

San Jose, CA, USA



May 7 - 12

2016 #chi4good



Association for
Computing Machinery



SIGCHI

Conference Program

The 34th Annual CHI Conference on Human Factors in Computing Systems

San Jose Convention Center

<https://chi2016.acm.org>

SCHEDULE OF EVENTS

Saturday, May 7

09:00 - 17:00 Workshops & Symposia
#chi4good Day of Service

Sunday, May 8

09:00 - 17:00 Workshops & Symposia
Doctoral Consortium
17:00-18:00 Newcomer's Welcome Reception

Monday, May 9

08:30 - 10:00 Opening Keynote: Dayo Olopade
10:00 - 11:30 Coffee Break
Video Showcase
Student Game Finalist Exhibition
11:30 - 12:50 Technical Sessions
12:50 - 14:30 Lunch Break
lunch@chi
14:30 - 15:50 Technical Sessions
15:50 - 16:30 Coffee Break
16:30 - 17:50 Technical Sessions
18:00 - 19:30 Opening Reception and Exhibit Hall
Grand Opening
Interactivity Demos Open

Tuesday, May 10

08:30 - 09:20 Plenary: Kimberly Bryant in
conversation with Sarah Guthals
09:30 - 10:50 Technical Sessions
10:50 - 11:30 Coffee Break
Interactive Demos Open
Student Game Finalist Exhibition
11:30 - 12:50 Technical Sessions
12:50 - 14:30 Lunch Break
Diversity Lunch
14:30 - 15:50 Technical Sessions
15:50 - 16:30 Coffee Break
Interactive Demos Open
16:30 - 17:50 Technical Sessions
18:00 - 19:30 Job Fair
Art Exhibition Opening

Wednesday, May 11

08:30 - 09:20 Plenary: Marissa Mayer in
conversation with Terry Winograd
09:30 - 10:50 Technical Sessions
10:50 - 11:30 Coffee Break
Interactive Demos Open
11:30 - 12:50 Technical Sessions
12:50 - 14:30 Lunch Break
14:30 - 15:50 Technical Sessions
15:50 - 16:30 Coffee Break
Interactive Demos Open
16:30 - 17:50 Technical Sessions
18:00 Sponsor Hospitality Receptions
Corporate Receptions

Thursday, May 12

08:30 - 09:20 Plenary: Alan Kay in conversation
with Vishal Sikka
09:30 - 10:50 Technical Sessions
10:50 - 11:30 Coffee Break
Interactive Demos Open
11:30 - 12:50 Technical Sessions
12:50 - 14:30 Lunch Break
14:30 - 15:50 Technical Sessions
15:50 - 16:30 Coffee Break
16:30 - 17:50 Closing Keynote: Salman Khan

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WiFi: WickedlyFastWifi
No password required

SCHEDULE AT A GLANCE: MONDAY

Mon	220A	220B	230C	210D	210H	210C	210G	210BF	210AE	112
08:30 Opening Keynote (220A) Dayo Olopade										
Coffee Break										
11:30 - 12:50				Course Research Methods for Child Computer Interaction (1/2)	Course Designing with the Mind in Mind (1/2)	Course Introduction to Human Computer Interaction (1/2)	Course Personal Fabrication: State of the Art and Future Research	Papers Supporting Vulnerable Populations	Papers Online Behaviors	SIG Multiple Views on Safety-Critical Automation
Lunch Break lunch@chi meet at Registration Desks										
14:30 - 15:50	Panel User Experience (UX) in India	alt.chi Critical Theory and Pedagogy		Course Research Methods for Child Computer Interaction (2/2)	Course Designing with the Mind in Mind (2/2)	Course Introduction to Human Computer Interaction (2/2)	Course Game User Experience Evaluation (1/2)	Papers Sociotechnical Assemblages	Papers Thinking Critically	SIG Refugees and HCI
Coffee Break										
16:30 - 17:50	alt.chi Food Fictions	Panel On the Future of Personal Assistants	alt.chi Confronting Power in HCI	Course Hands-on Introduction to Interactive Electric Muscle Stimulation	Course Visual Facilitation for Design Groups	Course An Introduction to Cognitive Aging and Dementia	Course Game User Experience Evaluation (2/2)	Papers Sustainability, Design and the Environment	Papers Interaction Design for Audio Interfaces	SIG Diversity in High Tech
18:00 - 19:30 Conference Reception & Exhibits Grand Opening (Hall 1/Hall2)										

SCHEDULE AT A GLANCE: TUESDAY

Tue	220A	220B	230C	210D	210H	210C	210G	210BF	210AE	112
08:30 Plenary (220A) Kimberly Bryant in conversation with Sarah Guthals										
09:30 - 10:50	Award Talk SIGCHI Social Impact Award	Panel The Future of Robotic Telepresence	SIG Technology for disabled and older people	Course Interaction Design for Online Video and Television (1/2)	Course Visual Analytics 101 (1/2)	Course Introduction to Creating Musical Interfaces (1/2)	Course An Introduction to Automotive User Interfaces (1/2)	Papers Citizenry and the Sciences	Papers Evaluating Educational Technology	SIG Transparent Statistics in HCI
Coffee Break										
11:30 - 12:50			SIG Become a Volunteer at ACM	Papers Interaction Design for Online Video and Television (2/2)	Papers Visual Analytics 101 (2/2)	Papers Introduction to Creating Musical Interfaces (2/2)	Course An Introduction to Automotive User Interfaces (2/2)	Papers Infrastructure through a Critical Lens	Papers Shortcuts for More Efficient Input	SIG SIGCHI Games: The Scope of Games Research at CHI
Lunch Break Diversity & Inclusion Lunch (Room 220BC; preregistration required)										
14:30 - 15:50	Panel AMA: CHI Chairs		SIG Digital Civics	Course Make This! Introduction to Electronics Prototyping Using Arduino (1/2)	Course Designing Technology to Foster Psychological Wellbeing (1/2)	Course User Story Mapping: The Hands-on Course (1/2)	Course Designing and Assessing Interactive Systems Using Task Models (1/2)	Papers HCI and Gender	Papers Game and Design	SIG Mind the Gap
Coffee Break										
16:30 - 17:50			SIG State of Accessibility at CHI	Course Make This! Introduction to Electronics Prototyping Using Arduino (2/2)	Course Designing Technology to Foster Psychological Wellbeing (2/2)	Course User Story Mapping: The Hands-on Course (2/2)	Course Designing and Assessing Interactive Systems Using Task Models (2/2)	Papers Civic Tech, Participation and Society	Papers User Experience and Performance	SIG Usability of Programming Languages
18:00-20:00 Arts Exhibition Opening Event (Works/San Jose, 365 S. Market Street)										
18:00-19:30 Job Fair & Recruiting Boards (Hall 1/Hall2)										

SCHEDULE AT A GLANCE: MONDAY

Mon	114	LL21C	LL21D	LL21E	LL21F	LL20A	LL20D	LL20B	LL20C	LL21B
08:30 Opening Keynote (220A) Dayo Olopade										
Coffee Break										
11:30 - 12:50	Case Studies Education	Papers Families and Assistive Technology	Papers 3D Virtual Space	Papers Mining Human Behaviors	Papers Social Media and Location Data	Papers Front Stage on Social Media	Papers Behavioral Change	Papers Collaborative Fabrication	Papers Learning Feedback	Papers How Fast Can You Type on Your Phone
Lunch Break lunch@chi meet at Registration Desks										
14:30 - 15:50	Case Studies Tools for Workers	Papers Computer Supported Parenting	Papers Real Reality Interfaces	Papers Privacy – Social and Geolocated	Papers Personal Informatics: Dear Data	Papers Social Media Engagement	Papers Older Adult Support	Papers 3D Designing, Modelling & Printing	Papers Learning @ School	Papers Visual Design for Unconventional Displays
Coffee Break										
16:30 - 17:50	Course So, you want to be a CHI AC	Papers Physical and Digital Collections	Papers Augmented AR and VR Experiences	Papers Living Healthy	Papers Paying Attention to Smartphones	Papers Designing Quality in Social Media	Papers Technological Care for Autism	Papers (Re) understanding Making	Papers Learning Facilitation	
18:00 - 19:30 Conference Reception & Exhibits Grand Opening (Hall 1/Hall2)										

SCHEDULE AT A GLANCE: TUESDAY

Tue	114	LL21C	LL21D	LL21E	LL21F	LL20A	LL20D	LL20B	LL20C	LL21B
08:30 Plenary (220A) Kimberly Bryant in conversation with Sarah Guthals										
09:30 - 10:50	Case Studies New Markets and Localization	Papers Work, Multitasking, and Distraction	Papers VR for Collaboration	Papers Quantifying Efficiency of Input Methods	Papers Democratizaing and Opening Data	Papers The Economics of Being Online	Papers Physical Disability and Assistive Technology	Papers Designing Physical Games	Papers Learning Programming	Papers Tracking Fingers
Coffee Break										
11:30 - 12:50	Case Studies User Research	Papers Displays and Shared Interactions	Papers VR & Feedback	Papers HCI and Physiological Interactions	Papers Mobile Behaviors	Papers Visual Impairment and Technology	Papers Mental Health via Online Tools	Papers Design, Labour and Peril in Crowdsourcing	Papers Gamification	Papers Touchscreen Interactions
Lunch Break Diversity & Inclusion Lunch (Room 220BC; preregistration required)										
14:30 - 15:50	Case Studies Organizational Change for Better UX	Papers Distance Still Matters	Papers Enabling End-Users and Designers	Papers Embodied Interaction	Papers Contextual Awareness	Papers Curation and Algorithms	Papers Interventions to Design Theory	Papers Crowdsourcing and Creation	Papers Complexity and Learning in Crowdsourcing	Papers In-Air Gestures
Coffee Break										
16:30 - 17:50	Case Studies Design Methodology	Papers Workplace Social Performance	Papers Software and Programming Tools	Papers Haptic Feedback Everywhere	Papers Big Data and Local Society	Papers Managing Design for Life Disruptions	Papers Patients' Participation in Mixed Settings	Papers Microtasks and Crowdsourcing	Papers Players' Motivations in Games	Papers Touch Interaction
18:00-20:00 Arts Exhibition Opening Event (Works/San Jose, 365 S. Market Street)										
18:00-19:30 Job Fair & Recruiting Boards (Hall 1/Hall2)										

