 1/2**

**CFL**
Card Sorting for Navigation Design
William Hudson

**252B Case studies: Changing How We Work**

**SBN**
CHAIR: KATHY BAXTER

- Best Practices for Enterprise Social Software Adoption: A Case Study of Deploying IBM Connections within IBM
  Meng Yang, Michael Warner, David R. Millen

- Minimizing Change Aversion for the Google Drive Launch
  Aaron Sedley, Hendrik Müller

- Do You Enjoy Getting Gifts? Keeping Personas Alive Through Marketing Materials
  Christina Hochleitner, Cornelia Graf, Manfred Tscheligi

**FRL**

- The Fingerstroke-Level Model Strikes Back: A modified Keystroke-Level Model in developing a gaming UI for 4G networks
  Kibum Song, Jhoon Kim, Yoan-Han Cha, Ahreum Lee, Hokyung Ryu

**253 Course C13 – Unit 1/2**

**CRC**
Expert Reviews – For Experts
Rolf Molich

**Posters Rotation 1**
List on page 57

**HALL MAILLOT**

Enter these 3-letter codes in the search box of the CHI 2013 Mobile App to go directly to the corresponding session or presentation
BORDEAUX  Papers: Design for the Home

**CHM**  CHAIR: ALBRECHT SCHMIDT

**FRO**  Designing for the Living Room: Long-Term User Involvement in a Living Lab
Corinna Ogonowski, Benedikt Ley, Jan Hess, Lin Wan, Volker Wulf

**PGH**  Leaving the Wild: Lessons from Community Technology Handovers
Nick Taylor, Keith Cheverst, Peter Wright, Patrick Olivier

**PSY**  How Groups of Users Associate Wireless Devices
Ming Xi Chong, Hans W Geelersen

**PSU**  MultiNet: Reducing Interaction Overhead in Domestic Wireless Networks
Anthony Brown, Richard Mortier, Tom A Rodden

342A Papers: Novel Programming

**SND**  CHAIR: MARGARET BURNETT

**PTM**  Use of an Agile Bridge in the Development of Assistive Technology
Suzanne Prior, Annalu Waller, Thilo Kroll, Rolf Block

**PLA**  Codeable Objects: Computational Design and Digital Fabrication for Novice Programmers
Jennifer M Jacobs, Leah Buechley

**PPL**  I Can Do Text Analytics! Designing Development Tools for Novice Developers
Huahai Yang, Diana Pupons-Wickham, Laura Chiticariu, Yunyao Li, Benjamin Nguyen, Arnaldo Carreno-Fuentes

**PFL**  Debugging Support for End User Mashup Programming
Sandeep Kaur Kuttal, Anita Sarma, Gregg Rothermel

343 Course C14 – Unit 1/2

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

361 Special Interest Group

**GXS**  Managing UX Teams
Janice Rehn, Carola Felzen-Thompson

362 Special Interest Group

**GPC**  Changing Perspectives on Sustainability: Healthy Debate or Divisive Factions?
Daniela K Busse, Samuel Mann, Lisa P Nathan, Chris Preisz

HAVANE  Special Session

**SIA**  CHAIR: LOREN TERVEEN

**SIA**  Social Impact Award: Sara J. Czaja
Sara J. Czaja from University of Miami is the recipient of the 2013 SIGCHI Social Impact Award, presented to individuals who promote the application of human-computer interaction research to pressing social needs.

351 Papers: Temporal Design

**SEV**  CHAIR: ANN BLANDFORD

**PTU**  Authoring Personal Histories: Exploring the Timeline as a Framework for Meaning Making
Elizabeth A Thiry, Sid E. Lindley, Richard Banks, Tim Regan

**POU**  Looking Past Yesterday’s Tomorrow: Using Futures Studies Methods to Extend the Research Horizon
Jennifer Mankoff, Haakon Faste, Jennifer A. Rode

**PQJ**  Tying with Time: Considering Temporal Themes in Interactive Artifacts
Sus Lundgren

**PTV**  Designing with Traces
Daniela K Rosner, Miwa Ikemya, Diana Km, Kristin Koch

352 Papers: Tactile Experiences

**SHM**  CHAIR: MARILYN MCGEE-LENNON

**PFF**  Talking about Tactile Experiences
Marianna Obrist, Sue Ann Seash, Sriam Subramanian

**PHM**  Tactile Perceptions of Digital Textiles: A Design Research Approach
Douglas S Atkinson, Pawel M Orzechowski, Bruna B Petreca, Nadia Bianchi-Berthouze, Penelope Watkins, Sharon L Baurley, Mike J Chanter

**PTE**  The Roles of Touch during Phone Conversations: Long-Distance Couples’ Use of POKE in Their Homes
Young-Woo Park, Kyung-Min Baek, Tek-Jin Nam

**PSL**  The Design and Field Observation of a Haptic Notification System for Timing Awareness During Oral Presentations
Diane Tom, Karan E. MacLean, Joanna McGregor, Katherine J. Kuchenbecker

15:20-16:00 Interactivity List on page 65

HALL MAILLOT
Enter these 3-letter codes in the search box of the CHI 2013 Mobile App to go directly to the corresponding session or presentation.

**BLEU Papers: Public Displays**

- CHAIR: HANS GELLERSEN
  Hanna Kukka, Heidi Oja, Vassilis Kastakas, Jorge Gonçalves, Timo Ojala
- **PKA** - Interaction Techniques for Creating and Exchanging Content with Public Displays
  Florian Alt, Alireza Sahami, Thomas Kubitz, Albrecht Schmidt
- **PGG** - Screenfinity: Extending the Perception Area of Content on Very Large Public Displays
  Constantin Schmidt, Jörg Müller, Giles Boily
- **PTV** - Squaring the Circle: How Framing Influences User Behavior around a Seamless Cylindrical Display
  Gilbert Beyer, Florian Köttner, Manuel Scheewe, Ivo Haulsen, Andreas Butz

**242A Papers: Communicating Health**

- CHAIR: YUNAN CHEN
- **STF** - Messaging to Your Doctors: Understanding Patient-Provider Communications via a Portal System
  Si Sun, Xiaomu Zhou, Joshua C. Denny, Trent S. Rosenbloom, Hua Xu
- **PLU** - HeartLink: Open Broadcast of Live Biometric Data to Social Networks
  Franco Curmi, Maria Angela Ferrario, Jen Southern, Jon Whittle
- **PGM** - Technology Preferences and Routines for Sharing Health Information during the Treatment of a Chronic Illness
  Carolyn Pang, Caman Neustaedter, Bernhard E. Riecke, Erick Oudur, Serena Hillman
- **POZ** - A Text Message a Day Keeps the Pulmonologist Away
  Tae-Jung Yun, Rosa I. I. Arriaga

**243 Course C12 – Unit 2/2**

- CHAIR: SIÂN LINDLEY
- **STG** - Practical Statistics for User Experience Part II
  Jeff Sauro, James Lewis
- **SKN** - Digital Artifacts as Legacy: Exploring the Lifespan and Value of Digital Data
  Rebecca Gulotta, William T. Odorn, Haakon Faste, Jodi L. Forlazzi
- **PFA** - Design for Forgetting: Disposing of Digital Possessions after a Breakup
  Carina Sos, Steve Whittaker
- **POZ** - Fragmentation and Transition: Understanding Perceptions of Virtual Possessions among Young Adults in Spain, South Korea and the United States
  William Odorn, John Zimmerman, Jodi Forlazzi, Ana López Higuera, Mauro Marchitto, José Cañas, Youn-kyung Lim, Tek-Jin Nam, Da-jung Kim, Moon-Hwan Lee, Yeo-reum Lee, Yeo-kyung Row, Jinmin Seok, Bokyung Sohn, Heather Moore
- **PTL** - Instagram at the Museum: Communicating the Museum Experience through Social Photo Sharing
  Alexandra Weißenmann, Thomas Hillmon, Beata Jungselius

**251 Papers: Reading and Writing**

- CHAIR: AARON QUIGLEY
- **SSO** - Community Enhanced Tutorials: Improving Tutorials with Multiple Demonstrations
  Benjamin Lofreniere, Tovi Grossman, George Fitzmaurice
- **PFL** - Kolibri – Tiny and Fast Gestures for Large Pen-based Surfaces
  Jakob F. Leitner, Florian Perteneder, Can Liu, Christian Rendt, Michael Haller
- **PNH** - Graduate Student Use of a Multi-Slate Reading System
  Nicholas Y Chen, François V Guimbretière, Abigail J Seiler
- **PNG** - The Wheels are Turning: Content Rotation on Steering Wheel Displays
  David Wilfinger, Martin Murer, Sebastian Osswald, Alexander Meschtscherjakov, Manfred Tscheligi

**252A Course C15 – Unit 2/2**

- CHAIR: WILLIAM HUDSON
- **CFL** - Card Sorting for Navigation Design
  Janaki Kumar, Mario Herger, Sebastian Deterding, Scott Schnaars, Matt Landes, Erika Noll Webb

**252B Papers: Studying Digital Artifacts**

- **SKN** - Digital Artifacts as Legacy: Exploring the Lifespan and Value of Digital Data
  Rebecca Gulotta, William T. Odorn, Haakon Faste, Jodi L. Forlazzi
- **PFA** - Design for Forgetting: Disposing of Digital Possessions after a Breakup
  Carina Sos, Steve Whittaker
- **POZ** - Fragmentation and Transition: Understanding Perceptions of Virtual Possessions among Young Adults in Spain, South Korea and the United States
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- **PTL** - Instagram at the Museum: Communicating the Museum Experience through Social Photo Sharing
  Alexandra Weißenmann, Thomas Hillmon, Beata Jungselius

**253 Course C13 – Unit 2/2**

- CHAIR: ROlf MOLICH
- **CKC** - Expert Reviews – For Experts
  Rolf Molich
BORDEAUX  Papers: Ethics in HCI

SPE  CHAIR: MICHAEL MASSIMI

PGL  Categorised Ethical Guidelines for Large Scale Mobile HCI
Donald McMillan, Alistair Morrison, Matthew Chalmers

PGU  Benevolent Deception in Human Computer Interaction
Eytan Adar, Desney T. Tan, Jaime Teevan

PBE  HCI in the Press: Online Public Reactions to Mass Media Portrayals of HCI Research
John Vines, Anja Thieme, Rob Comber, Mark Blythe, Peter C. Wright, Patrick Oliver

PRT  The Emotional Wellbeing of Researchers: Considerations for Practice
Wendy Marcur

342A  Papers: Embodied Interaction 2

SPG  The Effects of Tactile Feedback and Movement Alteration on Interaction and Awareness with Digital Embodiments
Andre Doucette, Regan L. Mandryk, Carl Gutwin, Miguel A. Nacenta, Andry Pavlyuch

PPH  Designing for Perceptual Crossing: Designing and Comparing Three Behaviors
Eva Deckers, Stephan Wensveen, Pierre Levy, Rene Ahn

PSO  ISee You There! Developing Identity-Preserving Embodied Interaction for Museum Exhibits
Francesco Caffaro, Alessandro Panella, Leilah B. Lyons, Jessica Roberts, Josh Rudinsky

PPB  In-body Experiences: Embodiment, Control, and Trust in Robot-Mediated Communication
Irene Rae, Leila A. Takayama, Bilge Mutlu

343  Course C14 – Unit 2/2

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

361  Special Interest Group

GMZ  HCI with Sports
Florian Mueller, Rohit A. Khot, Alan D Chatham, Sebastiaan Pijnappel, Cagdas "Chad" Toprak, Joe Marshall

362  Special Interest Group

SIG: NVI (Non-Visual Interaction)
Arke M. Breek, Slim Kamoun, Hugo Nicolau, Tiago Guerreira, Shaun K. Kane, Christophe Jaufras

HAVANE  Papers: Design Research

SEP  CHAIR: DANIELA BUSSE

TML  Strong Concepts: Intermediate-level Knowledge in Interaction Design Research
Kristina Höök, Jonas Löwgren

FNS  Crossing the Bridge over Norman’s Gulf of Execution: Revealing Feedforward’s True Identity
Jo Vermeulen, Kris Luyten, Elise van den Hoven, Karin Coninx