SCHEDULE AT A GLANCE: WEDNESDAY

Wed	220A	220B	230C	210D	210H	210C	210G	210BF	210AE	112
08:30 Plenary (220A) Marissa Mayer in conversation with Terry Winograd										
09:30 - 10:50	Award Talk SIGCHI Lifetime Research Award	Panel Boundary Troubles	alt.chi Authorship and Reviews	Course Advances in Participatory Design (1/2)		Course Empirical Research Methods for Human-Computer Interaction (1/2)	Course Speech-based Interaction: Myths, Challenges, and Opportunities (1/2)	Papers Participating in Well-Being and Family	Papers Input Technology	SIG Leading Design Teams and Organizations
Coffee Break										
11:30 - 12:50	Student Game Competition Finals	Panel Design Leadership for Business Innovation	alt.chi See this, hear this, touch this, keep this	Course Advances in Participatory Design (2/2)		Course Empirical Research Methods for Human-Computer Interaction (2/2)	Course Speech-based Interaction: Myths, Challenges, and Opportunities (2/2)	Papers Reflection on UX Design	Papers Displays and Visualization	SIG The Masters Degree in HCI at 20
Lunch Break SIGCHI Town Hall Meeting (Room 230C)										
14:30 - 15:50	Student Design Competition Finals	Panel Science and Service, Innovation and Inspiration	alt.chi Design Fictions and HCI		Course Interactive Biotechnology (1/2)	Course Tools for Designing for Home Entertainment (1/2)	Course User Interface Design in Agile Projects (1/2)	Papers Participatory Design (PD) and Applications	Papers Legitimacy, Performance, and the Crowd	SIG Thinking Beyond Post-It Notes
Coffee Break										
16:30 - 17:50	Student Research Competition Finals	Panel HCI and International Public Policymaking		Course Designing for an Aging Population: Toward Universal Design	Course Interactive Biotechnology (2/2)	Course Tools for Designing for Home Entertainment (2/2)	Course User Interface Design in Agile Projects (2/2)	Papers The Boundaries of HCI Research	Papers How can Smartphones Fit Our Lives?	SIG Jogging at CHI
Hospitality Receptions (Various Locations)										

SCHEDULE AT A GLANCE: THURSDAY

Thu	220A	220B	230C	210D	210H	210C	210G	210BF	210AE	112
8:30 Plenary (220A) Alan Kay in conversation with Vishal Sikka										
09:30 - 10:50	Award Talk SIGCHI Lifetime Practice Award	Panel Beyond the Pipeline: Addressing Diversity in High Tech		Course Presumptive Design: Design Thinking in the Service of Research (1/3)	Course Creative Worthwhile Interaction Design (1/3)	Course A Dummy's Guide to your next EXPeriment (1/3)	Course Practical UX Research Methodologies (1/3)	Papers Representing User Experience	Papers Transportation and HCI	SIG Child-Computer Interaction
Coffee Break										
11:30 - 12:50		Panel Algorithmic Authority		Course Presumptive Design: Design Thinking in the Service of Research (2/3)	Course Creative Worthwhile Interaction Design (2/3)	Course A Dummy's Guide to your next EXPeriment (2/3)	Course Practical UX Research Methodologies (2/3)	Papers Social Media and Health	Papers New Materials and Manufacturing Skills	SIG Conflict & HCI
Lunch Break										
14:30 - 15:50				Course Presumptive Design: Design Thinking in the Service of Research (3/3)	Course Creative Worthwhile Interaction Design (3/3)	Course A Dummy's Guide to your next EXPeriment (3/3)	Course Practical UX Research Methodologies (3/3)		Papers Seams of Craft, Design and Fabrication	SIG Rethinking Mobile Interfaces for Older Adults
Coffee Break										
16:30 - 17:50 Closing Plenary (Grand Ballroom) Salman Khan – "Education Reimagined"										

SCHEDULE AT A GLANCE: WEDNESDAY

Wed	114	LL21C	LL21D	LL21E	LL21F	LL20A	LL20D	LL20B	LL20C	LL21B
08:30 Plenary (220A) Marissa Mayer in conversation with Terry Winograd										
09:30 - 10:50	Case Studies Gaming, Gamifications and Arts	Papers Comprehension through Visualization	Course End-User Programming	Papers Haptic Sensation Meets Screens	Papers Designing for Attention and Multitasking	Papers Politics on Social Media	Papers Health Support		Papers Gesture Elicitation and Interaction	Papers Supporting Player Performance
Coffee Break										
11:30 - 12:50	Case Studies Activities and Health	Papers Usability and User Burden	Papers Making Interfaces Work for Each Individual	Papers Shape Changing Displays	Papers Smartphone Authentication	Papers Online Community Identity and Behavior	Papers Affording Collective Action in Social Media	Papers Motivating and Incentivising Crowdsourcing	Papers Designing New Player Experiences	Papers Fat Fingers, Small Watches
Lunch Break SIGCHI Town Hall Meeting (Room 230C)										
14:30 - 15:50	Course Mobile UX: Breaking the Glass to Richer User Experience (1/2)	Papers How does it look? Evaluating Visual Design	Papers Expressive HCI	Papers Everyday Objects as Interaction Surfaces	Papers Privacy over Time and Relationships	Papers UX and Usability Methods	Papers Health Support and Management	Papers Designing for Marginalized Users	Papers Supporting Player Social Experiences	Papers Fingers and Technology
Coffee Break										
16:30 - 17:50	Course Mobile UX: Breaking the Glass to Richer User Experience (2/2)	Papers Detecting User Emotion	Papers Robot Personalities	Papers Visualization Methods and Evaluation	Papers Privacy and Security Interfaces	Papers Video Sharing	Papers Diverse Disabilities and Support	Papers Search and Discovery		Papers Interaction with Small Displays
Hospitality Receptions (Various Locations)										

SCHEDULE AT A GLANCE: THURSDAY

Thu	114	LL21C	LL21D	LL21E	LL21F	LL20A	LL20D	LL20B	LL20C	LL21B
8:30 Plenary (220A) Alan Kay in conversation with Vishal Sikka										
09:30 - 10:50		Papers Natural User Interfaces for InfoVis	Papers Eye Gaze		Papers Mental Models of Privacy	Papers Making Music on the Brain	Papers Design for Health Care		Papers Living in Smart Environments	Papers Interaction Techniques for Mobile Interfaces
Coffee Break										
11:30 - 12:50			Papers Eye Tracking Applications		Papers Food as a Method and Inquiry	Papers Supporting Information Seeking	Papers Medical Device Sensing		Papers Engaging Players in Games	Papers Multi-Device Interaction
Lunch Break										
14:30 - 15:50		Papers IoT and HCI ASAP!	Papers Body and Fashion						Papers Smart Homes, Devices and Data	Papers Large Display Interaction
Coffee Break										
16:30 - 17:50 Closing Plenary (Grand Ballroom) Salman Khan – "Education Reimagined"										

CHAIRS' WELCOME



San Jose Conference Center

Welcome to CHI 2016! We began our conference planning process, two years ago, with three core ideas:

- **CHI in Silicon Valley:** emphasizing local engagement in this vibrant community
- **HCI in the community:** recognizing the potential of HCI as a force for social good
- **A More Humane Conference and Planning Process:** lots of transparency, early planning, no surprises, data-driven decisions and taking into account the importance of families and work/life balance.

From this start we developed the conference theme, **#chi4good**: addressing issues of social good through the innovation and creativity of the CHI community. To this end, we held the **#chi4good** Day of Service on the Saturday May 7th, with hundreds of CHI attendees working on projects for non-profit and area arts organizations.

We continued that theme by hosting the Diversity and Inclusion Lunch, bringing childcare back to the conference for the first time in years, and introducing the lunch@chi program to facilitate small group lunches on the first day of the conference. We have CHI's first Diversity & Inclusion Statement, and

our keynote and plenary speakers represent the vibrancy, diversity and excitement of the wide field of HCI, with particular emphasis on **#chi4good**.

As the CHI conference continues to grow and flourish, so too do the number of submissions across all tracks. This year there were over 3,500 submissions, with over 1,000 accepted across 17 venues. Over the weekend we hosted over 50 workshops, the Doctoral Consortium and Development Consortia, and Japanese, Chinese and ASEAN HCI Symposia. During the week, we have as many as 19 parallel sessions of Papers & Notes, Panels, alt.chi, Interactivity, Case Studies, Special Interest Groups (SIGs), student research, design, and game competitions. We are particularly happy to introduce a new venue, the Art Exhibition, held at the Works/San Jose Gallery.

We would like to thank an enormous number of volunteers without whom CHI 2016 would not be possible, including over 4000 reviewers, 222 members of the Papers & Notes program committee, 100 members of the Late-breaking Work program committee, nearly 100 members of the CHI 2016 conference organization committee and more than 180 student volunteers. The CHI conference is supported by the efforts of SIGCHI, (the Special Interest Group on Computer-Human Interaction) of the Association for Computing Machinery (ACM) and ACM, and the generous donations of our sponsors and exhibitors. We are indebted for their ongoing support, organization, and leadership to support CHI's future.