PBU  Q-Methodology as a Research and Design Tool for HCI
Kathleen O’Leary, Jacob O. Webrock, Eve A. Riskin

NGT  Design Research at CHI and its Applicability to Design Practice
David J. Roedl, Erik Stolterman

NEB  DesignLibs: A Scenario-Based Design Method for Ideation
Jared S. Bauer, Julie A. Kientz

351  Papers: Developing the World

SME  CHAIR: JON FROEHLICH

PFT  Powering the Cellphone Revolution: Findings from Mobile Phone Charging Trials in Off-Grid Kenya
Susan P. Wyche, Laura L. Murphy

PPL  Deep Conservation in Urban India and its Implications for the Design of Conservation Technologies
Yedendra B. Shrinivasan, Mohit Jain, Deva P. Seetharam, Abhishek Choudhary, Elaine M. Huang, Towanna Dildhun, Jennifer Mankoff

PL2  Fighting against the Wall: Social Media use by Political Activists in a Palestinian Village
Volker Wolff, Konstantin Asl, Ibrahim Abu Kleish, Meryem Atam, Kai Schubert, George Yerousis, David William Randall, Markus Rohde

PEH  The Mobile Media Actor-Network in Urban India
Neha Kumar, Nirmi Ragaswamy

352  Papers: Collaborative Creation

SEP  CHAIR: XIANGHUA DING

PGF  Cascade: Crowdsourcing Taxonomy Creation
Lydia B. Chilton, Greg Little, Darren Edge, Daniel S. Weld, James A. Landay

POH  Let’s Get Together: The Formation and Success of Online Creative Collaborations
Burr H. Settles, Steven P. Dow

PKT  A Tribute to Mad Skill: Expert Amateur Visuality and World of Warcraft Machinima
Tyler Pace, Austin L. Toombs, Shod D. Gross, Tony Pottin, Jeffrey Bardzell, Shawnen Bardzell

NEE  Virtual Birding: Extending an Environmental Pastime into the Virtual World for Citizen Science
Mark Cotterman-Fields, Margot Breteron, Paul Roe

NE6  Warping Time for More Effective Real-Time Crowdsourcing
Walter S. Losecki, Christopher D. Miller, Jeffrey P. Bigham
Enter these 3-letter codes in the search box of the CHI 2013 Mobile App to go directly to the corresponding session or presentation.

**BLEU** Papers: Aesthetics and the Web

**SP** CHAIR: EFFIE LAW

**IWC** Predicting Users' First Impressions of Website Aesthetics With a Quantification of Perceived Visual Complexity and Colorfulness
Katharina Reinecke, Tom Yeh, Luke Miratrix, Yuechen Zhao, Rahmati Mardika, Jenny Liu, Krzysztof Z. Gajos

**IWC** Love it or Hate it! Interactivity and User Types
Jenifer Hart, Alistair Gutch, Antonella De Angelis

**PQG** SPRWeb: Preserving Subjective Responses to Website Colour Schemes through Automatic Recolouring
David R Rustia, Katharina Reinecke, Carl Gutwin, Krzysztof Z. Gajos

**TPC** User-Experience from an Inference Perspective
Paul van Schaik, Marc Hassenzahl, Jonathan Ling

**241 Panel**

**LCG** Theory and Practice in UX Research: Uneasy Bedfellows?
Marianna Obrits, Peter C. Wright, Kari Kuutti, Yvonne Rogers, Kristina Höök, Pardha S. Pyla, Jean-Louis Frechin

**242AB Papers: Evaluation Methods 2**

**SQH** CHAIR: MANFRED TSCHELIGI

**THI** Backtracking Events as Indicators of Usability Problems in Creation-Oriented Applications
David Akers, Robin Jeffries, Matthew Simpson, Terry Winograd

**PGT** Analyzing Users’ Narratives to Understand Experience with Interactive Products
Alexandre N. Tuch, Rune Trustrup, Kasper Hornbæk

**PAG** Extracting Usability and User Experience Information from Online User Reviews
Steffen Hedegaard, Jakob Grue Simonsen

**NKR** UMUX-LITE – When There’s No Time for the SUS
James R. Lewis, Brian S. Utesch, Deborah E. Maher

**NGT** Non-parametric Decision Trees and Online HCI
Toben H Ska, Henry J Gardner, Michael A Martin

**243 Course C16 - Unit 1/2**

**CNS** The Past 100 Years of the Future: CHI/HCI/UX in Sci-Fi Movies and Television
Aaron Marcus

**251 Papers: Design for the Blind**

**SSU** CHAIR: SHAUN KANE

**PTG** Listen to it yourself! Evaluating Usability of “What’s Around Me?” for the Blind
Sabrina A. Paniels, Adriana Olmos, Jeffrey R. Blum, Jeremy R. Cooperstock

**TGN** Enabling the Blind to See Gestures
Francis Quek, Francisco CMB Oliveira

**PHX** Visual Challenges in the Everyday Lives of Blind People
Enn Brady, Meredith Ringel Morris, Yu Zhong, Samuel C. White, Jeffrey P. Bigham

**FGH** Accessible Photo Album: Enhancing the Photo Sharing Experience for People with Visual Impairment
Susumu Hunada, Daisuke Sato, Dustin W. Adams, Sri Kumariwann, Hirohito Tozaki, Chieko Asakawa

**252B alt.chi: Design Lessons**

**SAE** CHAIR: MARK PERRY

**AGJ** “Sergey Brin is Batman”: Google’s Project Glass and the Instigation of Computer Adoption in Popular Culture
Isabel Federsens, Doug Trueman

**AGZ** Talkative Objects in Need of Interpretation. Re-Thinking Digital Badges in Education
Razvan Ruginis

**AVS** Beyond Recognition: Using Gesture Variation for Continuous Interaction
Baptiste Caronix, Frederic Bevloecqua, Atau Tanaka

**AML** Design Activism in the HCI Classroom
Sabrina Hausler, Audrey Desjardins, Ran Wakkary

**ADU** Fillables: Everyday Vessels as Tangible Controllers with Adjustable Haptics
Christian Carsten, Chat Wacharamanathan, Jon Borchers

**AUL** A Load of Cobbler’s Children: Beyond the Model Designing Processor
Gilbert Cockton

**253 Course C17 – Unit 1/2**

**CHG** Interactive Walking in Virtual Environments
Frank Steinicke, Yon Visell, Jennifer Campos, Anatole Lécuyer

**Labor Day** (May 1st) is a major French holiday. Many stores and restaurants are closed. Check chi2013.acm.org for more information.

“Muguet” (Lily of the Valley) is a lucky charm and is sold everywhere on the streets on May 1.
BORDEAUX Papers: Mobile Interaction

A Study on Icon Arrangement by Smartphone Users
Matthias Böhmer, Antonio Krüger

SeeSay and HearSay CAPTCHAs for Mobile Interaction
Sajad Shirali-Shahreza, Gerald Penn, Ravin Balakrishnan, Yashar Ganjali

Phonepiroception: Enabling Mobile Phones to Infer Where They Are Kept
JASON W Wiese, T. Scott Saponas, A.J. Bernheim Brush

Facilitating Parallel Web Browsing through Multiple-Page View
Wenchang Xu, Chun Yu, Songmin Zhao, Jie Liu, Yuanchun Shv

Swipe Vs. Scroll: Web Page Switching on Mobile Browsers
Andrew Warr, Ed H Chi

342A Papers: Performing Interaction

Flights in my Hands: Coherence Concerns in Designing Strip TIC, a Tangible Space for Air Traffic Controllers
Catherine Letondal, Christophe Hurter, Rémi Lesbordes, Jean-Luc Viot, Stéphane Conrad

PixelTone: A Multimodal Interface for Image Editing
Gerald Laput, Mira Doncheva, Gregg Wilensky, Walter Chang, Aseem Agarwala, Jason Linder, Eytan Adar

The Space Between the Notes: Adding Expressive Pitch Control to the Piano Keyboard
Andrew P McPherson, Adrian Gierakowski, Adam M Stark

Reflexive Looper for Solo Musical Improvisation
Francois Pachet, Pierre Rey, Julia Moreira, Mark d’Inverno

8D: Interacting with a Relightable Glasses-Free 3D Display
Matthew Hirsch, Shahram Izadi, Henry Holtzman, Ramesh Raskar

352 Papers: Touch Interaction

How Fast is Fast Enough? A Study of the Effects of Latency in Direct-Touch Pointing Tasks
Ricardo Jota, Albert Ng, Paul H Dietz, Daniel J Wigdor

TouchViz: A Case Study Comparing Two Interfaces for Data Analytics on Tablets
Steven M. Drucker, Danyel Fisher, Ramik Sadana, Jessica Herron, m.c. schraefel

W3Touch: Metrics-based Web Page Adaptation for Touch
Michael Nebeling, Maximilian Speicher, Marisa Norrie

Augmented Letters: Mnemonic Gesture-Based Shortcuts
Quentin Roy, Sylvain Malacria, Yves Guiard, Eric Lecolinet, James Eagan
251 Special Session
CHAIR: WENDY MACKAY

Interacting with CHI
Learn about the CHI 2013 Mobile App, Interactive Schedule, COBI author sourcing and Social Media. Ask questions, give feedback and learn how you can contribute next year.

252A Special Session
CHAIRS: SHAOYEN BARDZELL, CELINE LATULIPE

Student Research Competition
The CHI 2013 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.

252B Case Studies: Novel Settings
CHAIR: ELIZABETH DYKSTRA-ERICKSON

Counter Entropy: Visualizing Power Consumption in an Energy+ House
Florian Heller, Konstantinos Tsoleridis, Jan O’Borchers

Biometric Interaction – a Case Study of Visual Feedback and Privacy Issues in New Face Recognition Solutions
Per Kwambinik, Karin Fahliquist, Thomas Mejtoft

A Software Development Methodology for Sustainable ICTD Solutions
Joerg Doerflinger, Andy Dearden, Tom Gross

What Should I Read Next? Awareness of Relevant Publications Through a Community of Practice
Gonzalo Pano, Joris Klerkx, Erik Duval

253 Course C17 – Unit 2/2
CHAIR: ANNE BARTLETT

Interactive Walking in Virtual Environments
Frank Steinicke, Tanes Athanasopoulos, Heike Schillinger, Marleen Huhndorf, Istvan Foldes, Jochen Kastens, Thomas Gross

241 Panel
CHAIR: ANDREA BUNT

Digital Arts: Did You Feel That?
Ernest Edmonds, Steve Benford, Zafer Bilda, Jill Fontauzzascalff, Roger Malina, Hugues Vinet

242A Papers: Passwords and Errors
CHAIR: IAN OAKLEY

My Profile Is My Password, Verify Me! The Privacy/Convenience Tradeoff of Facebook Connect
Serge Egelman

Does My Password Go up to Eleven? The Impact of Password Meters on Password Selection
Serge Egelman, Andrea Sotirokoulas, Ildar Irevich Mushakhov, Konstantin Beznosov, Cornado Herley

Back-of-Device Authentication on Smartphones
Alexander De Luca, Emanuél von Zeeschitz, Ngo Duc Hung Nguyen, Max Emanool Mauer, Elsa Rubegni, Marcello Paolo Scapioni, Marc Langheinrich

Using Fake Cursors to Secure On-Screen Password Entry
Alexander De Luca, Emanuél von Zeeschitz, Laurent Pichler, Heinrich Hussmann

Using Redundancy to Detect Human Error
Sarah Wiseman, Anna L. Cox, Duncan P. Brumby, Sandy J. Gould, Sarah O’Carroll

243 Course C16 - Unit 2/2
CHAIR: ANDREA BUNT

The Past 100 Years of the Future: CHI/HCI/UX in Sci-Fi Movies and Television
Aaron Marcus
BORDEAUX  Papers: Social Tagging

SNM  CHAIR: MARGOT BRERETON
All the News that’s Fit to Read: A Study of Social Annotations for News Reading
Chinmay Eishan Kulkarni, Ed H Chi

PEF  "Shared Joy is Double Joy": The Social Practices of User Networks Within Group Shopping Sites
Serena Hillman, Carman Neustaedter, Carolyn Pang, Erick Oduber