Jofish Kaye

Yahoo, CHI 2016 General Conference Co-Chair

Allison Druin

University of Maryland / National Park Service,
CHI 2016 General Conference Co-Chair

#chi4good: addressing issues of social good through the innovation and creativity of the CHI community

CONFERENCE COMMITTEE

CONFERENCE COMMITTEE

General Chairs

Jofish Kaye, Yahoo
Allison Druin, University of Maryland

Technical Program Chair

Cliff Lampe, University of Michigan

Papers

Dan Morris, Microsoft
Juan Pablo Hourcade, University of Iowa

Design Director

Ron Wakkary, Simon Fraser University

Late-Breaking Work

Helena Mentis, University of Maryland Baltimore County
Panos Markopolos, University of Eindhoven, Netherlands
Andrea Parker, Northeastern University
Mike Massimi, Facebook

Workshops

Eve Hoggan, Helsinki Institute of Technology
Frank Vetere, University of Melbourne
Sanjay Kairam, Stanford University
Siân Lindley, Microsoft

Interactivity

Julie Williamson, University of Glasgow
Amanda Williams, Wyld Collective, Ltd.
Cesar Torres, Berkeley
Sean White, Mozilla

alt.chi

Janet Vertesi, Princeton University
Silvia Lindtner, University of Michigan
Morgan Ames, UC Irvine

Courses

Wendy Ju, Stanford University
Joy Mountford, Akamai Technologies

Case Studies

Kaisa Väänänen, Tampere University of Technology
Susan Dray, Dray Associates
Suzanne Currie, GE Research
Richard Anderson

Arts Exhibit

Ernest Edmonds, University of Technology, Sydney
Jason Challas, West Valley College

Panels

Franca Garzoto, Politecnico di Milano
Jamie Teevan, Microsoft
Moira Burke, Facebook

Doctoral Consortium

Yvonne Rogers, University College London
Alan Borning, University of Washington
Hilary Hutchinson, Google

Special Interest Groups

Simone Barbosa, PUC-Rio
Regina Bernhaupt, Ruwido

Video Showcase

Kurt Luther, Virginia Tech
Rodrigo de Oliveira, Youtube / Google
Catherine Letondal, ENAC
Hyun Jean Lee, Yonsei University
Jude Yew, University of Singapore
Jaz Choi, Queensland University of Technology

Video Previews

Justin Matejka, Autodesk
Jarrod Knibbe, University of Bristol

Student Design Competition

Anirudha Joshi, India Institute of Technology Bombay
Scott L. Minneman, California College of the Arts

Student Game Competition

Katherine Isbister, New York University
Florian 'Floyd' Mueller, Royal Melbourne Institute of Technology
Jessica Hammer, Carnegie Mellon University

Student Research Competition

Jerry Fails, Montclair State University
Tilde Bekker, University of Eindhoven

Technical Program Chair Emeritus

Kori Inkpen, Microsoft

Student Volunteers

Siroberto Scerbo, Virginia Tech
Anna Kötteritzsch, Universität der Bundeswehr München

Social Impact

Liz Geber, Northwestern University
Kathy Baxter, Salesforce
Dan Russell, Google

Design

Markus Lorenz Schilling, Simon Fraser University
Toni-Jan Keith Monserrat, University of the Philippines
Los Baños

Data Chairs

Max van Kleek, University of Southampton
BoYu Gao, Konkuk University

Program/Proceedings

Lora Oehlberg, University of Calgary
Jaejeung Kim, KAIST

Local Arrangements

Tara Matthews, Google
Molly Mackinlay, Google

Operations

Bobby Beaton, Virginia Tech

Child Care

Louise Barkhuus, University of Stockholm
Judd Antin, Facebook

Diversity & Inclusion Chairs

Anke Brock, Inria Bordeaux
Daniela Busse, Citi Ventures
Dalila Szostak, Google Ideas
Gopinaath Kannabiran, Indiana University

Accessibility

Shaun Kane, UC Boulder
Mike Shebanek, Yahoo
Susumu Harada

Journals Liason

Jeff Nichols, Google

Awards

Jon Froehlich, University of Maryland

Arts Awards

Celine LaTulipe, UNC

Video Examples

Dave Green, Newcastle

SIGCHI Video Liason

David Lindlbauer, TU Berlin

Posters

Sarah Vieweg, Qatar Computing Research Institute

lunch@chi

Hajin Lim, Cornell University
Ali Alkhatib, Stanford University

Telepresence

Carman Neustaedter, Simon Fraser University
Irene Rae, Microsoft

Media

Max Wilson, Nottingham University
Vicky McArthur, University of Toronto
Dan Afergan, Google

VC Office Hours

Manu Kumar, K9 Ventures
Sean White, Mozilla

Welcome Reception

Jeffrey Bigham, CMU

Templates Redesign

David Ayman Shamma, Yahoo
Jofish Kaye, Yahoo

Keywords Redesign

Frank Bentley, Yahoo

CHI2016@CHI2015 Closing Plenary Design

Asreen Rostami, Stockholm University

CHI2016 Plenary Planning

Danielle Lottridge, Yahoo

Conference Committee Alumni

Leila Takayama, Google X
Mona Leigh Guha, University of Maryland
Anthony Andre, SJSU
Michael Muller, IBM
Mark Handel, Facebook

SIGCHI Technical Liaison

Scooter Morris, UC San Francisco
Sara Drenner

ACM Liaison

Ashley Cozzi

Communication Strategy

Lexi Mills, Manyminds Digital

Sponsorship & Exhibits

Carol Klyver, Foundations of Excellence

Conference Management

Janeé Pelletier, C&LC
Allison Perrelli, C&LC
Stacey Ogren, C&LC

Registration

Yvonne Lopez, Executive Events, Inc.
Brooke Daley, Executive Events, Inc.
Taylor Vick, Executive Events, Inc.

PAPERS & NOTES ASSOCIATE CHAIRS

Papers & Notes ACs

Technology, Systems, and Engineering

Subcommittee Chairs:

Carl Gutwin, University of Saskatchewan
Caroline Appert, Université Paris-Sud

Andrea Bunt, University of Manitoba
Emmanuel Pietriga, Inria
Erin Solovey, Drexel University
James Fogarty, University of Washington
Jeffrey Bigham, Carnegie Mellon University
Jessica Cauchard, Stanford University
Jörg Müller, Aarhus University
Michael Nebeling, Carnegie Mellon University
Michael Rohs, Leibniz Universität Hannover
Nicolas Roussel, Inria
Scott Bateman, University of New Brunswick
Stephen Volda, University of Colorado Boulder

Specific Application Areas

Subcommittee Chairs:

Alexander De Luca, Google
Chris Quintana, University of Michigan
Jeff Heer, University of Washington
Julie Kientz, University of Washington
Leah Findlater, University of Maryland
Mike Hazas, Lancaster University

Allison Woodruff, Google
Amy Hurst, University of Maryland Baltimore County
Amy Ogan, Carnegie Mellon University
Andrea Bianchi, KAIST
Angela Sasse, University College London
Anind K Dey, Carnegie Mellon University
Anne Marie Piper, Northwestern University
Betsy DiSalvo, Georgia Institute of Technology
Brian Bailey, University of Illinois Urbana-Champaign
David Flatla, University of Dundee
Eelke Folmer, University of Nevada, Reno
Eun Kyoung Choe, Pennsylvania State University
Florian Block, Harvard University
Florian Schaub, Carnegie Mellon University
Gabriela Marcu, Drexel University
Gavin Doherty, Trinity College Dublin
Hao-Hua Chu, National Taiwan University
Jason Yip, University of Washington
June Ahn, University of Maryland College Park
Karyn Moffatt, McGill University
Lauren Wilcox, Georgia Institute of Technology
Lena Mamykina, Columbia University
Lilly Irani, University of California San Diego
Maria Håkansson, Chalmers University of Technology
Mark W Newman, University of Michigan
Marshini Chetty, University of Maryland College Park
Melissa Densmore, University of Cape Town
Mikael B Skov, Aalborg University
Miriah Meyer, University of Utah
Nathalie Henry-Riche, Microsoft
Nicki Dell, University of Washington
Niklas Elmqvist, University of Maryland College Park
Paul Dunphy, Atom Bank (UK)
Predrag Pedja Klasnja, University of Michigan
Ranjitha Kumar, University of Illinois Urbana-Champaign
Remco Chang, Tufts University
Robert Comber, Newcastle University
Serge Egelman, University of California, Berkeley / ICSI
Steve Oney, University of Michigan
Svetlana Yarosh, University of Minnesota
Tiago Guerreiro, University of Lisbon
Walter S Lasecki, University of Michigan
Wesley Willett, University of Calgary
Yang Wang, Syracuse University
Zhicheng Liu, Adobe Research

Games and Play

Subcommittee Chairs:

Florian Müller, RMIT University
Kathrin Gerling, University of Lincoln
Regan Mandryk, University of Saskatchewan

Ben Schouten, Eindhoven University of Technology
Bonnie Nardi, University of California Irvine
Conor Linehan, University College Cork
Daniel Johnson, Queensland University of Technology
Dennis Wixon, University of Southern California
Heather Desurvire, User Behavioristics Inc.
Janet C Read, University of Central Lancashire
Katherine Isbister, New York University
Lennart Nacke, University of Waterloo
Mark Hancock, University of Waterloo
Nicholas Graham, Queen's University
Perttu Härmäläinen, Aalto University
Rilla Khaled, Concordia University
Sebastian Deterding, Northeastern University
Vero Vanden Abeele, KU Leuven
Zachary O Toups, New Mexico State University

Social Computing and Computer-Supported Cooperative Work

Subcommittee Chairs:

N Sadat Shami, IBM
Pernille Bjørn, University of Copenhagen

Anbang Xu, IBM Research
Antonella De Angeli, University of Trento
Brent Hecht, University of Minnesota
Brian Keegan, Harvard University
Claudia Müller, University of Siegen
Dan Cosley, Cornell University
Daniela Rosner, University of Washington
Gunnar Stevens, University of Siegen
Hilda Telliloglu, Vienna University of Technology
Ingrid Erickson, Rutgers University
Jacki O'Neill, Microsoft
Mark Ackerman, University of Michigan
Michael Bernstein, Stanford University
Michael Muller, IBM Research
Michael Prilla, Ruhr University of Bochum
Maira Burke, Facebook
Munmun De Choudhury, Georgia Tech
Myriam Lewkowicz, Troyes University of Technology
Patrick Shih, Indiana University
Richard Harper, Microsoft
Sarita Yardi Schoenebeck, University of Michigan
Scott Robertson, University of Hawaii
Susanne Bødker, Aarhus University
Victoria Sosik, Google
Volker Wulf, University of Siegen