PMN  I Need to Try This*: A Statistical Overview of Pinterest
Eric Gilbert, Soideeh Bakhshi, Shuo Chang, Loren Terveen

TNG  Beyond Recommendations: Local Review Websites and Their Impact
Barry Brown

342A Papers: Food and Health

SMZ  CHAIR: KATHERINE ISBISTER

PSF  I am What I Eat: Identity & Critical Thinking in an Online Health Forum for Kids
Andrea Grimes Parker, Ian McElenan, Catherine Grever, Victoria Ayo, WonTaek Chung, Veda Johnson, Elizabeth D Mynatt

PNE  Domestic Food and Sustainable Design: A Study of University Student Cooking and its Impacts
Adrian K Clear, Mike Hazas, Janine Morley, Adrian Friday, Oliver Bates

PAS  Food Practices as Situated Action: Exploring and designing for everyday food practices with households
Rob Comber, Jettee Hoonhaut, Aart T van Halteren, Paula Mynihan, Patrick Oliver

PHD  Tailoring Persuasive Health Games to Gamer Type
Rita Oyi, Regan L. Mandryk, Julia Vassileva, Kathrin Maria Gerling

343 Course C18 — Unit 2/3

CCZ  Designing with and for Children in the 21st Century: Techniques and Practices
Allison Drun, Jerry Falls, Mona Leigh Guha, Greg Walsh

HAVANE  Papers: Mobile Applications

SKO  CHAIR: SUNNY CONSOLVO

FTW  When the Price Is Right: Enabling Time-Dependent Pricing of Broadband Data
Sournya Sen, Carlee Joe-Wong, Sangho Ho, Jasika Bawa, Mung Chiang

PEI  Mobile Advertising: Evaluating the Effects of Animation, User and Content Relevance
Marco de Sa, Vidhya Navulapakkam, Elizabeth F Churchill

TTZ  Enriching Archaeological Parks with Contextual Sounds and Mobile Technology
Carmelo Arditu, Maria Francesca Costabile, Antonella De Angelis, Rosa Lanziotti

PLD  Validating a Mobile Phone Application for the Everyday, Unobtrusive, Objective Measurement of Sleep
Shaun W Lawson, Sue Jamison-Powell, Andrew Thomas Garbett, Conor Linehan, Erica Kucharczyk, Sanne Verbaan, Duncan A Rowland, Kevin Morgan

351 Papers: Crime and Conflicts

SNV  CHAIR: JEFFREY BARDOZELL

PKJ  Protecting the Home: Exploring the Roles of Technology and Citizen Activism from a Burglar’s Perspective
Sheena Lewis Erete

PRK  Digital Portraits: Photo-sharing After Domestic Violence
Rachel Elizabeth Clarke, Peter C Wright, Madeline Balaam, John McCarthy

PBM  Envisioning Across Generations: A Multi-lifespan Information System for International Justice in Rwanda
Daisy Yoo, Milli Lake, Tord Nilsen, Molly E Utter, Robert Alsdorf, Theanose Bizman, Lisa P Nathan, Mark Ring, Elizabeth J Utter, Robert F. Utter, Batya Friedman

PCN  Digital Apartheid: An Ethnographic Account of Racialised HCI in Cape Town Hip-Hop
Gary W Pritchard, John Vines

352 Papers: Haptics

SHF  CHAIR: KOJI YATANI

PAD  Gesture Output: Eyes-Free Output Using a Force Feedback Touch Surface
Anne Roudaut, Andreas Rau, Christoph Sterz, Max Plaeth, Pedro Lopes, Patrick Baudisch

POX  Reality Jockey: Lifting the Barrier between Alternate Realities through Audio and Haptic Feedback
Kevin Fan, Hideyuki Izumi, Yuta Sugitani, Koosha Minamizawa, Sohei Wakisaka, Masahiko Inami, Naotaka Fuji, Susumu Tachi

PBO  Real-Time Perception-Level Translation from Audio Signals to Vibrotactile Effects
Jaebong Lee, Seungmoon Choi

NAK  Muscle-Propelled Force Feedback: Bringing Force Feedback to Mobile Devices
Pedro A. Lopes, Patrick M. Baudisch

NYY  uTouch: Sensing Touch Gestures on Unmodified LCDs
Ke-Yu Chen, Gabe A Carlin, Shihant Gupta, Shwetak N Patel
Enter these 3-letter codes in the search box of the CHI 2013 Mobile App to go directly to the corresponding session or presentation.

**241 Panel**
- **LYV** Exploring the Representation of Women Perspectives in Technologies
  - Susan M. Dray, Andrea J. Peer, Anke Marie Brock, Anicia N. Peters, Shaowen Bardzell, Margaret M. Burnett, Elizabeth F. Churchill, Erika Shehan Poole

**242A Papers: Mental Health**
- **STM** CHAIR: GAVIN DOHERTY
- **PAQ** A Design-led Inquiry into Personhood in Dementia
  - Jayne Wallace, Peter C. Wright, John McCarthy, David Philip Green, James Thomas, Patrick Oliver
- **PT1** Designing Mobile Health Technology for Bipolar Disorder: A Field Trial of the MONARCA System
  - Jakob E. Bardram, Mads Frost, Károly Szántó, Maria Faurlin-Jepsen, Maj Vinberg, Lars Vedel Kessing
- **PHR** Understanding the Conflicting Demands of Family Caregivers Caring for Depressed Family Members
  - Naomi Tamashita, Hideaki Kizuoka, Keiji Hiruta, Takashi Kudo
- **PSI** Design to Promote Mindfulness Practice and Sense of Self for Vulnerable Women in Secure Hospital Services
  - Anja Thieme, Jayne Wallace, Paula Johnson, John McCarthy, Síon E. Lindley, Peter C. Wright, Patrick Oliver, Thomas D. Meyer

**243 Course C19 – Unit 1/2**
- **CCG** Empirical Research Methods for Human-Computer Interaction
  - Scott MacKenzie, Steven J. Castelucci

**251 Special Session**
- **CHAIRS:** THECLA SCHIPHORST, CAROLA ZWICK
- **SDC** Student Design Competition
  - The CHI 2013 Student Design Competition (SDC) challenges students to design an object, interface, system, or service related to collaborative crowd experiences.

**252A Course C21 – Unit 1/2**
- **CHAIR:** GAVIN DOHERTY
- **PAQ** A Design-led Inquiry into Personhood in Dementia
  - Jayne Wallace, Peter C. Wright, John McCarthy, David Philip Green, James Thomas, Patrick Oliver
- **PT1** Designing Mobile Health Technology for Bipolar Disorder: A Field Trial of the MONARCA System
  - Jakob E. Bardram, Mads Frost, Károly Szántó, Maria Faurlin-Jepsen, Maj Vinberg, Lars Vedel Kessing
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  - Anja Thieme, Jayne Wallace, Paula Johnson, John McCarthy, Síon E. Lindley, Peter C. Wright, Patrick Oliver, Thomas D. Meyer

**252B alt.chi: Ethics**
- **SAH** CHAIR: LILLY IRANI
- **ABC** On Legitimacy: Designer as Minor Scientist
  - Aysar Ghassan, Mark A. Bythe
- **AFC** Ethical Issues and Guidelines when Conducting HCI Studies with Animals
  - Helk K. Väätäjälä, Ernill K. Pessen
- **AYQ** “Un-Googling” Publications: The Ethics and Problems of Anonymization
  - Irena A. Shkolovsky, Janet Vertesi
- **ATU** STALLTALK: Graffiti, Toilets, and Anonymous Location based Micro Blogging
  - Jonathan Friedman, Michael Horn
- **ABX** Critical InfoVis: Exploring the Politics of Visualization
  - Marian Dörk, Patrick Feng, Christopher M. Collins, Sheelagh Carpendale
- **ANS** CHI and the Future Robot Enslavement of Humankind: A Retrospective
  - Ben Kirman, Conor Linehan, Shaun Lawson, Dan O’Hara

**253 Course C20 – Unit 1/2**
- **CMU** Designing Augmented Reality Experiences
  - Mark Billinghurst, Henry Been-Lirn Duh
BORDEAUX  Special Session

CHAIR: DENNIS WIXON

LPA  Lifetime Practice Award: Jakob Nielsen

The 2013 SIGCHI Lifetime Practice Award is presented to Jakob Nielsen, founder of the Nielsen Norman Group, for outstanding contributions to the practice and understanding of human-computer interaction.

342A Papers: Consent and Privacy

SPQ  CHAIR: SAMEER PATIL

PGC  Why Do People Seek Anonymity on the Internet? Informing Policy and Design
Russu Kang, Stephanie Brown, Sara Kiesler

PED  Preference-based Location Sharing: Are More Privacy Options Really Better?
Bart P Kriekenbush, Alfred Katsa, Hongxia Jin

PGC  The Secret Life of a Persona: When the Personal Becomes Private
Elina Eriksson, Henrik Artman, Anna Swartling

PRM  Consent for All: Revealing the Hidden Complexity of Terms and Conditions
Ewa A Lugge, Stuart Morlan, Tom Rudden

343 Course C18 – Unit 3/3

CKZ  Designing with and for Children in the 21st Century: Techniques and Practices
Allison Druin, Jerry Fails, Mona Leigh Guha, Greg Watch

361 Special Interest Group

GHQ  Automotive User Interface Research Moves into Fast Lane
Susanne Cj Roll, Andrew L Kun, Peter Frählich, James Foley

362 Special Interest Group

GCE  SIG NIME: Music, Technology, and Human-Computer Interaction
Frederic Bevilacqua, Sidney Fels, Alexander R. Jensenius, Michael J. Lyons, Norbert Schnell, Atau Tanaka

351 Papers: Sustainability

SMS  CHAIR: ELAINE HUANG

PHZ  Beyond Being Green: Simple Living Families and ICT
Maria Håkansson, Phoebe Sengers

PDR  The Power of Play: Design Lessons for Increasing the Lifespan of Outdated Computers
Derek Lomas, Kirshan Patel, Dixie Chong, Meera Lukshman, Matthew Kan, Anuj Kumar, Jodi L Forlizzi

PKD  inAir: A Longitudinal study of Indoor Air Quality Measurements and Visualizations
Sunyoung Kim, Eric Paulus, Jennifer Markoff

PCD  “I want to imagine how that place looks”: Designing Technologies to Support Connectivity Between Africans Living Abroad and Home
Susan R Wyche, Marhini Chetty

352 Papers: Mobile Text Entry

SIX  CHAIR: CAROLINE APPERT

PEL  Improving Two-Thumb Text Entry on Touchscreen Devices
Antti Oulasvirta, Anna Reichel, Wenbin Li, Yan Zhang, Myroslav Bachynsky, Keith Vertanen, Per Ola Kristenson

PEG  Making Touchscreen Keyboards Adaptive to Keys, Hand Postures, and Individuals - A Hierarchical Spatial Backoff Model Approach
Ying Yin, Tom Yu Ouyang, Kurt Partridge, Shumin Zhai

PCD  Gestures and Widgets: Performance in Text Editing on Multi-Touch Capable Mobile Devices
Vittorio Fuccella, Peki M Isokoski, Benoit Martin

NPV  ZoomBoard: A Diminutive QWERTY Soft Keyboard Using Iterative Zooming for Ultra-Small Devices
Stephen Oney, Chris Harrison, Amy Organ, Jason Wiese

15:20-16:00 Posters Spotlight 2

Augmented Reality
Gesture
Tabletops & Displays
Ubiquitous Computing
Web & E-commerce

Emotions
Inputs
Tactile
Visualization

Game/Play
PDA, & Mobile
UI Design
Sustainability

List on page 60

HALL MAILLOT

WEDNESDAY 14:00-15:20
**WEDNESDAY 16:00-17:20**

### BLEU Papers: Design for Development

**Chair:** John Thomas

- **Job Opportunities through Entertainment: Virally Spread Speech-Based Services for Low-Literate Users**
  Agha Ali Raza, Farhan Ul Haq, Zain Tang, Mansoor Pervaiz, Samia Razaz, Umar Saif Roni Rosenfeld

- **Some Evidence for the Impact of Limited Education on Hierarchical User Interface Navigation**
  Indrani Medhi, Meera Lakshmanan, Kentaro Toyama, Edward Cutrell

### 241 Panel

**Chair:** John Thomas

- **Design-Driven Narrative: Using Stories to Prototype and Build Immersive Design Worlds**
  Eric Spaulding, Haakon Faste

- **Materials, Materiality, and Media**
  Verena Fuchsberger, Martin Murer, Manfred Tscheligi

- **Infrastructures and Vocations: Field, Calling, and Computation in Ecology**
  Steven J. Jackson, Sarah Barbrow

### 242 A8 Papers: Narrative and Materiality

- **Chair:** Volkanar Pipek

  - **Design-Driven Narrative: Using Stories to Prototype and Build Immersive Design Worlds**
    Eric Spaulding, Haakon Faste

  - **Materials, Materiality, and Media**
    Verena Fuchsberger, Martin Murer, Manfred Tscheligi

- **Infrastructures and Vocations: Field, Calling, and Computation in Ecology**
  Steven J. Jackson, Sarah Barbrow

### 243 Course C19 – Unit 2/2

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

### 251 Special Session

**Chair:** S. Cooper, H. Desurvire, M. Seif El-Nasr

- **Student Game Competition**

  The CHI 2013 Student Game Competition (SGC) challenges students to design games in three categories: Games for a Purpose, Innovative Interface or Innovative Game Design.