User Experience and Usability

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Understanding People: Theory, Concepts, Methods

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ALT.CHI JURY & LATE-BREAKING WORK ASSOCIATE CHAIRS

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Alex Taylor, Microsoft Research UK
Brenda Laurel, UC Santa Cruz
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Nimmi Rangaswamy, Xerox Research Center Bangalore

Late Breaking Work ACs

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Fraser Anderson, Autodesk Research
Salvatore Andolina, University of Helsinki
Michelle Annett, Autodesk Research
Ahmed Arif, Ryerson University
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Vassilis-Javed Khan, Eindhoven University of Technology
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Andrew MacFarlane, City University London
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Horia Alexandru Maior, The University of Nottingham
Aqueasha M. Martin-Hammond, University of Maryland Baltimore County
Donald McMillan, SICS
Roisin C McNaney, Newcastle University
Andrew D Miller, Georgia Institute of Technology
Aliaksei Miniukovich, University of Trento
Fabio Morreale, University of Trento
Omar Mubin, University of Western Sydney
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GENERAL INFORMATION

ACM SIGCHI

CHI 2016 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 12:50-14:30 in 230C or visit www.sigchi.org to learn more about SIGCHI. We also have a Youtube channel <https://www.youtube.com/user/acmsigchi> and an active Tumblr at sigchi.tumblr.com where we document the discussion and process around the development of CHI.

Membership Information

Please contact ACM's Member Services Department

Online: www.acm.org

Tel: +1-800-342-6626 (USA/Canada)
+1-212-626-0500 (International)

Fax: +1-212-944-1318

Email: acmhelp@acm.org

Write: Association for Computing Machinery, Inc.
General Post Office
P.O. Box 30777 New York, NY
10087-0777, USA

CHI INFORMATION AND POLICIES

Name Badges

Your CHI 2016 name badge serves as your admission pass to conference sessions and events. Please wear your name badge at all times while inside the San Jose Convention Center. Conference management reserves the right to deny admission to anyone not wearing a CHI 2016 name badge.

Student Volunteers

Room 212

CHI 2016 has over 150 Student Volunteers, easily identified by their brightly colored SV t-shirts. Most are graduate students in HCI and some are seeking jobs or internships.

Media/Press Office

Room 213

CHI 2016 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 2016, SIGCHI, and future CHI conferences. CHI 2016 media coordinators are happy to schedule interviews with select authors at the conference. Media Office hours are the same as the Registration Desk.

Child Care

Room 230AB

Pre-registration required

This year, childcare is available at the conference center by reservation or walk-up (subject to availability) in room 230A. The care is available for children 6 months to 12 years old from 8:30 a.m. to 5 p.m. Saturday-Sunday, and from 8:30 a.m. to 1 p.m. and 2:30 p.m. to 6 p.m. Monday through Thursday. The carers are from a professional childcare company, Kiddie Corp, all of whom are CPR/first aid certified and with child care experience. The childcare has activities and play materials such as arts and crafts as well as appropriate toys for babies (including baby bouncers) as well as a quiet area for napping with blankets and pillows.

Nursing Room

Room 232

A room for nursing mothers with a fridge is available on request. Please contact the conference office (Room 211A) to schedule time and for the key.

Telepresence Robots

Pre-registration required

This year we are providing the opportunity for a small number of people to remotely attend the CHI conference via telepresence robot, or Beam. Our goal is to increase access to the conference for remote participants who would otherwise be unable to attend due to mobility impairments, chronic health issues, or temporary travel limitations. To evaluate the viability of using these telepresence technologies at future CHI conferences, we'll also be collecting feedback on any interactions you have with the telepresence robots. So tweet your photos with hashtag #beamatCHI, fill out a survey at <http://tinyurl.com/chi2016beam>, and if you see someone using one, feel free to say hi!

Internet Café

Hall 1/Hall 2

Enjoy chatting with colleagues during the breaks at the Internet Café, located next to the Exhibits, Interactivity and Posters in Hall 1/Hall 2. CHI 2016 provides access to power for your mobile devices in addition to wireless access.

Wireless Access

CHI 2016 offers wireless high-speed internet access throughout the San Jose Convention Center. Please be considerate of your colleagues and limit your time spent online and any unnecessary bandwidth usage. Use the SSID WickedlyFastWifi. There is no password required.

Blogging & Photosharing

CHI encourages attendees to blog, tweet and share photos using the hashtag #chi2016.

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. It is prohibited to audio or video record any talks or presentations.

TECHNICAL PROGRAM OVERVIEW

Audience Questions

Keynotes, Plenaries and selected technical program sessions will use sli.do to organize and moderate questions. Visit <http://sli.do>, use the event code #chi2016, and select your room to ask or vote for questions.

Smoking Policy

By California state law, and in the interest of public health, the Convention Center has adopted a non-smoking policy. Smoking outside of the facility is only permitted at a distance of 25 ft. from the building.

Tippling in the United States

In the US, you should typically tip restaurant staff 15% of the pre-tax bill, or more, as their wages are frequently dependent on tips. Individual drinks at a bar should be tipped \$1-2 per drink.

DIVERSITY AND INCLUSION STATEMENT

The open exchange of ideas and the freedom of thought and expression are central to the aims and goals of the CHI 2016 conference. The organizers of CHI 2016, aim and commit to providing a harassment-free, accessible, and pleasant conference experience with equity in rights for all. We want every participant to feel welcome, included, and safe at the conference. Moreover, we will do our best to accommodate specific needs – be it child care, accessibility, or dietary requirements. We cannot promise to solve every issue, but will try our best.

We aim to provide a safe, respectful, and harassment-free conference environment for everyone involved regardless of age, sex, gender, gender identity and expression, sexual orientation, (dis)ability, physical appearance, race, ethnicity, nationality, marital status, military status, veteran status, religious beliefs, dietary requirements, childbirth- and pregnancy-related medical conditions or childcare requirements. We also respect any other status protected by laws of the country in which the conference or program is being held.

We do not tolerate harassment of conference participants. Harassment includes but is not limited to overt and/or covert acts of:

- Verbal accusations or bullying
- Deliberate intimidation, stalking, or following both in person and online
- Harassing photography or recording
- Sustained disruption of talks or other events
- Interference with a person's participation or opportunity for participation
- Inappropriate physical contact
- Unwelcome sexual attention
- Advocating for, or encouraging, any of the above behaviour

We expect participants to follow these rules during all conference events (workshops, SIGs, panels, etc.) as well as official social media representing the events. Conference participants violating these rules may be sanctioned or expelled from the conference (without a refund) at the discretion of the conference organizers. A response that the participant was “just joking,” or “teasing,” or being “playful,” will not be accepted.

Anyone witnessing or subject to unacceptable behavior should notify individual members of the Diversity Committee, the General Chairs, or the Diversity Committee directly at diversity@chi2016.acm.org

TECHNICAL PROGRAM OVERVIEW

CHI 2016 received over 3500 submissions and accepted over 1000 presentations and events distributed across 17 parallel sessions over four days. The CHI 2016 Proceedings and Extended Abstracts is over 7500 pages.

There is a wide variety of technical content for you to attend at the conference. It includes Papers and Notes, papers from selected journals, as well as Courses, Case Studies, Panels, alt.chi, SIGs, Video Showcase, and poster presentations and demos from Late-Breaking Work, Interactivity and Interactivity Research Demos, the Doctoral Consortium, the Student Research Competition, the Student Design Competition and the Student Game Competition, as well as the Arts Exhibit.

We distinguish between two categories of CHI material in the ACM Digital Library. Papers and Notes are the most rigorously peer reviewed and prestigious material presented at the conference, and are collected in the Conference Proceedings. The other categories of work are represented in the Extended Abstracts. These are peer-reviewed, juried, or curated, and reflect the breadth of education, research, design, artistic, scientific exploration and engineering activity within the HCI community. Most content is available on the ACM Digital Library at <http://dl.acm.org>. In addition, journal papers are archived in their respective journals.

Navigating CHI 2016: How do you choose?

With so many presentations happening at once, how do you choose? CHI 2016 offers the following resources to help you make the most of your conference experience:

- There is a [Newcomers Reception](#) on Sunday night, 5:00pm-6:30pm in the Almaden Ballroom, in the Hilton San Jose. This is a great opportunity to meet local people, find like-minded attendees and to discuss plans for catching great content during the conference.
- This [CHI 2016 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.
- The free [CHI 2016 Mobile App](#) (downloadable from Apple's App Store and Google Play) contains the full CHI 2016 program as well as a personal interactive schedule to help you keep track of events you would like to see. The CHI 2016 Proceedings and Extended Abstracts as well as Video Previews can be loaded into the Mobile App for easy access.
- The [CHI 2016 Video Previews](#) are 30-second video overviews of most presentations in the main technical program. You can browse them through the Mobile App. Video Previews are also available on the ACM SIGCHI Youtube channel.
- The CHI 2016 schedule is also available through [Confer](#), a tool for conference attendees to discover papers of their interest, get paper recommendations and create their personal schedule. <http://confer.csail.mit.edu/chi2016/papers>

TECHNICAL PROGRAM OVERVIEW

Papers & Notes

20-minute presentations for Papers; 10-minute for Notes

These rigorously peer-reviewed presentations are equivalent to journal papers in other fields, and form the core of CHI's technical program.

Case Studies

20-minute presentations

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

Panels

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 HCI.

alt.chi

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.