### 252A Course C21 – Unit 2/2

**Chair:** Eric Paulos

- **A Biological Imperative for Interaction Design**
  Amanda J. Parkes, Connor Dickie

### 252B alt.chi: Nature and Nurture

**Chair:** S. Cooper, H. Desurvire, M. Seif El-Nasr

- **Animal-Computer Interaction (ACI): Changing Perspective on HCI, Participation and Sustainability**
  Clara Mancini

- **Morphing Agency: Deconstruction of an Agent with Transformative Agential Triggers**
  Hirotoha Osawa, Michita Imai

- **AniThings: Animism and Heterogeneous Multiplicity**
  Philip A. van Allen, Joshua McVeigh-Schultz, Brooklyn Brown, Hye Mi Kim, Daniel Lara

- **Smart Pose: Mobile Posture-aware System for Lowering Physical Health Risk of Smartphone Users**
  Hosub Lee, Young Sung Choi, Sunjoo Lee, Eunsoo Shim

### Course C20 – Unit 2/2

- **Designing Augmented Reality Experiences**
  Mark Billinghurst, Henry Been-Lirn Duh

17:30-19:00 **Job Fair**

**Hall Maillot**
BORDEAUX Papers: Design for Children

SPK CHAIR: MICHAEL MULLER

TQS Supporting Personal Narrative for Children with Complex Communication Needs
Rolf Block, Annalu Woller, Ross Turner, Etud Reiter

PNR Design Research by Proxy; using Children as Researchers to gain Contextual Knowledge about User Experience.
Fenne van Doorn, Peter Jon Stappers, Mathieu Gelen

PACIT PD: A Framework for Analysis and Creation of Intergenerational Techniques for Participatory Design
Greg Walsh, Elizabeth Foss, Jason Yip, Allison Drum

NLT Three Tensions in Participatory Design for Inclusion
Harold Holene, Jo Herstad

NET Interview Approaches to Researching Embodiment
Sara Price, Carey Jewitt

Papers: Evaluation Methods 3

SWE CHAIR: GLORIA MARK

PCE Using Behavioral Data to Identify Interviewer Fabrication in Surveys
Benjamin Brambaum, Goeta Goneria, Abraham D Flaxman, Brian DeRena, Anna R Karlin

PMH Footprint Tracker: Supporting Diary Studies with Lifelogging
Ruben Gouveia, Evangelos Karapanos

PGT Investigating Self-Reporting Behavior In Long-Term Studies
Andreas Molter, Matthias Kranz, Barbara Schmid, Luis Rosalter, Stefan Dewald

NHL The Effect of Global Instructions on Think-aloud Testing
Sharon McDonald, Helen Petrie

NSU Refining Social Movement Trajectories
Adam Fouse, Nadir Weibel, Christine Johnson, James D. Hallan

HAVANE Papers: Visual Perception

SFK CHAIR: PAUL MARSHALL

PND Influencing Visual Judgment through Affective Priming
Lane Harrison, Drew Skau, Steven Franconeri, Aidong Lu, Remco Chang

PAT Play it by Ear: A Case for Serendipitous Discovery of Places with Musicons
Anupriya Ankolekar, Thomas Sandholm, Louis Yu

PCT Waves: Exploring Idiographic Design for Live Performance
Jonathan Hook, John McCarthy, Peter Wright, Patrick Oliver

PFT Effects of the Display Angle in Museums on User’s Cognition, Behavior, and Subjective Responses
Junko Ichina, Kazuo Iida, Ayaka Hara, Tetsuya Ueda

Papers: Searching and Finding

SNG CHAIR: LEONG-HWEE TEO

PMF Costs and Benefits of Structured Information Foraging
Aniket Kittur, Andrew M Peters, Abodhani Driye, Trupti Telang, Michael R Bove

PAQ Supporting Orientation during Search Result Examination
Henry Feld, Ryan W White, Xin Fu

PEC TraiMap: Facilitating Information Seeking in a Multi-Scale Digital Map via Implicit Bookmarking
Jian Zhao, Daniel J Wigdor, Ravi Balakrishnan

NMQ Leading People to Longer Queries
Elena Algoave, Gero Golovchinsky, Perdita Warwick

NQG Pirates of the Search Results Page
Kathy K Baxter, Lori Wu Malachy, Jeremy Lubin

Papers: Mobile Gestures

SFG CHAIR: STEPHANE HUOT

TYG “Spindex” (Speech Index) Enhances Menus on Touch Screen Devices with Tapping, Wheeling, and Flicking
Myoung Hoon Jeon, Bruce N. Walker, Abhishek Srivastava

FNR Bezel-Tap Gestures: Quick Activation of Commands from Sleep Mode on Tablets
Marcos Semana, Eric Lecolinet, Yes Guizar

FGR iGrasp: Grasp-based Adaptive Keyboard for Mobile Devices
Lung-Pan Cheng, Hsiang-Sheng Liang, Che-Yang Wu, Mike Y. Chen

FEX Multi-Touch Rotation Gestures: Performance and Ergonomics
Eve E Hoggan, John H Williamson, Antti Oulasvirta, Miguel A. Nacenta, Per Ola Kristensson, Aru Lehto

LNX iRotateGrasp: Automatic Screen Rotation based on Grasp of Mobile Devices
Lung-Pan Cheng, Meng Han Lee, Che-Yang Wu, Fang-I Hsiao, Yen-Ting Liu, Hsiang-Sheng Liang, Yi-Cheng Chiu, Ming-Sui Lee, Mike Y. Chen

351 Special Interest Group

CHI 2013 Human Work Interaction Design (HWID): Past History and Future Challenges
Torkil Clemmensen, Pedro F Campos, Dinesh S Katne, Jose Abdelnour Noce, Amanda Guera Lopes, Rickie Ongreen, Shailey Minocha
9:00-10:20 Special Joint CHI-ECRC Plenary

**Keynote Speaker:** Vint Cerf, Google & ACM President

**Conversations with a Computer**

10:20-11:00 Interactivity

List on page 65

HALL MAILLOT

**10:20-11:00 Posters Spotlight 2**

Augmented Reality

Gesture

Tabletops & Displays

Ubiquitous Computing

Web & E-commerce

HALL MAILLOT

Emotions

Inputs

Tactile

Visualization

Game/Play

PDA & Mobile

UI Design

Sustainability

List on page 60

**BLEU Papers: Design for Developers**

**SHT**

CHAIR: STEVEN DRUCKER

The Whats and Hows of Programmers’ Foraging Diets

David J. Piorowski, Scott D. Fleming, Irwin Kvarn, Margaret M. Burnett, Christopher Scaffidi, Rachel R. E. Bekkum, Joshua Jordahl

**PAU**

How Tools in IDEs Shape Developers’ Navigation Behavior

Jan-Peter Krämer, Thorsten Karrer, Joachim Kurz, Moritz Witternichen, Jan Borchers

**PLE**

Webzeitgeist: Design Mining the Web

Ranitha Kumar, Arvind Satyanarayan, Cesar A. Torres, Maxine Lim, Salman A. Ahmad, Scott R. Klemmer, Jerry O. Talton

**PKX**

Modeling How People Extract Color Themes from Images

Sharon Dene Lin, Pat Hanrahan

**PNU**

Reducing Disruption from Subtle Information Delivery during a Conversation: Mode and Bandwidth Investigation

Eyal Ofek, Shamsi T. Iqbal, Karin Strauss

**NAB**

Adaptive Automation and Cue Invocation: The Effect of Cue Timing on Operator Error

Daniel I. Gartenberg, Leonard Breslow, Joo Park, Malcolm McCurry, Greg Trofim

**NDN**

Distraction Beyond the Driver: Predicting the Effects of In-Vehicle Interaction on Surrounding Traffic

Dario D. Salvucci

**SEE**

CHAIR: DANIEL WIGDOR

Testing the Robustness and Performance of Spatially Consistent Interfaces

Joey Scott, Andy Cockburn, Carl Gutwin, Sylvain Mailloch

**PGJ**

Canyon: Providing Location Awareness of Multiple Moving Objects in a Detail View on Large Displays

Alexandra Ito, Y.-L. Betty Chang, Michael Haller, Mark Hancock, Stacey D. Scott

**PMD**

Designing Graphical Menus for Novices and Experts: Connecting Design Characteristics with Design Goals

Krystian Sump

**NRB**

Binocular Cursor: Enabling Selection on Transparent Displays Troubled by Binocular Parallax

Joan Hyb Lee, Seok-Hyung Bae

**NTQ**

Studying Spatial Memory and Map Navigation Performance on Projector Phones with Peephole Interaction

Borja Kaufmann, David Ahlström

12:20-14:00 Lunch Break

Restaurants, bakeries & supermarkets available nearby

**242A Papers: Perception and Awareness**

**SHT**

CHAIR: JOANNA MCGRENERE

Modeling How People Extract Color Themes from Images

Sharon Dene Lin, Pat Hanrahan

Reducing Disruption from Subtle Information Delivery during a Conversation: Mode and Bandwidth Investigation

Eyal Ofek, Shamsi T. Iqbal, Karin Strauss

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Enter these 3-letter codes in the search box of the CHI 2013 Mobile App to go directly to the corresponding session or presentation
251 Papers: Autism

SSY CHAIR: BILGE MUTLU

PKV Why Do They Still Use Paper? Understanding Data Collection and Use in Autism Education
Gabriela Marcu, Kevin Tassini, Quintin Carlson, Julian Goodwyn, Gabrielle Rivkin, Kevin J. Schoefer, Anind K. Dey, Sara Kiesler

PS2 TOBY: Early Intervention in Autism through Technology
Sveeta Venkatesh, Stewart Greenhill, Dinh Q Phung, Thi Duong, Brett Adams

PSH Evaluation of Tablet Apps to Encourage Social Interaction in Children with Autism Spectrum Disorders
Juan Pablo Hourcade, Stacy R. Williams, Elfen A. Miller, Kelsey E. Huebner, Lucas J. Liang

PGL Investigating the Use of Circles in Social Networks to Support Independence of Individuals with Autism
Hwajung Hong, Sveeta Venkatesh, Jennifer G. Kim, Gregory D. Abowd, Rosa I. Arriaga

252 Course C24 – Unit 1/2

CON Storyboarding for Designers and Design Researchers
Pieter Jan Stappers, Gert Pasman

253 Course

CLX HTML5 Game Development
Jim Parker

BORDEAUX Papers: Information Visualization

SPX CHAIR: PIERRE DRAGICEVIC

PSS Interactive Horizon Graphs: Improving the Compact Visualization of Multiple Time Series
Charles Perin, Frédéric Vernier, Jean-Daniel Fekete

PDB Patina: Dynamic Heatmaps for Visualizing Application Usage
Justin Matejkou, Tovi Grossman, George Fitzmaurice