Courses

1, 2, 3 or 4 80-minute units

List on page 54

CHI 2016 offers a wide variety of courses designed to appeal to our diverse audience of researchers, practitioners, designers, developers, managers and students. You must pay the Courses registration fee before attending a course at the Registration Desk to receive a ticket to attend the course.

Special Interest Groups (SIGs)

80-minute sessions

List on page 68

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

Video Showcase

Room 220ABC

60-minute session

Monday 10:00-11:30

List on page 55

Videos offer a variety of perspectives on HCI, including novel interfaces, reflective pieces and future environments. The Video Showcase highlights the best videos on Monday during the first coffee break from 10:00 - 11:30 am, immediately after the plenary.

Interactivity & Interactivity Research Demos

Hall 1/Hall 2

Hands-on demonstrations

List on page 56

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 2016 Conference Reception and Exhibits Grand Opening (Monday 9 May, 17:30, Hall 1/Hall 2) and throughout the conference during breaks. Dark Interactivity (Room 111) features interactive exhibits that require darkness.

Doctoral Consortium

Hall 1/Hall 2

List on page 58

Doctoral Consortium posters will be on display in Hall 1/Hall 2. Doctoral Consortium students are available to discuss their research during the Conference Reception and during the Tuesday morning coffee break.

Student Research Competition

Room 220A

Posters and 80-minute session

Wednesday

List on page 58

The Student Research Competition (SRC) is a branch of the ACM Student Research Competition. Students' posters are on display in Hall 1/Hall 2 on Tuesday morning. The SRC jury selects finalists who present their work and answer questions in a closed session on Tuesday (9:50-10:30, room 211B). Final presentations are held on Wednesday (16:30, room 220A). Winners are announced at the Closing Plenary.

Student Design Competition

Room 220A

Posters and 80-minute session

List on page 59

The Student Design Competition (SDC) challenges students from around the globe to design an object, interface, system, or service related to assistive technologies. Monday 10:00-11:30 (Room 210D) is the Closed Jury Session. Semifinalist posters are displayed in the Exhibit Hall 1&2 Poster Area during the first poster rotation on Monday and Tuesday. The SDC jury selects four finalists to present on Wednesday at 14:30 (Room 220A). The winner is announced at the Closing Plenary.

Student Game Competition

Finals in Room 220A

Demonstrations and 80-minute session

List on page 59

The Student Game Competition (SGC) challenges students to design games in three categories: Games for a Purpose, Innovative Interface, and Innovative Game Design. Students demonstrate their games in the Hall 2 Concourse on Monday and Tuesday during the coffee breaks. The final is held on Wednesday from 11:30 to 12:50 in room 220A. Winners are announced at the Closing Plenary.

Late Breaking Work (LBW)

Hall 1/Hall 2

List on page 60

A Late-Breaking Work submission is a concise report of recent findings or other types of innovative or thought-provoking work relevant to the CHI community. Late-Breaking Work submissions represent work that has not reached a level of completion or maturity that would warrant the full refereed selection process. Submissions report on cutting edge or emerging work that has not been fully realized or developed, for which empirical data may not yet be available, or that has not yet reached a level of maturity expected for a Paper or Note submission. Rotation 1 posters appear on Monday and Tuesday; authors are available to discuss their work on Monday (15:50) and Tuesday (10:50). Rotation 2 posters appear on Wednesday and Thursday; authors are available to discuss their work on Wednesday (15:50) and Thursday (10:50).

Art Exhibition

Works/San Jose, 365 S Market Street

A public exhibition of interactive art, "Inter/Action: digital art that responds" is presented by ACM SIGCHI CHI 2016 and Works/San Jose. The exhibition documents a selected history of interactive art and show new work selected from submissions to CHI 2016. The exhibition extends beyond the CHI 2016 conference, through the end of May. An illustrated catalogue is available and descriptions are included in the Extended Abstracts. Works/San Jose is an art and performance center located on the Market Street edge of the San José Convention Center, 365 S Market Street.

Open: Monday-Thursday 11:00 - 19:30
Opening Reception: Tuesday 18:00 - 20:00

OPENING HOURS & SPECIAL EVENTS

OPENING HOURS

Registration and Merchandise Desk

Register for the CHI 2016 Conference and Courses (subject to availability) at the Registration Desk located at the Hub. CHI 2016 Merchandise, including hoodies, onesies, T-shirts, water bottles, sweatshirts, and limited-edition CHInosaurs are available for purchase beginning at 12:00 on Monday, subject to availability. Non-member registrations include a one-year ACM and SIGCHI membership.

Sunday	08:00 – 18:00	The Hub
Monday	07:30 – 18:30	The Hub
Tuesday	08:00 – 18:00	The Hub
Wednesday	08:00 – 17:30	The Hub
Thursday	08:00 – 17:00	The Hub

Main Exhibit Hall

Hall 1/Hall 2

At the Main Exhibit Hall you can enjoy a beverage and light snack during coffee breaks, talk with colleagues or explore Exhibits, Posters and Interactivity demonstrations and performances. Opens on Monday evening.

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

Coffee Breaks

Regularly scheduled morning and afternoon coffee breaks are complimentary for all registered CHI 2016 attendees.

Monday	10:50 – 11:30	Main Concourse
	15:50 – 16:30	Main Concourse
Tuesday	10:50 – 11:30	Hall 1/Hall 2
	15:50 – 16:30	Hall 1/Hall 2
Wednesday	10:50 – 11:30	Hall 1/Hall 2
	15:50 – 16:30	Hall 1/Hall 2
Thursday	10:50 – 11:30	Hall 1/Hall 2
	15:50 – 16:30	Main Concourse

Speaker Ready Rooms

Room 231A, Room 231B

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.

Sunday	8:00 – 17:00
Monday	8:00 – 17:00
Tuesday	8:00 – 17:00
Wednesday	8:00 – 17:00
Thursday	8:00 – 14:30

SPECIAL EVENTS

#CHI4good Day of Service

Saturday 7 May

Open to All Attendees, Pre-registration required.

The #CHI4good Day of Service provides a valuable opportunity for teams of people with diverse perspectives to engage in meaningful volunteer opportunities. #CHI4good activity will be highlighted throughout the conference. CHI is partnering with Benetech to bring over a dozen non-profits to the San Jose Convention Center to enable CHI attendees to leverage their skills to make an impact. These non-profit organizations may be in support of the arts, cultural heritage, education, environmental science, social justice and more. The volunteer work that people are doing ranges from helping critique a website, to brainstorming new ideas for an app, to mentoring kids in Hour of Code.

Doctoral Consortium

Saturday 7 May & Sunday 8 May

Room LL21A

Invitation Only

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 Hall 1/Hall 2 and brief descriptions appear in the CHI 2016 Extended Abstracts. The Doctoral Consortium is partially sponsored by the National Science Foundation (Proposal #1624025).

Workshops & Symposia

Saturday 7 May & Sunday 8 May

Invitation Only

Various Locations in the San Jose Convention Center

Workshops and Symposia 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. Participants are pre-selected based on submitted position papers and a brief description of each workshop appears in the CHI 2016 Extended Abstracts.

Newcomer Welcome Reception

Sunday 8 May

Almaden Ballroom, Hilton San Jose

17:00 – 18:30

New to CHI? Join us for a welcome reception! Newcomers to CHI will be welcomed by a variety of Bay Area and CHI special interest groups, including CHILGBT, BayCHI, UC Berkeley, San Jose State University, and the CHI Accessibility community.

lunch@chi

Monday 9 May

Open to All Attendees

12:50 – 14:50

Pre-registration required

Meet at your restaurant as per the email you received.

The CHI 2016 conference is excited to host its first lunch@chi this year. You'll get the chance to form lasting relationships with people you might not have otherwise had the opportunity to meet in the hustle and bustle of a conference consisting of thousands of people. We hope this lunch will prove to be a unique opportunity for you to get to know people at myriad points in their careers and at various institutions.

SPECIAL EVENTS

Conference Reception & Exhibits Grand Opening Hall 1/Hall 2

Catch up with old friends and meet new ones at the CHI 2016 Conference Reception and explore almost 80 hands-on demonstrations and performances at the Grand Opening of Exhibits and Interactivity. 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.

Diversity & Inclusion Lunch

Room 220BC

Tuesday 10 May

12:50-14:50

Open to All Attendees, Pre-registration through regonline required

The CHI 2016 conference is hosting its first Diversity and Inclusion Lunch. Building upon the tradition of 'CHI Women's Breakfast' at previous conferences, this lunch is both an expansion of scope and deepening of engagement with multiple aspects of diversity and inclusion. These issues include but are not limited to race, ethnicity, geolocation, and culture; age and professional experience; gender identity and sexual orientation; (dis)ability and impairments; religious beliefs; work-life-balance and needs of parents and families at CHI. This lunch is intended as a social-peer platform to celebrate diversity, discuss challenges, and collaborate on strategies to bolster diversity and inclusion in the CHI community.

CHI Chairs AMA

Room 220A

Tuesday 10 May

14:30-15:50

Ask Me Anything! The CHI chairs for 2016, 2017 and 2018 sit in a room and answer your questions.

Venture Capitalist Office Hours

Sign-up Required. See <https://chi2016.acm.org/wp/vc/>

As CHI 2016 comes to Silicon Valley, we decided to bring some of Silicon Valley to CHI as well. As an experimental session, we're inviting several prominent investors to come and host office hours at CHI. The goal of this session is to allow CHI speakers and presenters to speak 1:1 with investors who have helped build some of the hottest tech companies in the world and have their questions answered and get feedback on the commercial potential of their research. Please note that this is not a venue to pitch investors, but it is a venue to talk about your research, explore the different avenues for commercialization of your research, and get feedback and pointers from investors on what to think about and how to get started.

Arts Exhibition Opening Reception

Works/San José, 365 S Market Street

Tuesday 10 May

18:00-20:00

Join us for an opening reception on Tuesday evening at Works/San José. Conference attendees are encouraged to attend this inaugural CHI Art Exhibit, which is open to the public, and mingle with the artists.

Job Fair & Recruiting Boards

Hall 1/Hall 2

Recruiters and job candidates are invited to take advantage of the CHI 2016 Job Fair on Tuesday evening. Visit the Recruiting Boards and designated exhibit booths throughout the conference to find out more about available positions.

Hero Sponsor Recruiter

Infosys

Booths 601/602

Champion Sponsor Recruiters

Bloomberg

Recruiting Board

Facebook

Booths 104/105

Google

Booths 504/505

IBM Research

Booth 400

Microsoft

Booths 100/101

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Booth 405

Contributing Sponsor Recruiters

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Additional Recruiters

[24]7 Inc.

Recruiting Board

Alibaba Group

Booth 309

Apple, Inc.

Booth 305a

Bentley University

Recruiting Board

Fitbit

Booth 302

Ford Motor Company

Recruiting Board

Iowa State University

Booth 305

ACM SIGCHI Town Hall Meeting

Room 210BF

Wednesday 11 May

12:50-14:30

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.

Hospitality Receptions

Various locations

Wednesday 11 May

Evening

Private and public receptions are hosted by companies, universities and other organizations. Some require invitations. Others are open to all CHI attendees, and your badge is your ticket. Enquire at exhibitor booths.

Last-Minute SIGs

Want to organize a last minute meeting? Reserve a timeslot at the Conference Office (Room 211A) and publicize using the hashtag #chi2016.

Monday - Thursday

Open Houses/Facility Tours

Various locations, see chi2016.acm.org/wp/open

Friday 13 May

Some companies with local offices offering open houses or tours on Friday 13 May (the day after CHI ends), open to CHI attendees. You may learn more about these opportunities by going to the CHI web site for details on how to contact host organizations to receive details about participation. These events are not CHI events; they are the sole responsibility of the hosting organization. To reserve your spot, please RSVP by May 10th at chi2016.acm.org/wp/open.

AWARDS

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. The criteria for the award are:

- Cumulative contributions to the field.
- Influence on the work of others.
- Development of new research directions.

Bob Kraut is the Herbert A. Simon Professor of Human-Computer Interaction in the School of Computer Science and Tepper School of Business at Carnegie Mellon University and one of the founding members of CMU's Human-Computer Interaction Institute. Previously he was a professor at the University of Pennsylvania and Cornell University and a research scientist at Bell Laboratories and Bell Communications Research. Bob is a social psychologist with broad interests in the impact of computing and telecommunications on individuals, groups and organizations and ways to design them to improve human lives. He has conducted empirical research on online communities, the social impact of the Internet, the design of information technology for small-group intellectual work and related topics. Starting with his HomeNet project, he has spent over 15 years conducting research to understand how the way people use technology influences their psychological well-being and personal relationships. His research on online communities combines careful empirical studies of communities with interventions and design ideas to improve them. This approach is illustrated in his book with Paul Resnick, *Building Successful Online Communities: Evidence-Based Social Design*. His most recent research focuses on ways to improve productivity and creativity in online production.

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. The criteria for the award are:

- Cumulative contributions to the field directly and through the leadership of others.
- Innovation and the stimulation of innovation through practice.
- Impact on the field, industry, and society.
- Influence on the work of others, and the growth of other HCI practitioners and researchers.
- Successful application of human-computer interaction to products, services, and systems.

Jeff Johnson is President and Principal Consultant at UI Wizards, Inc., a product usability consulting firm. He also is a principal at Wiser Usability, a consultancy focused on elder usability and universal accessibility. He has worked in HCI since 1978. After earning B.A. and Ph.D. degrees from Yale and Stanford, he worked as a UI designer, implementer, manager, usability

tester, and researcher at Cromemco, Xerox, US West, Hewlett-Packard Labs, and Sun Microsystems. In 1990, he co-chaired the first Participatory Design conference, PDC'90. Since 2004 he has served on the SIGCHI U.S. Public Policy Committee. He has taught at Stanford University, Mills College, and the University of Canterbury. He has been an ACM Distinguished Speaker and in 2014 was inducted into the SIGCHI Academy. He has authored or co-authored many articles and book chapters on a variety of topics in HCI and the impact of technology on society, as well as the books *GUI Bloopers*, *Web Bloopers*, *GUI Bloopers 2.0*, *Designing with the Mind in Mind*, *Conceptual Models: Core to Good Design* (coauthored with Austin Henderson), and *Designing with the Mind in Mind, 2nd Edition*. His forthcoming book, co-authored with Kate Finn, is on designing for an aging population.

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. Criteria for this award are:

- Service to SIGCHI and its activities in a variety of capacities.
- Extended contributions over many years.
- Influence on the community at large.

Gerrit van der Veer developed courses on interactive systems design in universities in Romania, Spain, Germany, The Netherlands, Italy, Belgium, and China. Currently he is supervising PhD students in Belgium, Italy, the Netherlands and China. At the Dalian Maritime University, China, he teaches Usability Engineering, Research Methods for HCI, and Service Design. He published over 200 conference and journal papers, and edited over 10 volumes of research in HCI related domains. His research includes mental models, task analysis, individual differences, user interface architecture, experience design, ICT for cultural heritage, and design for adult learning. With his partner Elly Lammers and with Thomas Green he developed in 1982 the European Association of Cognitive Ergonomics with the annual ECCE conference. In 1989 he joined IFIP TC 13 as well as SIGCHI, aiming at making both organizations more globally active. He was co-chair of the first CHI ever outside North America (Amsterdam 1993). He took many volunteer roles in SIGCHI, including Vice President for Conferences, Chair for CHI 2005 (Portland), and President (2009-2015). He received the IFIP TC13 Pioneer award, and was awarded by the former Dutch Queen (like his wife Elly Lammers) the title of Knight for long term services to society.

SOCIAL IMPACT AWARD

This award is given to individuals who promote the application of human-computer interaction research to pressing social needs. The recipient should have past or current work within the HCI profession that demonstrates social benefit according to criteria such as:

- facilitating use of computer and telecommunication technology by diverse populations
- increasing access to technology for those with limited educational opportunities
- reducing economic barriers for access to information and communication technologies
- promoting privacy, security, trust, and safety

AWARDS

- improving medical care, education, housing, water supplies, and nutrition
- supporting technologies for international development and conflict resolution
- improving human communication and reducing isolation

Dr. Jonathan Lazar is a Professor of Computer and Information Sciences at Towson University, where he serves as director of the undergraduate program in Information Systems. He has authored or edited 10 books, including *Ensuring Digital Accessibility Through Process and Policy* (2015, co-authored with Goldstein and Taylor), and *Research Methods in Human-Computer Interaction* (2010, co-authored with Feng and Hochheiser). Dr. Lazar has published over 140 refereed articles related to web accessibility for people with disabilities, user-centered design, and public policy, and has been granted 2 US patents for his work on web-based security features for blind users. He frequently serves as an advisor to government agencies, regularly provides testimony to legislative committees, and multiple US Federal regulations cite his research. Dr. Lazar has been honored with the 2015 AccessComputing Capacity Building Award (sponsored by the University of Washington), the 2011 University System of Maryland Regents Award for Public Service, and the 2010 Dr. Jacob Bolotin Award from the National Federation of the Blind. In 2012, Dr. Lazar was selected as the Shutzer Fellow at the Radcliffe Institute for Advanced Study at Harvard University, to investigate the relationship between human-computer interaction for people with disabilities, and US Disability Rights Law.

CHI ACADEMY

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

- Cumulative contributions to the field.
- Impact on the field through development of new research directions and/or innovations.
- Influence on the work of others.

Margaret Burnett is a Professor of Computer Science at Oregon State University. She began her career in industry, where she was the first woman software developer ever hired at Procter & Gamble Ivorydale. A few degrees and start-ups later, she joined academia, with a research focus on people who are engaged in some form of software development. She was the principal architect of the Forms/3 spreadsheet language, and pioneered the use of information foraging theory in the domain of software debugging. As founding Project Director of the EUSES Consortium, she and her collaborators re-imagined the area of end-user programming to co-found the area of end-user software engineering. She and her team also performed seminal work that systematically investigates “gender-neutral” software, uncovering pervasive gender bias in software from spreadsheets to programming environments. She has published more than 200 papers, with several receiving best paper awards and honorable mentions, and has presented invited talks and keynotes over her research in 14 countries. Burnett is also an award-winning mentor, particularly to women and underrepresented groups.

Elizabeth Churchill is a Director of User Experience at Google. Her work focuses on the connected ecosystems of the Social Web and Internet of Things. For 2 decades, Elizabeth has been a research leader at well-known corporate R&D organizations including Fuji Xerox’s research lab in Silicon Valley (FXPAL), the Palo Alto Research Center (PARC), eBay Research Labs in San Jose, and Yahoo in Santa Clara, California. Elizabeth has contributed groundbreaking research in a number of areas, publishing over 100 peer reviewed articles, co-editing 5 books in HCI related fields, contributing as a regular columnist for ACM’s interactions magazine since 2008, and publishing an academic textbook, *Foundations for Designing User Centered Systems*. Her upcoming book, *Designing with Data*, will be published in 2016. She has also launched successful products, and has more than 50 patents granted or pending. An ACM Distinguished Scientist and Speaker, Elizabeth has held many leadership roles in SIGCHI, including serving on the SIGCHI Executive Committee for 8 years, 6 years of those as Executive Vice President. Elizabeth’s undergraduate degree was in Experimental Psychology and her Masters in Knowledge Based Systems both from the University of Sussex. Her PhD was from the University of Cambridge in Cognitive Science.