PSE Evaluation of Alternative Glyph Designs for Time Series Data in a Small Multiple Setting
Johannes Fuchs, Fabian Fischer, Florian Mansmann, Enrico Bertini, Petra Isenberg

361 Course C25 – Unit 1/2

CDQ Designing Search Usability
Tony Russell-Rose

362 Special Interest Group

GKU Science vs. Science: the Complexities of Interdisciplinary Research
Clare J. Hooper, David Millard, Jill Fantauzzacoffin, Joseph "Jofish" Kaye

HAVANE Papers: Social Media Practices

SBU CHAIR: SEAN MUNSON

PJJ Limiting, Leaving, and (re)Lapsing: An Exploration of Facebook Non-Use Practices and Experiences
Eric P. S. Baumer, Phil Adams, Vera D. Khovanskaya, Tony C. Liao, Madeline E. Smith, Victoria Schwanda Sosik, Kaiton Williams

PEN Predicting Postpartum Changes in Emotion and Behavior via Social Media
Munmun De Choudhury, Scott Counts, Eric Horvitz

AQQ “I read my Twitter the next morning and was astonished” A Conversational Perspective on Twitter Regrets
Manya Sleeper, Justin Cranshaw, Patrick Gage Kelley, Blaise Ur, Alessandro Acquisti, Lorrie Faith Cranor, Norman Sadeh

ADE Understanding Motivations for Facebook Use: Usage Metrics, Network Structure, and Privacy
Tasos Spiliotopoulos, Ian Oakley

12:30-14:00 Videos
List on page 55
## 241 Panel

**LUM**
The Future of HCI Publishing in Journals and Books  
Joseph ‘Jofish’ Kaye, Beverley Ford, Dianne Murray, Doug Sery, Peter Thomas, Steve Whitaker, Shumin Zhai

## 242A Papers: Multi-Device Interaction

**SFD**
**CHAIR:** KASPER HORNBEK  
Designing a Multi-Slate Reading Environment to Support Active Reading Activities  
Nicholas Y Chen, François V Guimbretière, Abigail J Sellen

**TEX**
Personal Clipboards for Individual Copy-and-Paste on Shared Multi-User Surfaces  
Dominik Schmidt, Corina Sas, Hans W Gellersen

**PBR**
Collaborative Sensemaking on a Digital Tabletop and Personal Tablets: Prioritization, Comparisons, and Tableaux  
James R Wallace, Stacey D. Scott, Carolyn G. MacGregor

**PAN**
A Comparative Evaluation of Touch-Based Methods to Bind Mobile Devices for Collaborative Interactions  
Tero Jokela, Andrés Lucero

## 242B Papers

**SPH**
**CHAIR:** FLORIAN MUELLER  
The Design Space of Body Games: Technological, Physical, and Social Design  
Elena Márquez Segura, Annika Waern, Carolina Johansson, Jin Moen

**PJH**
Seeing Movement Qualities  
Helena M. Mentis, Carolina Johansson

**PET**
**CHAIR:** KASPER HORNBEK  
ExoBuilding: Physiologically Driven Adaptive Architecture  
Holger M Schnädelbach, Ainoje Irune, David S Kirk, Kevin Glover, Patrick R Brunet

**PTT**
CrashAlert: Enhancing Peripheral Alertness for Eyes-Busy Mobile Interaction while Walking  
Juan David Hincapié-Ramos, Pourang Irani

**NKU**
Three Perspectives on Behavior Change for Serious Games  
Joshua G Tanenbaum, Alissa N Antle, John Robinson

## 243 Course C22 – Unit 2/2

**CBU**
**CHAIR:** JEFF A JOHNSON  
Designing What to Design: A Task-Focused Conceptual Model

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All ECRC sessions are open to CHI attendees on Thursday.

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Enter these 3-letter codes in the search box of the CHI 2013 Mobile App to go directly to the corresponding session or presentation.
251 Papers: Understanding Privacy

- **SPM** Chair: Serge Egelman
  - Privacy as Part of the App Decision-Making Process
    Patrick Gage Kelley, Lorrie Faith Cranor, Norman Sadeh
  - "Everybody Knows What You’re Doing": A Critical Design Approach to Personal Informatics
    Vera D Khovanskaya, Eric: P.S. Baumer, Dan Cosley, Stephen A Voida, Geri Gay

- **PMK**
  - Shifting Dynamics or Breaking Sacred Traditions? The Role of Technology in Twelve-Step Fellowships
    Svetlana Yanash
  - Taking Data Exposure into Account: How Does It Affect the Choice of Sign-in Accounts?
    Shohar Ronen, Oriana Riva, Manitoz Johnson, Donald Thompson
  - Understanding the Privacy-Personalization Dilemma for Web Search: A User Perspective
    Sourabhi Parijwani, Noheeth Shrivastava, Sourabhi Shukla, Sharad Jaiswal

252 Course C24 – Unit 2/2

- **CQN**
  - Storyboarding for Designers and Design Researchers
    Pieter Jan Stappers, Gert Paskon

252B Case studies: In the Wild

- **SBG** Chair: Jonathan Arnowitz
  - Automotive HMI Test Package: An Exploitable Approach to Study In-Car HMIs
    David Wilfinger, Alexander Meschtscherjakov, Nicole Perterer, Martin Murer, Marco Rügler, Manfred Tscheligi

- **YPO**
  - The Democratization of Mission Control
    Jay Trimble, Tom Dayton, Alan Crocker

- **YPP**
  - We’ll Take It From Here: Letting the Users Take Charge of the Evaluation and Why That Turned Out Well
    Cosmin Munteanu, Helene Fourmer, Jean-François Lapointe, Bruno Emond, Ima Kondratova

- **YPB**
  - Multi-modal Location-Aware System for Paratrooper Team Coordination
    Danielle N Cummings, Manoj Prasad, George R Lucchese, Christopher L Aikey, Tracy A Hammond

253 Course

- **CLQ** HTML5 Game Development
  - Jim Parker

BORDEAUX Papers: Design Strategies

- **SEN** Chair: Jodi Forlizzi
  - Slow Design for Meaningful Interactions
    Barbara Grosse-Hering, Jan Mason, Dzmitry Aliakseyeu, Conny A. Bakker, Pieter M.A. Desmet
  - All You Need is Love: Current Strategies of Mediating Intimate Relationships through Technology
    Marc Hossenzahl, Stephanie Heidecker, Kai Ecksold, Sarah Dieffenbach, Uwe Hillmann

- **PMK**
  - Making Design Probes Work
    Jayne Wallace, John McCarthy, Peter C. Wright, Patrick Oliver

- **PLG**
  - Indoor Weather Stations: Investigating a Ludic Approach to Environmental HCI Through Batch Prototyping
    William W Gover, John Bowers, Kirsten Boehmer, Andy Boucher, David W T Corrier, Mark Hauenstein, Nadine Jarvis, Sarah Pennington

361 Course C25 – Unit 2/2

- **CDQ** Designing Search Usability
  - Tony Russell-Rose

362 Special Interest Group

- **GGN**
  - Visions and Visioning in CHI
    Aaron J Quigley, Alan J Dix, Wendy E. Mackay, Hiroshi Ishii, Jürgen Steinle

HAVANE Papers: Tensions in Social Media

- **CCG** Chair: Valentina Nisi
  - Reveal-it!: The Impact of a Social Visualization Projection on Public Awareness and Discourse
    Nina Valkanova, Sergi Jordà, Martin Tomitsch, Andrew Vande Moere

- **PFR**
  - Social Media and the Police—Tweeter Practices of British Police Forces during the August 2011 Riots
    Sebastian Denef, Petra S. Boyer, Nica A. Kapp

- **PFM**
  - Whoosly: Facilitating Information Seeking For Hyperlocal Communities Using Social Media
    Yuheng Hu, Shelly D. Farnham, Andrés Monroy-Hernández

- **TJF**
  - Co-Narrating a Conflict: An Interactive Tabletop to Facilitate Attitudinal Shifts
    Massimo Zancanaro, Olivera Stock, Zvi Eissakvits, Chaya Koren, Patrice (Tamar) L Weiss

16:00-17:20 Closing Plenary

- **KCP** Keynote Speaker: Bruno Latour, Sciences Po, Paris
  - From Aggregation to Navigation: A Few Challenges for Social Theory
    Grand Amphitheater

CHI2013
WORKSHOPS

CHI 2013 workshops take place at Université Paris-Dauphine on Saturday April 27 and Sunday April 28. Workshops are accessible only to pre-registered attendees.

W01 RepliCHI - The Workshop - M. Wilson, R. Resnick, D. Coyle, E. Chi

W02 Geographic Human-Computer Interaction - B. Hecht, J. Schöning, M. Hoklai, L. Capra, A. Mashhadi, L. Terveen, M. Kwan


W04 Organic Experiences: (Re)shaping Interactions with Displayable Disforms - J. Alexander, R. Brotran, D. Holman, A. Youkni, R. Vertegaal, J. Kildal, A. Luera, A. Rouault, S. Subramanian

W05 Game Jam - A. Chatham, B. Schouten, C. Toprak, F. Mueller, M. Deen, R. Benhamiap, R. Khat, S. Pijnappel

W06 Personal Informatics in the Wild: Hacking Habits for Health & Happiness - L. Li, J. Freiehlisch, J. Larsen, G. Catherine, E. Ramirez

W07 Designing Social Media for Change - N. Karnal, S. Feis, M. Fergusson, J.Feece, D. Casley, S. Murison

W08 Exploring and Enhancing the User Experience for TV - J. Jain, M. Evans, V. Venayagamoorthy

W09 Interactive City Lighting - D. Alakosyeyu, H. van Essen, A. Lucero, J. Mason, B. Meerbeek, E. den Ouden, A. Wiethoff

W10 Gaze Interaction in the Post-WIMP World - A. Bulling, R. Dochstz, A. Duchowksi, R. Jacob, S. Steinmack, V. Sundstedt

W11 Let’s talk about Failures: Why was the Game for Children not a Success? - C. Moser, M. Tscheligi, B. Zaman, V. Vanden Abeele, L. Geurts, M. Vondereiteere, P. Markopoulos, P. Wyeth, J. Hofstätter

W12 HCI Fieldwork in Healthcare - Creating a Graduate Guidebook - D. Furniss, A. O’Kane, R. Rondell, S. Toneva, H. Mentis, A. Blandford


W14 Changing Perspectives of Time in HCI - L. Lindley, R. Corish, E. Kasanmack Vocor, P. Ferreira, V. Simbelis

W15 Motherhood and HCI - M. Bolaam, J. Robertson, G. Fitzpatrick, R. Say, G. Hayes, M. Mazmanian, B. Parmar


W18 POWERWALL: Int. Workshop on Interactive, Ultra-High-Resolution Displays - C. Rooney, J. Fekete, A. Endert, C. North, K. Hornbæk

W19 Designing For- and With-Vulnerable People - J. Vines, R. McNaney, R. Clarke, S. Lindsay, J. McCarthy, S. Howard, M. Romero, J. Wallace


W21 Designing and Evaluating Sociability in Online Video Games - G. Christou, E. Low, D. Geerts, L. Nackle, P. Zaphiris

W22 Methods of Working with Teenagers in Interaction Design - J. Read, M. Horton, O. Iversen, D. Fitzan, L. Little


W24 POST_SUSTAINABILITY: A CHI Sustainability Community Workshop - C. Preist, D. Busse, L. Nathan, S. Morn


W30 Experiencing Interactivity in Public Spaces (EIPS) - K. Våttänren-Vano-Martila, J. Håkkilo, A. Cassinelli, J. Müller, E. Rukzio, A. Schmidt


W32 Displays Take New Shape: An Agenda for Future Interactive Surfaces - J. Steinhol, H. Benko, A. Cassinelli, H. Ishi, D. Leitvinger, P. Mese, I. Pouyryev


W37 Avec le Temps! Time, Tempo, and Turns in Human-Computer Interaction - J. Thomas, P. Yue, T. Erickson, E. Blevis, C. Letondal, A. Tabard

W38 FAB at CHI: Digital Fabrication Tools, Design, and Community - D. Meers, S. Falmer, B. Hartmann, L. Buechley, M. Gross

W39 Reclaiming Repair: Maintenance and Mending as Methods for Design - D. Roisin, S. Jackson, G. Hertz, L. Houston, N. Rangaswamy

DOCTORAL CONSORTIUM

The CHI 2013 Doctoral Consortium provides an opportunity for Doctoral students to explore and develop their research interests in an interdisciplinary workshop, under the guidance of a panel of distinguished researchers.