Allison Druin is Special Advisor for National Digital Strategy for the National Park Service, on leave for 2-years from the University of Maryland. Prior to her government work, she was Chief Futurist for the University of Maryland’s Division of Research, a Professor in the iSchool, and a researcher in the Human-Computer Interaction Lab. In her 20 years of research, she has led design teams of children and teens, computer scientists, educators and more to develop new educational technologies for young people with co-design methods. Her research focuses on developing co-design methods that give voice to children in the technology development process. Over the years, her team has created a variety of new technologies, including new mobile storytelling devices, digital libraries to support cultural tolerance, and robotic toys for active learning. She has been honored by SIGCHI for her work by receiving the 2010 SIGCHI Social Impact Award. She has been active as a CHI conference volunteer for over 20 years and is currently conference co-chair for CHI2016. She holds a Ph.D. from the University of New Mexico in K-12 technologies, a M.S. from the MIT Media Lab, and a B.F.A in graphic design from the Rhode Island School of Design.

Susan R. Fussell is a Professor in the Department of Communication and the Department of Information Science at Cornell University. She received her BS degree in psychology and sociology from Tufts University, and her Ph.D. in social and cognitive psychology from Columbia University. Prior to joining Cornell University in 2008, she was an Associate Research Professor in the Human-Computer Interaction Institute at Carnegie Mellon University. From 2010 to 2012, she served as a Program Officer in the Human-Centered Computing cluster in the Division of Information and Intelligent Systems (CISE/IIS) at the National Science Foundation. Susan’s primary interests lie in the areas of computer-supported cooperative work and computer-mediated communication. Her earlier work focused on how gesture, gaze and other communication channels help people coordinate their efforts on physical tasks. Her current projects examine the effects of culture and native language on computer-mediated communication, collaboration among intelligence analysts, tools to motivate people to reduce their energy usage, human-robot interaction, and telepresence robotics.

Yves Guiard, an experimental psychologist specializing in the study of human movement, earned his PhD in cognitive neuroscience from the University of Marseilles, France. He spent two year-long sabbaticals in Britain, one in Oxford (1984-85) and the other in Cambridge, UK, where he was elected a French Government Fellow of Churchill College (1996-97). Now an Emeritus Research Director at the CNRS, he works in Paris in the VIA team of the LTCI, a joint research laboratory between the CNRS and Telecom-ParisTech. The kinematic chain model Yves proposed in 1987 was found useful by HCI researchers a decade later when they began exploring the intriguing possibility of two-handed interaction. His other research interests include stimulus-response compatibility and the speed/accuracy trade-off of aimed movement, currently his main focus. With colleagues and PhD students, he has introduced a number of tricks for facilitating target acquisition in GUIs and has designed and tested many novel interaction techniques, especially for mobile devices. He has extended Fitts' law to the challenges of pointing in multiscale electronic worlds and pleaded for perspective visualization of everyday documents. Yves has sat on several program committees for CHI and is currently an associate editor of ACM TOCHI.

Leysia Palen is Professor and Founding Chair of the Department of Information Science at the University of Colorado Boulder (USA), where is also Professor of Computer Science, and faculty fellow with the ATLAS and Cognitive Science Institutes. She is a Full Adjunct Professor at the University of Agder in Norway. Palen is the author of over 80 manuscripts in the areas of human computer interaction and computer supported cooperative work, with an emphasis on crisis informatics, an area she forged with her graduate students and colleagues at Colorado. For this work, Palen was awarded the 2015 ACM Computer Human Interaction Social Impact Award. Her research is supported by the US National Science Foundation, including a CAREER award. She serves as Associate Editor for the Human Computer Interaction Journal and the Computer-Supported Cooperative Work Journal. Prof. Palen graduated from UCSD with a BS in Cognitive Science, and UCI with an MS and PhD in Information and Computer Science. As an undergraduate, she spent time at the University of Stirling, Scotland, and as faculty member at the University of Aarhus, Denmark and the University of Agder, Norway. She has worked at Boeing Commercial, USWEST Advanced Technologies, Microsoft Commercial and Xerox PARC.

Daniel M. Russell is a senior research scientist at Google where he works in the area of search quality, with a focus on understanding what makes Google users happy in their use of web search. As an individual contributor, Dan is best known for his studies of sensemaking behavior of people dealing with understanding large amounts of information. He has created a Massive Open Online Course (MOOC) called "PowerSearchingWithGoogle.com" which has taught search skills to over 2.8M students. Before joining Google, he also held research positions at IBM's Research Almaden Research Center (San Jose, CA), Apple's Advanced Technology Group (ATG), and Xerox PARC. Dan has also been an adjunct lecturer in computer science at University of Santa Clara and at Stanford University, and is currently an adjunct faculty member at the University of Maryland, College Park. Dr. Russell received his B.S. in Information and Computer Science from U.C. Irvine, and his M.S. and Ph.D. degrees in Computer Science from the University of Rochester (1983). While at Rochester, he did research work in the neuropsychology of laterality, models of apraxia and aphasia, coordinated motor movements and computer vision.

John Stasko is a Professor in the School of Interactive Computing at the Georgia Institute of Technology, and an Honorary Professor in the School of Computer Science at the University of St. Andrews in Scotland. With his students and colleagues, John has published over 170 papers on human-computer interaction and related subareas such as software visualization, computer science education, peripheral and ambient displays, information visualization, and visual analytics. Most recently, his research has focused on developing ways to help people and organizations explore, analyze, and make sense of large amounts of data, primarily through the use of visualization. John received the IEEE VGTC Visualization Technical Achievement Award in 2012, in part for his work on the Jigsaw visual analytics system. He has been on the editorial boards of multiple journals including ACM ToCHI, IEEE TVCG, and Information Visualization. He also has been Papers Co-Chair of the IEEE InfoVis and VAST Conferences, and General Chair of the IEEE VIS meeting in 2013.

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.

In addition to the Papers & Notes awards, there are four Best Late Breaking Work awards and ten Honorable Mention Late Breaking Work awards, out of 647 submissions, as well as one Best Case Study and two Honorable Mention Case Studies, out of 105 submissions. These are marked with the medallion and trophy icons in the program. Winners of the Student Competitions are announced in the Keynote sessions. We also have two special award categories: Interactive Art Awards and the Golden Mouse. Congratulations to the 2016 award winners and nominees for their outstanding contributions to CHI 2016 and to our field.

Interactive Art Awards

SIGCHI is giving two interactive art awards. Interactive art can include visual work; music, dance, or theater performance; participatory experiences as well as interactive aesthetic experiences that don't fall into any of the previous categories.



Best Art Paper: Awarded to authors of a paper or note which has generated interactive art work as either the main focus or a byproduct of the research.

Best Interactive Art Piece: Awarded to artist(s) for the best interactive art work submitted to the Art Exhibition or the Art.CHI workshop and catalog. Award criterion include critical engagement and audience impact.

Golden Mouse Award

The Golden Mouse Award has been awarded annually since the creation of the Video Showcase in 2009. It is our "best of show" award and recognizes the best overall submission to the Showcase in terms of both content and presentation value.



Haptic Retargeting Video Showcase: Dynamic Repurposing of Passive Haptics for Enhanced Virtual Reality Experience.

Mahdi Azmandian, Mark Hancock, Hrvoje Benka, Eyal Ofek, Andrew D Wilson

AWARDS

PAST HONOREES

SIGCHI Lifetime Research Award

2015 Jim Hollan
2014 Steve Whittaker
2013 George G. Robertson
2012 Dan Olsen
2011 Terry Winograd
2010 Lucy Suchman

SIGCHI Lifetime Practice Award

2015 Susan M. Dray, Bill Verplank
2014 Gillian Crampton Smith
2013 Jakob Nielsen
2012 Joy Mountford
2011 Larry Tesler
2010 Karen Holtzblatt

SIGCHI Lifetime Achievement Award

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

SIGCHI Lifetime Service Award

2015 Michel Beaudouin-Lafon, Jean Scholtz
2014 Wendy Mackay, Tom Hewett
2013 Joseph A. Konstan
2012 Mike Atwood, Kevin Schofield
2011 Arnie Lund, Jim Miller
2010 Mary Czerwinski
2009 Clare-Marie Karat, Steven Pemberton
2008 John Karat, Marian Williams
2007 Richard I. Anderson
2006 Susan M. Dray
2005 Sara Bly, John 'Scooter' Morris, Don Patterson, Gary Perlman, Marilyn Mantei Tremaine
2004 Robin Jeffries, Gene Lynch
2003 Lorraine Borman
2002 Dan R. Olsen Jr.
2001 Austin Henderson

SIGCHI Social Impact Award

2015 Leysia Palen
2014 Richard E. Ladner
2013 Sara J. Czaja
2012 Batya Friedman
2011 Alan Newell, Clayton Lewis
2010 Allison Druin, Ben Bederson
2009 Helen Petrie
2008 Vicki Hanson
2007 Gregory Abowd, Gary Marsden
2006 Ted Henter
2005 Gregg Vanderheiden