The Consortium is held on Saturday and Sunday, 27-28 April 2013, at Université Paris-Dauphine and is open only to the selected participants and the jury. The CHI 2013 attendees can meet the participants at the poster session on Monday afternoon.

Monday
14:00 - 19:30 (Hall Maillot) Poster session
15:20 - 16:00 (Hall Maillot) Meet the poster authors

Faculty
- Marti Hearst (Chair) University of California, Berkeley, USA
- Carl Gutwin University of Saskatchewan, Canada
- Joseph A. Konstan University of Minnesota, USA
- Zhengjie Liu Dalian Maritime University, China
- Gary Olson University of California, Irvine, USA
- Abigail Sellen Microsoft Research, United Kingdom

Participants
- Math Manipulation for Students with Impaired Vision - N. Abla"
- Nurturing Children’s Creative Practice through Micro-Enactments - S. Chu Yew Yee
- Multi-Player Online Video Games for Cognitive Rehabilitation - J. Colman
- SYSSON: A Systematic Procedure to Develop Sonifications - V. Goudarzi
- Influencing the User Experience through Unexpected Events - A. Gross
- Supporting Behavioral Differences and Changes in Personal Task Management - M. Horay
- Materializing Trust as an Understandable Digital Concept - C. Hochleitner
- Digital Arts for End-users: Learning from Traditional Craft Practice - R. Kazi
- Development of a Taxonomy to Improve Human-Robot Interaction Through Multimodal Robot Feedback - N. Minig
- Blackgammon: A Grounded Participatory Design of a Preconception Health Promotion ‘Alternate Reality Game’ for Adolescent Indigenous Australian Women - M. Muscat
- Using Robot-Mediated Communication to Improve Remote Collaboration - I. Rae
- Design and Evaluation of Proxemics-Aware Environments to Support Navigation in Large Information Spaces - R. Rüde
- Exploiting Spatial Memory to Design Efficient Command Interfaces - J. Scarf
- Inferential Methods in Interaction, Usability and User Experience - H. Vazakova
- Automation of VUI to GUI Mapping - A. Wagner

STUDENT RESEARCH COMPETITION

The CHI 2013 Student Research Competition is a forum for undergraduate and graduate students to showcase their research, exchange ideas, and improve their communication skills while competing for prizes at CHI 2013. Sponsored by Microsoft Research, the SRC is a branch of the ACM Student Research Competition. SRC winners are announced at the Closing Plenary.

Monday
16:00 - 17:20 (Room 361) Judging (jury & competitors only)

Tuesday
10:20 - 11:00 (Hall Maillot) Meet the authors at their posters

Wednesday
16:00 - 17:20 (Room 252A) Presentations

Jury
- Geraldine Fitzpatrick Vienna University of Technology, Austria
- Andrea Forte Drexel University, USA
- Youn-kyung Lim KAIST, South Korea
- Janet Read University of Central Lancashire, United Kingdom
- Jens Riegelsberger Google, USA
- Orn Shaer Wellesley College, USA

Finalists
- Adapting Arcade Games for Learning - C. Cai
- What Makes Online Health Information Credible for Older Adults: An Exploratory Study - W. Choi
- Human Cognitive Measurement as a Metric within Usability Studies - M. Crobb
- Seizure Frequency Analysis Mobile Application: The Participatory Design of an Interface with and for Caregivers - H. Ellis
- Couple Collaboration: a Design Research Exploration - L. He
- Foot Position as Indicator of Spatial Interest at Public Displays - B. Huber
- Sweat-Atoms: Crafting Physical Objects with Everyday Exercise - R. Khot
- ToolScape: Enhancing the Learning Experience of How-to Videos - J. Kim
- Re-Imagining Persuasion: Designing for Self-Transcendence - B. Knowles
- Smart Subtitles for Language Learning - G. Kovacs
- Real-Time Conversational Crowd Assistants - W. Losecki
- Theseus: Understanding Asynchronous Code - T. Lieber
- Multiverse: Crowd Algorithms on Existing Interfaces - K. Murray
- Real-time Trip Planning with the Crowd - J. Rafidi
- Accessible Clothing Tags: Designing for Individuals with Visual Impairments - K. Ringland
- Measuring the Effects of Human Likeness and Eeriness on Empathetic Associations with a Primed Categorization task - P. Srinivas
- Visualizing the Performance of Classification Algorithms with Additional Re-Annotated Data - M. Torkildson
- Different Strokes for Different Folks: Individual Stress Response as Manifested in Typed Text - L. Vizer
- Seek It or Let It Come: How Designers Achieve Inspirations - M. Zhao

STUDENT EVENTS
### STUDENT DESIGN COMPETITION

This is the 11th year of the CHI Student Design Competition. This year's conference theme “Changing Perspectives” focuses our design challenge on the importance of perception and knowledge as a goal and value of design.

Collaboration is a social strategy that is evidenced in both the harvesting and seeding of crowdsourced data. Crowdsourcing has appropriated technologies from social networks; there is a rich context of sensory-rich data from biometric, neo-analog, DIY culture and geophysical sensing that expands our ability to enrich or shift our perspectives and our knowledge.

This year's challenge is to design an object, interface, system, or service intended to help us develop and share awareness, understanding or appreciation for our collective and collaborative crowd experience as it relates to our changing perspectives through collaboration.

The SDC winners are announced at the Closing Plenary.

#### Monday afternoon and Tuesday morning

Poster session (Hall Maillot) Meet the authors at the breaks

#### Wednesday

16:00 - 17:20 (Room 251) Presentations

**Jury**

- Steve Benford, University of Nottingham, United Kingdom
- Elisa Giacciardi, Delft University of Technology, Netherlands
- Liam Loke, University of Sydney, Australia
- Carman Neustaedter, Simon Fraser University, Canada

#### Finalists

- **Xpress:** Crowdsourcing Native Speakers to Learn Colloquial Expressions in a Second Language - Y. Chang, S. Choe, M. Lu, S. Ruan, L. Li
- **Comic Circuit:** An Online Community for the Creation and Consumption of News Comics - B. Chen, R. Jablonsky, J. Margnes, R. Gupta, S. Thakkar
- **Wonder Album:** Cultural Awareness Through Knowledge Creation - C. Chen, J. Farney, M. Moreau, M. Stalings
- **Markitup:** Crowdsourced Collaborative Reading - L. Chircop, J. Rathodkriishnan, L. Selener, J. Chiu
- **KAVA:** The Virtual Experience of Urban Sharing - N. Fouad Amrouche, J. Lovigne, M. Lafond, M. Manette
- **YIVI:** A System which Organizes, Promotes and Democratizes Social Participation in the Indigenous Communities in Mexico. - G. Hernández Salvador, A. Ramírez Ortiz, P. Ramírez Ramos, E. Sánchez
- **Let’s Chalk! Strengthening Communities Through Play** - M. Jensen, S. Louraine, S. Miller, A. Rosenzweig Castillo
- **Strive:** Student-Athletes Transitioning with Camaraderie and Competition - T. Kennedy, D. Ellis, V. Posnpleteni, A. Williams, Y. Ye
- **Maater:** Crowdsourcing to Improve Online Journalism - R. Liu, A. Zlenik, M. Baldwin, S. Butler
- **AME-C:** Raising Awareness for a Life Free of Gender Violence - J. Rajas López, S. López Hoyas, M. Jiménez Guzmán

### 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.

The SGC winners are announced at the Foyer Bleu.

#### 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

9:00 - 12:20 (Foyer Bleu) Demonstrations by the finalists

#### Wednesday afternoon

16:00 - 17:20 (Room 251) Presentations and awards

**Jury**

- **Seth Cooper,** University of Washington, USA
- **Heather Desurvire,** User Behavioristics Research, Inc., USA
- **Magy Seif El-Nasr,** Northeastern University, USA

#### Finalists

- **Card Board:** A Flexible Environment for Any Game, Anyone. - G. Cheung
- **ATUM:** Applying Multi-layer Game Design and Environmental Storytelling - M. Clavero Jiménez, T. Buijtenweg
- **Umbra:** Beyond Avatars: A Gaming Installation using Shadows - A. Goldman, D. Teixeira, S. Tranquada, J. Silva, A. Alves, B. Han, J. Diaz, C. Camacho
- **bSpine:** A Motion-Sensing Edutainment System for Improving Children’s Spinal Health - S. Hsu, W. Tseng, F. Hsu, Y. Lo
- **Machineries:** Playfully Introducing Programming to Children - H. Lode, N. Gamsgaard Frederiksen, G. Franchi
- **Forgotten Island:** A Story-Driven Citizen Science Adventure - N. Prestopnik, D. Soud
- **Celestia:** A Vocal Interaction Music Game - Y. Shi, C. Yang
- **Squidge:** An Integrated Game Controller - T. Smith
- **Wake Up Call:** M. Ziegler
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.

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

C01 User Interface Design and Adaptation for Multi-Device Environments - F. Paternò
C02 Six Steps to Successful UX in an Agile World - H. Beyer, K. Holzblatt
C03 Rapid Design Labs - A Tool to Turbocharge Design-Led Innovation - J. Nieters, C. Thompson, A. Runde
C05 Practical Statistics for User Experience Part I - J. Saura, J. Lewis
C06 Agile User Experience and UCD - W. Hudson
C07 Speech-based Interaction: Myths, Challenges, and Opportunities - C. Munteanu, G. Penn

Tuesday Courses

C09 Choice and Decision Making for HCI - A. Jameson
C10 Cognitive Crash Dummies: Predicting Performance from Early Prototypes - B. John
C11 Analyzing Social Media Systems - S. Fanhan, E. Kéman
C12 Practical Statistics for User Experience Part II - J. Saura, J. Lewis
C13 Expert Reviews – For Experts - R. Molich
C14 Make This! Introduction to Electronics Prototyping Using Arduino - W. Yu, D. Sirk
C15 Card Sorting for Navigation Design - W. Hudson

Wednesday Courses

C16 The Past 100 Years of the Future: CHI/HCI/UX in Sci-Fi Movies and Television - A. Marcus
C17 Interactive Walking in Virtual Environments - F. Steinicke, Y. Weik, I. Campos, A. Lécuyer
C19 Empirical Research Methods for Human-Computer Interaction - S. Mackenzie, S. Castelucci
C20 Designing Augmented Reality Experiences - M. Billinghurst, H. Duh
C21 Interaction Design for Social Development - G. Marsden, M. Jones

Thursday Courses

C22 Designing What to Design: A Task-Focused Conceptual Model - J. Johnson
C23 HTML5 Game Development - J. Parker
C24 Storyboarding for Designers and Design Researchers - P. Stoppers, G. Rosman
C25 Designing Search Usability - T. Russell-Rose

Videos

Videos offer a variety of perspectives on human-computer interaction, including future environments, reflective and humorous pieces, novel interfaces and research studies relevant to HCI. Videos are played daily at the lunch breaks and a selection of the best are screened at the Video Showcase Wednesday evening, followed by the Golden Mouse award ceremony. The People’s Choice video award winners are announced at the Closing Plenary.

Monday to Thursday

12:30 - 14:00 (Bordeaux Amphitheater) Video show
Wednesday

17:30 - 18h30 (Bordeaux Amphitheater) Video Showcase

Videos

Revel: Programming the Sense of Touch - O. Bui, I. Popyrev, M. Le Gac, L. Gofflot, M. Glisson
ReMind: A Transformational Object for Procrastinators - J. Breichmann, M. Hassenzahl, M. Laschke, M. Digel
Virtualized Reality - J. Briejer, J. Ota
GravitySpace: Tracking Users and Their Poses in a Smart Room Using a Pressure-Sensing Floor - A. Bräzzerl, C. Holz, D. Hoffmann, D. Schmidt, M. Krusst, P. Löhr, R. Meusel, S. Richter, P. Baudisch
Unojoy!: A Library for Rapid Video Game Prototyping using Arduino - A. Chatham, W. Walmink, F. Mueller
HeartLink: Open Broadcast of Live Biometric Data to Social Networks - F. Curmi, F. Ferrario, J. Southern, J. Whittle
Cheers – Alcohol-aware Strobing Ice Cubes - D. Dand
SPRWeb: Preserving Subjective Responses to Website Colour Schemes through Automatic Recolouring - D. Flottia, K. Reinecke, C. Gutwin, K. Gajos

Palais des Congrès | Paris, France | 55
WORKS IN PROGRESS

Authors are scheduled to stand by their posters during Spotlight 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: Monday afternoon and Tuesday all day
Authors present their posters at these Spotlight Sessions:

Monday afternoon break: 15:20 - 16:00
Tuesday morning break: 10:20 - 11:00

The following poster collections are on display:

Accessibility 0001 - 0011
Computer-Supported Cooperative Work 0011 - 0120
Evaluation & Design Methods 0120 - 0233
Health 0233 - 0325
Interaction & Experience design 0325 - 0414
Learning 0414 - 0517
Multimedia 0517 - 0602
Music & Audio 0602 - 0709
Privacy 0709 - 0807
Social Computing 0807 - 0917

Second rotation: Wednesday all day and Thursday morning
Authors present their posters at these Spotlight Sessions:

Wednesday afternoon break: 15:20 - 16:00
Thursday morning break: 10:20 - 11:00

The following poster collections are on display:

Augmented Reality 1001 - 1011
Emotions 1011 - 109
Game/Play 109 - 1216
Gesture 1216 - 1309
Inputs 1309 - 1424
PDA & Mobile 1424 - 1513
Sustainability 1513 - 1612
Tabletops & Displays 1612 - 1709
Tactile 1709 - 1801
Ubiquitous Computing 1801 - 1909
UI Design 1909 - 2011
Visualization 2011 - 2108
Web & E-commerce 2108 - 2217
**FIRST ROTATION – MONDAY-TUESDAY**

### Accessibility

Can We Augment Reality with “Mental Images” to Elicit Pretend Play? - A. Usability Study - Z. Bai, A. Blackwell, G. Coulouris

A Motion-based Interface to Control Environmental Stimulation for Children with Severe to Profound Disabilities - C. Manness, Yee, J. Munro, D. Arellano

Adaptive Time Windows for Real-Time Crowd Captioning - M. Murphy, C. Miller, W. Lasocki, J. Brigham


Facilitating Route Learning Using Interactive Audio-Tactile Maps for Blind and Visually Impaired People - N. Abd Hamid, A. Edwards

Towards an Ambient Assisted Living User Interaction Taxonomy - M. Petzold, F. Babarocka, J. Babeth, D. Kern, C. Meyer, M. Morandell

Exploring Tangible Collaborative Distance Learning Environments for the Blind and Visually Impaired - M. Manzoor, E. Pontelli, S. Manzoor


Design Guidelines of a Tool to Help Blind Authors Independently Format Their Word Documents - L. Morales, S. Anteaga, S. Kurniawan

Button Blender: Remixing Input to Improve Video Game Accessibility - K. Saul, S. Kane

### Computer-Supported Cooperative Work

0101-0120

Investigating the Communication Patterns of Distance-Separated Grandparents and Grandchildren - A. Forghani, C. Neustaedter, T. Schiphorst

Designing a Smartpen Reminder System for Older Adults - J. Williamson, M. McGee-Lennon, E. Freeman, S. Brewster

Rotating Tilting: Bouncing Using an Interactive Chair to Promote Activity in Office Environments - K. Peust, D. Lindbauer, P. Greindl, M. Trapp, M. Halík, B. Schwartz, A. Schrempf

That’s not Norma(n)l!: A Detailed Analysis of Mids Touch in Gaze-based Problem-solving - H. Vázquez, R. Besharck

Facilitating Gaze Interaction Using the Gap and Overlap Effects - A. Diaz Tula, A. Kuruachi, C. Morimoto


Navigating Constraints: The Design Work of Professional Software Developers - D. Socha, J. Tenenberg

Supervisory Guide Part I: Detecting Gaps in UAV Swarm Operator Situation Awareness - F. Frische, A. Ludtke

A Theoretical Model for Trust in Automated Systems - K. Hofer, M. Bagher


Hand and Eyes: How Eye Contact is Linked to Gestures in Video Conferencing - K. Neureiter, M. Murer, F. Fuchsberger, M. Tscheligi

GitHub Developers Use Rockstars to Overcome Overflow of News - M. Lee, B. Ferwerda, J. Choi, J. Hohn, J. Moon, J. Kim

Performance and Participation in Open Source Software on Github - N. McDonald, S. Goggins

CrowdUtility: Know the Crowd that Works for You - K. Dasgupta, V. Rajan, S. Karanam, K. Ponnavaikko, C. Balamurugan, N. Piratla

Taskville: Visualizing Tasks and Raising Awareness in the Workplace - S. Nakkula, D. Byrne, H. Sundaram, A. Keilhöfer, S. Linn

### Evaluation & Design Methods

0201-0233

CHECk: A Tool to Inform and Encourage Ethical Practice in Participatory Design with Children - J. Read, M. Horton, G. Sim, P. Gregory, D. Fitton, B. Cassidy

Exploring the Potential of the Drawing Intervention Method for Design and Exploration by Young Children - W. Barendregt, T. Bekker


The Challenge of Working with Teens as Participants in Interaction Design - D. Fitton, J. Read, M. Horton

Suprise, Surprise: Activity Log Based Time Analytics for Time Management - V. Pannier, M. Bratic

Towards inferring language expertise using eye tracking - K. Kunze, H. Kawachi, K. Yoshimura, K. Kise

Social Devices – A Laboratory Study on User Preferences of Device Proactivity - J. Pohlkainen, K. Wahlén-Vansio-Mattila, H. Peltola

Users’ Socially Desirable Responding with Computer Interviewers - S. Kang, J. Marie


Measuring Touch Bias of One Thumb Posture on Direct Touch-based Mobile Devices - K. Lee, S. Kim, S. Myung

Collecting Memories of the Museum Experience - G. Kastakida, D. Frazoi, B. Valleri, M. Base, F. Casati, S. Calori, S. Tarter

Implementation of the Stroop task using an Interactive Table: An experimental study - H. Miller, S. Kubicki, C. Kaliski, J. Navetbee

Using an Intelligent Interviewer to Perform Cognitive Assessments - K. Weaver, A. Komnoli, B. Duffy

MATE — A Mobile Analysis Tool for Usability Experts - T. Porat, A. Schürer, B. Shapiro


Biomechanical Simulation in the Analysis of Aimed Movements - M. Bachynskyj, A. Oulassa, G. Palmos, T. Weinkauf

Informing the Design of New Mobile Development Methods and Tools - M. Nebeling, C. Zimmerli, M. Norrie

BESIDE -- The Built Environment for Social Inclusion in the Digital Economy - L. McIntyre, H. Hanson

Usability Evaluation of Eye Tracking on an Unmodified Common Tablet - C. Holland, A. Gaiza, E. Kortova, J. Cruz, O. Komargorsve

You say “Disaster”, I say “No Problem”: Unusable Problem Rating Scales - R. Malich, J. McGinn, N. Bevan


Did You Notice? Neuronal Processing of Multimodal Mobile Phone Feedback - J. Antons, S. Arndt, J. Seebode, R. Schiecker, S. Möller

Framing Design of Reminiscence Aids with Transactive Memory Theory - W. Tsai, H. Lee, J. Hsiao, R. Liang, J. Hsu

How Well Do You Know Tom Hanks? Using a Game to Learn About Face Recognition - D. Marques, J. Snyder, M. Lux


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Letting Go: Working with the Rhythm of Participants - L. Coles-Kemp, A. Angus, S. Stang

Allowing Software Developers to Develop Culture-Sensitive Applications by Providing them the OMCS-Br Cultural Knowledgebase - A. Bueno, J. Anacleto

Health

Rehearsing to Control Depressive Symptoms through a Behavior Change Support System - S. Langrial, H. Onka, H. Solis, P. Loppalainen, R. Loppalainen

Supporting Therapists In Motion-Based Gaming For Brain Injury Rehabilitation - C. Putnam, J. Cheng, D. Rusch, A. Berthaume, R. Burke

Developing Hospice Care Over a Distance in Highland Scotland: a Knowledge Exchange Process - A. Taylor, J. Lennex, A. Mort, D. Heatney, S. Munoz, M. Currie, G. Hubbard, K. Steele, J. Keen

Evaluation of Roller-Type Itch-Relief Device Employing Hot and Cold Alternating Stimuli - R. Watanabe, N. Saito, Y. Morii, T. Hachisu, M. Sato, S. Fucksushima, H. Kajimoto

The Wearable Lullaby: Improving Sleep Quality of Caregivers of Dementia Patients - E. Ehleringer, S. Kim


Designing a Prototype Interface for Visual Communication of Pain - A. Jong, D. MacLean, J. Hear

CuePbox: An Integrated Physical and Virtual Pillbox for Patient Care - Y. Cheng, G. Fernanda, C. Deshan, L. Goh, J. Hong, A. Sen, R. Pooawish, S. Foo

Data-Driven Exploration of Care Plans for Patients - A. Perer, D. Gotz

A Digital Game to Support Voice Treatment for Parkinson’s Disease - M. Krause, J. Smednick, R. Meyer

Research-Derived Guidelines for Designing Toddlers’ Healthcare Games - M. Hässeth, M. Giannakos, L. Jaccheri

Facet: Supporting Reflection upon Social Anxiety Events with Lifelogging - K. Rennert, E. Karapanos

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Encouraging Collaboration in Hybrid Therapy Games for Autistic Children - S. Manweck, R. Rädele, H. Reiterer

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“My Mobile Health, My Mobile Life”: Methods for Designing Health Interventions with Adolescents - T. Peyton, E. Paole

Exploring New Potentials In Preventing Unhealthy Computer Habits - T. Sonne, K. Granbæk

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Interaction & Experience Design

Experiential Perspectives on Road Congestions - M. Obst, D. Wurholfer, A. Krishkowsky, E. Karapanos, D. Wilfinger, N. Peterer, M. Tscheligi


A Life of Their Own: Museum Visitor Personas Penetrating the Design Lifecycle of a Mobile Experience - M. Poussard, A. Kastor, L. Pujol, M. Yoyanou, S. Rennick-Eggleston

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A Trip into the Countryside: An Experience Design for Experiential Car Cruises - M. Knobel, M. Hassenzahl, M. Lamar, J. Schumann, K. Eckoldt, A. Burz

WeCurate: Multiuser Museum Interactives for Shared Cultural Experiences - K. Hazelden, M. Yee-King, R. Coniglioni, F. Ghedini, D. de Jonge, N. Osman, C. Siema, M. d’Inverno

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Wet Pixels: From Digital to Analogical Originals - H. Kwon, J. Briggs, B. Freeth, L. Kadha, J. Thomas, M. Blythe, P. Oliver


Dreamy Eyes: Exploring Dynamic Expression in Human-System Interaction - J. Sterne, P. Murti, M. Tizarelli

KiTeMiROOM: A Fashion-Coordination System for Mobile Devices - A. Laurenzi, A. Cappelletti, M. Zancanaro

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Learning

0501-0517

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EasyAuthor-Supporting Low Computer Proficiency Teachers In The Case of Educational Content for Adult Literates - S. Chymidokanda, K. V. Nori
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Multimedia

0601-0602

ActivityDesk: Multi-Device Configuration Work using an Interactive Desk - S. Houben, J. Bardram
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Music & Audio

0701-0709

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Privacy

0801-0807

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0901-0917

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Emotions

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Game/Play

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Gesture

Comparing Avatar Game Representation Preferences across Three Age Groups - M. Rice, R. Koh, Q. Liu, Q. He, M. Wan, V. Ye, J. Ng, W. Tan
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Inputs

Designing Natural Speech Interactions for the Living Room - L. Stifelman, A. Elman, A. Sullivan
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PDA & Mobile

1501-1513

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Sustainability

1601-1612

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Tabletops & Displays

1701-1707

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Tactile

1801-1814

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WORKS IN PROGRESS

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Visualization 2101-2108

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Web & E-commerce 2201-2217

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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.

Cambridge University Press  Booth 18a
Cambridge University Press is a not-for-profit organization that advances learning, knowledge and research worldwide. It is an integral part of the University of Cambridge and for centuries has extended its research and teaching activities through a remarkable range of academic and educational books, journals, and examination papers. Come and visit our stand for 20% off all titles on display.

Core Assets Group / KDA LLC  Booth 8
KDA® is leading the way in bridging the gap between global care providers and modern technology. KDA® Online is a software program that translates the day to day life events of clients into developmental and clinical data. KDA® is simple and intuitive, user-led and supported by web-based portals and smartphone apps; it has applications across children’s, adult, obese and geriatric populations.

eBay, Inc. (Champion Sponsor)  Booth 17, 18, 19
eBay Inc. is shaping the future of commerce by connecting people to their interests and creating opportunities that often transform their lives. It’s an extraordinary time to be a part of our UX community. Come by our booth to meet our UX team and find out how we’re helping to transform the world of commerce.

Elsevier  Booth 11
Elsevier publishes some 250,000 journal articles a year. In the field of computer science, we publish many high quality journals. This includes many key publications by the best minds in the field. Visit our booth to learn more about our new journal: Journal of Child-Computer Interaction and other HCl journals. Our publisher and journal editors will be available to answer any publishing questions and talk through the submission process. We look forward to meeting you.

EyeTracking, Inc.  Booth 4
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 15
No matter what part of Facebook you join, you’ll be building something big and new. We welcome pioneers. In fact, we insist on them. If you work for us, you will be able to make an immediate impact. We’re hiring Designers, Researchers, Content Strategists and Front End Engineers to help design Facebook and the next set of social experiences across the web. Come find our booth and learn more about the opportunities we have at Facebook.

Google (Champion Sponsor)  Booth 25, 26
Google’s mission is to organize the world’s information and make it universally accessible and useful. In 1998, Larry Page and Sergey Brin applied their research to an interesting problem and invented the world’s most popular search engine. The same spirit holds true at Google today. Googlers working on interesting problems in HCI are spending time at our exhibit. Come and talk to us!

Inria (Champion Sponsor)  Booth 17a
Established in 1967, Inria is the only French public research body fully dedicated to computational sciences. Combining computer sciences with mathematics, Inria’s researchers strive to invent the digital technologies of the future. Educated at leading international universities, they creatively integrate basic research with applied research and dedicate themselves to solving real problems, collaborating with the main players in public and private research in France and abroad and transferring the fruits of their work to innovative companies. Inria currently employs 3000 researchers and hosts over 1000 young researchers each year.

Interactive Minds Dresden GmbH  Booth 9
Interactive Minds offers a range of eye tracking systems from The EyeFollower 2 that provides automatic eye acquisition, binocular tracking, and 0.45-degree gaze-point tracking accuracy throughout 20x12x15 inch volume to the Eyegaze Edgeâ Pack, an inexpensive plug-and-play system. All systems are available with optional state-of-the-art NYAN analysis software.

JCDecaux (Hero Sponsor)  Booth 20
JCDecaux is the number one outdoor advertising company worldwide. Its success has always been based upon an ambitious research and development policy and a unique capacity for innovation. Through its culture, its business model and its indoor (transport hubs…) and outdoor (downtown streets, highways…) products, JCDecaux is exploring the frontiers of digital and interactive advertising, in Europe (The M4 Torch in London, Roissy Charles-de-Gaulle airport in Paris…), Asia (Shanghai Airports, Changi Airport in Singapore…), North America (Chicago billboards…) or South America (Sao Paulo digital clocks).

Microsoft (Champion Sponsor)  Booth 30, 31, 32
At Microsoft, we get UX! Through ground-breaking research and inspirational design, we’re radically transforming the user experience. Supporting CHI and valuing our UX disciplines is a big part of what we are all about. Our researchers and designers impact products that touch the lives of a billion global consumers. Stop by our booth to participate in a variety of demos and discussions on Windows 8, Xbox, Kinect, Office, and more. Learn about the great opportunities for shaping Human Computer Interaction at Microsoft. And pick up free swag, too!

MIT Press  Booth 5
The MIT Press publishes a distinguished list of scholarly books in core and innovative areas of human-computer interaction and related technology and design studies. A wide range of our new and backlist titles will be available to purchase at 30% discount. Doug Sery, Acquisitions Editor, will be available during the conference to talk to you.

Google today. Googlers working on interesting problems in HCI are applying their research to an interesting problem and invented the world’s most popular search engine. The same spirit holds true at Google today. Googlers working on interesting problems in HCI are spending time at our exhibit. Come and talk to us!

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Morgan & Claypool Publishers  Booth 27
Morgan & Claypool is publisher of the Synthesis digital library, including the HCI series edited by Jack Carroll.

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MultiTouch Ltd. is a leading developer of interactive display systems, based on proprietary software and hardware designs. MultiTouch displays are Full HD LCDs, stackable into any size table or wall and support multi-user environments. The products are designed for corporate information, retail, marketing, exhibitions, museums, hospitality, research & education, arts and other professional uses.

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Publishers of the highly acclaimed FOUNDATIONS AND TRENDS (FnT) journals, including FnT HCI, edited by Ben Bederson. Peer-reviewed surveys, reviews and tutorials. Visit our booth to browse the available titles and meet the publisher.

Oxford University Press  Booth 3
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. Read the latest content from this journal at www.iwc.oxfordjournals.org and look at our related books at www.oup.com

Samsung  Booth 16
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. The Samsung User Experience Center and the San Francisco Bay Area Samsung UX Center America welcome you to CHI 2013.

SAP  Booth 7
As market leader in enterprise application software, SAP helps companies of all sizes and industries run better. With over 197,000 customers in over 120 countries, the SAP Group includes subsidiaries in every major continent and employs over 63,000 people worldwide. Positions are available, come by our booth to see how you could join this dynamic team of user experience and design professionals.

SensoMotoric Instruments GmbH  Booth 12
For more than 20 years, SensoMotoric Instruments (SMI) has been a world leader in eye tracking systems. Measure visual attention in situations that require full mobility or a natural interaction of users with the SMI Eye Tracking Glasses. Efficiently quantify attention of users on screen-based materials such as web designs, software or video games with the SMI RED-m remote eye tracking device.

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SMART EYE develops, manufactures and markets ROBUST 3D Eye Tracking systems. SMART EYE PRO is our FLEXIBLE solution for any kind of environment, whereas our all new DR120 is our INTUITIVE and EASY TO USE solution for measurements on screens. The systems provide REAL-TIME 3D information on gaze direction, head position and angles, eyelid opening, pupil size and many more. Come and visit us!

Springer  Booth 23, 24

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Building on two centuries’ experience, Taylor & Francis has grown rapidly over the last two decades to become a leading international academic publisher. Operating from a network of 20 global offices, the Taylor & Francis Group publishes more than 1,500 journals and around 1,800 new books each year with a books backlist in excess of 20,000 specialist titles.

TEA – SEEING MACHINES  Booth 6

Télécom ParisTech (Champion Sponsor)  Booth 28
At Télécom ParisTech we support innovation! The Telecom ParisTech incubator coaches and advises start-ups as part of its mission. Stop by and see two of our highlighted projects: « I’m in VR », a company providing immersive virtual reality (VR) applications and services. MiddleVR makes it easier for you, and ePawn’s tracking technology is revolutionary! You will be amazed to interact with virtual environments in real time via real-world objects.

Tobii Technology  Booth 19a
Tobii provides eye tracking systems and software for a wide variety of research. Our eye trackers are used within the scientific community and in usability and market research, to analyze vision, human behavior; user experiences and consumer responses. www.tobii.com/en/eye-tracking-research/global/

UserZoom  Booth 29
UserZoom is the leading software platform for online UX research in the market. We offer an on-demand web-based solution, which empowers User Experience professionals to cost-effectively conduct and manage sophisticated online research projects (Remote usability testing on PC, mobile and tablets…) 50% percent of Fortune Magazine’s 50 most admired companies are already using our solution.

Yahoo! (Contributing Sponsor)  Booth 13
Yahoo! Labs leads Yahoo!’s success through science, technology, and innovation thinking. We have an unmatched track record of ideas touching 700+ million users. Our work has yielded delightful experiences and tools for everyday life across the entire planet. We’ve never been so energetic and exciting with endless opportunities! Visit our booth, meet yahoos and see what we’re up to! We’re HIRING!
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 include:

**Interactivity Research** – an exciting collection of hands-on research demonstrations and prototypes. Experience new interaction techniques, systems, and early concepts.

**Interactivity Explorations** – cultural applications and explorations of future technologies. Experience digital art and interactive performances that ask questions, inspire reflection, and engage your intellect and imagination.

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.

**Monday**
- 17:30 - 19:30: Grand opening

**Tuesday**
- 10:20 - 11:00: Presenters available during the morning break
- 15:20 - 16:00: Presenters available during the afternoon break

**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

Interactivity demonstrations are laid out in four areas (Interactivity 1 to Interactivity 4). See the map on page 67 for the location of each area and each demonstration.

**Interactivity 1 – Research**

**Interactivity 2 – Exploration**

**Interactivity 3 – Exploration**

**Interactivity 4 – Exploration**
<table>
<thead>
<tr>
<th>Booth number</th>
<th>Exhibitor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Smart Eye AB</td>
</tr>
<tr>
<td>2</td>
<td>now publishers</td>
</tr>
<tr>
<td>3</td>
<td>Oxford University Press</td>
</tr>
<tr>
<td>4</td>
<td>EyeTracking, Inc.</td>
</tr>
<tr>
<td>5</td>
<td>MIT Press</td>
</tr>
<tr>
<td>6</td>
<td>Core Assets Group / KDA LLC</td>
</tr>
<tr>
<td>7</td>
<td>SAP</td>
</tr>
<tr>
<td>8</td>
<td>Interactive Minds Dresden GmbH</td>
</tr>
<tr>
<td>9</td>
<td>Taylor &amp; Francis Group</td>
</tr>
<tr>
<td>10</td>
<td>Elsevier</td>
</tr>
<tr>
<td>11</td>
<td>SensoMotoric Instruments GmbH</td>
</tr>
<tr>
<td>12</td>
<td>Yahoo! (Contributing)</td>
</tr>
<tr>
<td>13</td>
<td>MultiTaction by MultiTouch Ltd.</td>
</tr>
<tr>
<td>14</td>
<td>Facebook (Contributing)</td>
</tr>
<tr>
<td>15</td>
<td>Samsung</td>
</tr>
<tr>
<td>16</td>
<td>eBay, Inc. (Champion)</td>
</tr>
<tr>
<td>17</td>
<td>Inria (Champion)</td>
</tr>
<tr>
<td>17a</td>
<td>Cambridge University Press</td>
</tr>
<tr>
<td>18</td>
<td>Tobii Technology</td>
</tr>
<tr>
<td>18a</td>
<td>JCDécaux (Hero)</td>
</tr>
<tr>
<td>19</td>
<td>Bloomberg LP (Champion)</td>
</tr>
<tr>
<td>19a</td>
<td>Springer</td>
</tr>
<tr>
<td>20</td>
<td>Morgan &amp; Claypool Publishers</td>
</tr>
<tr>
<td>21, 22</td>
<td>Télécom ParisTech (Champion)</td>
</tr>
<tr>
<td>23, 24</td>
<td>Bentley University</td>
</tr>
<tr>
<td>25, 26</td>
<td>UserZoom</td>
</tr>
<tr>
<td>27</td>
<td>Microsoft (Champion)</td>
</tr>
<tr>
<td>28</td>
<td>Palais des Congrès</td>
</tr>
<tr>
<td>29</td>
<td>Paris, France</td>
</tr>
<tr>
<td>30, 31, 32</td>
<td>Microsoft (Champion)</td>
</tr>
</tbody>
</table>
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