CHI Academy Members

Class of 2015 Stephen Brewster, Andy Cockburn, Anind K. Dey, Ernest Edmonds, Scott MacKenzie, Sharon Oviatt, Catherine Plaisant
Class of 2014 John C. Tang, Jeff A. Johnson, Susan Dray, Jodi L. Forlizzi, Keith Edwards, Ken Hinckley, Richard H.R. Harper, Gary Marsden
Class of 2013 Patrick Baudisch, Victoia Bellotti, Clarisse Sieckenius de Souza, Alan Dix, Rebecca E. Grinter, Eric Horvitz, Bonnie Nardi, Thomas S. Tullis
Class of 2012 Ben Bederson, Steve Benford, Hugh Dubberly, Carl Gutwin, Joy Mountford, Alan Newell, Yvonne Rogers
Class of 2011 Ravin Balakrishnan, Steven Feiner, Joseph Konstan, James Landay, Jenny Preece, Abigail (Abi) Sellen, Dennis Wixon
Class of 2010 Susanne Bødker, Mary Czerwinski, Austin Henderson, David Kieras, Arnie Lund, Larry Tesler, Shumin Zhai
Class of 2009 Mark Ackerman, Bill Gaver, Clayton Lewis, Wendy E. Mackay, Aaron Marcus, Elizabeth Mynatt, Tom Rodden
Class of 2008 Gregory Abowd, Paul Dourish, Wendy Kellogg, Randy Pausch, Mary Beth Rosson, Steve Whittaker
Class of 2007 Joëlle Coutaz, Karen Holtzblatt, Gerhard Fischer, Robert J. K. Jacob, Jun Rekimoto, Chris Schmandt
Class of 2006 Scott Hudson, Hiroshi Ishii, Michel Beaudouin-Lafon, Jakob Nielsen, Peter Pirolli, George Robertson
Class of 2005 Ron Baecker, Susan Dumais, John Gould, Saul Greenberg, Bonnie E. John, Andrew Monk
Class of 2004 George Furnas, Jonathan Grudin, Brad Myers, William Newman, Dan R. Olsen Jr., Brian Shackel, Terry Winograd
Class of 2003 Thomas Green, James D. Hollan, Robert E. Kraut, Gary M. Olson, Peter G. Polson
Class of 2002 William A. S. Buxton, John M. Carroll, Douglas C. Engelbart, Sara Kiesler, Thomas K. Landauer, Lucy A. Suchman
Class of 2001 Stuart K. Card, James D. Foley, Morten Kyng, Thomas P. Moran, Judith S. Olson, Ben Shneiderman

Don't miss the Thursday morning keynote:
Alan Kay in conversation with Vishal Sikka, Infosys CEO

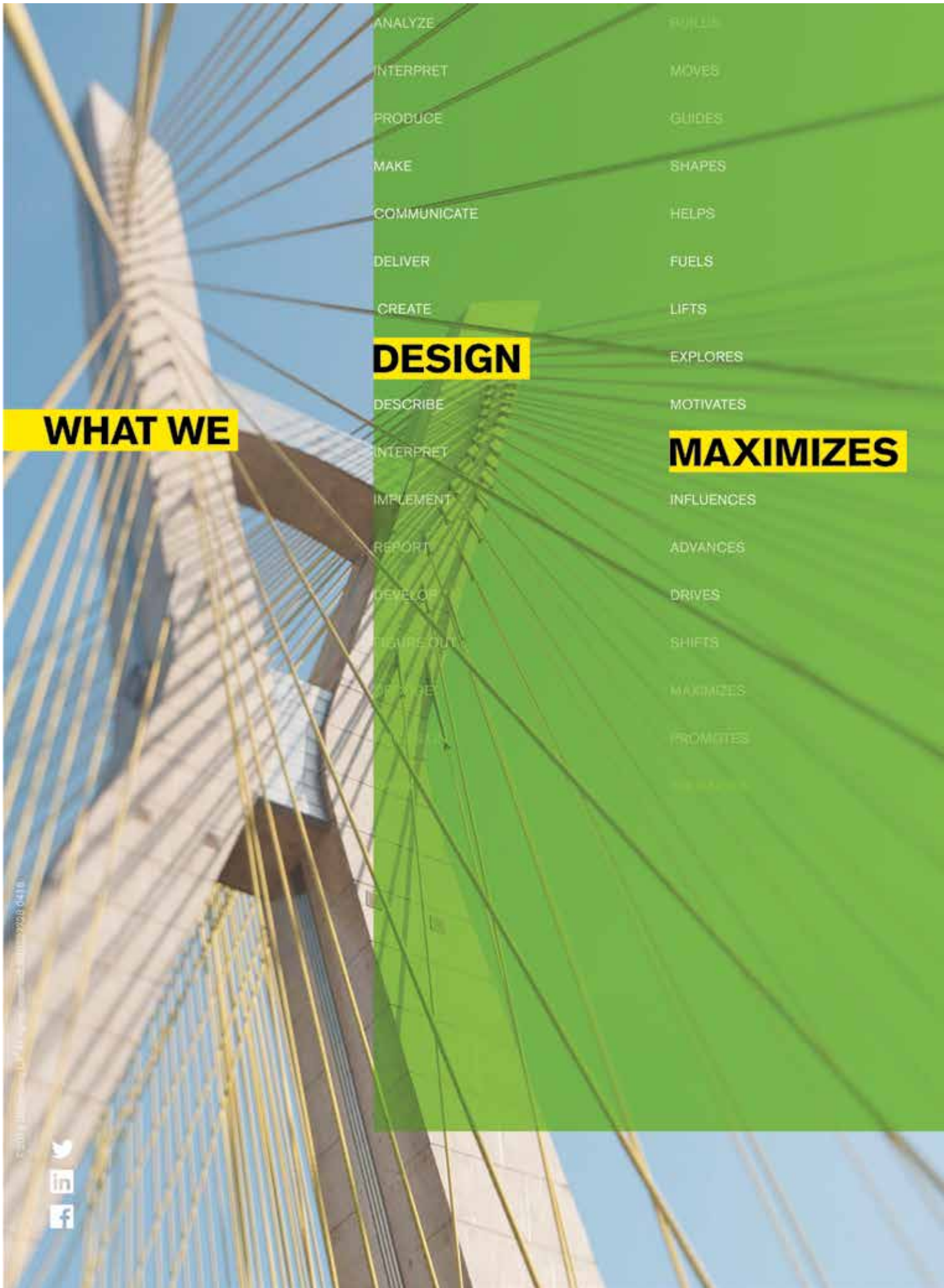
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FIGURE OUT

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FIGURE

BUILDS

MOVES

GUIDES

SHAPES

HELPS

FUELS

LIFTS

EXPLORES

MOTIVATES

MAXIMIZES

INFLUENCES

ADVANCES

DRIVES

SHIFTS

MAXIMIZES

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WHAT WE



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COMPANIES

COMMUNITIES

MARKETS

ECONOMIES

OPINIONS

CULTURES

WEALTH

ENVIRONMENTS

POTENTIAL

OPINIONS

CULTURES

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- Natural Language Processing
- Network
- Operating Systems
- Programming Languages
- Security / Privacy
- Social Computing
- Speech Technologies

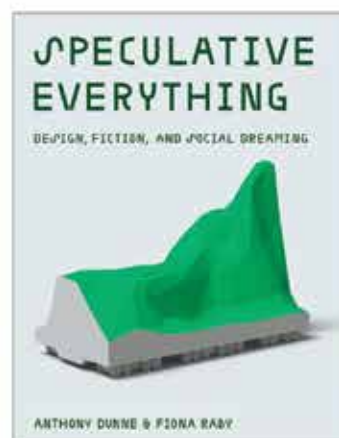
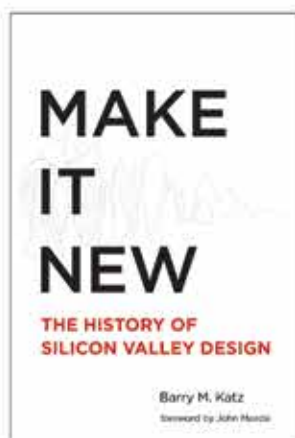


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foreword by John Maeda

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— **Jane McGonigal**, PhD, author of *Reality Is Broken* and creator of SuperBetter

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*We developed our platform in one week
without a front-end developer and become
Korea's largest P2P lending service.*

KEYNOTES AND PLENARIES

Opening Keynote

Monday 9 May, 08:30

Room 220A

Dayo Olopade, Journalist/Author *Bright Continent*

Dayo Olopade speaks, writes, and works on issues relating to Africa, technology, media and development. Dayo Olopade is a Nigerian-American journalist. She began her career at The New Republic, where she covered the 2008 presidential primaries and general election. She covered the first year of Barack Obama's presidency as Washington correspondent for The Root, and the second year as a reporter for The Daily Beast. She has been a Fellow at the New America Foundation, a United Nations Foundation Journalism Fellow, and a visiting scholar with the Rockefeller Foundation. Her work has also appeared in print and online at The American Prospect, The Atlantic, Democracy, Foreign Policy, The Guardian, The Nation, The New York Times and The Washington Post.



In 2010, Dayo moved to Nairobi and over the next two years, traveled through 17 African countries in search of a new narrative for Africa. The end result was a book that asks the world to reimagine the region's challenges as opportunities to innovate: *The Bright Continent: Breaking Rules and Making Change in Modern Africa*. Dayo has also helped to build a new mobile app for the New York Times, *NYT Now*, and co-founded

Kanju Media, a company that empowers short form video creators across the African Diaspora. It supports individuals through strategic partnerships, skills development, and connects commercial companies to Africa's mobile digital youth culture.

Dayo holds two degrees from Yale University: a BA in African Studies and a JD/MBA as a Knight Law and Media Scholar where she focused on technology policy and the information economy.

Tuesday Morning Plenary

Tuesday 10 May, 08:30

Room 220A

Kimberly Bryant, Black Girls Code

in conversation with

Sarah Guthals, co-Founder of ThoughtSTEM

Kimberly Bryant is the Founder and Executive Director of Black Girls CODE, a non-profit organization dedicated to "changing the face of technology" by introducing girls of color (ages 7-17) to the field of technology and computer science with a concentration on entrepreneurial concepts. Kimberly had a 25+ year professional career as an Engineering Manager in the pharmaceutical and biotech industries. Since 2011 Kimberly helped Black Girls CODE grow to an international organization with seven chapters across the U.S. and in Johannesburg, South Africa.

Kimberly serves on the National Champions Board for the National Girls Collaborative Project, and the National Board of the NCWIT K-12 Alliance. In August 2012 Kimberly was given the prestigious Jefferson Award for Community Service for her work supporting Bay Area communities. Kimberly was included in Business Insider's 2013 "The 25 Most Influential African-Americans in Technology" and named to The Root 100 and the Ebony Power 100 lists. Kimberly was invited to the White House in 2013 as a Champion of Change for her work in tech inclusion and for her focus on bridging the digital divide for girls of color. In 2014 Kimberly received an American Ingenuity Award in Social Progress from the Smithsonian and the Inaugural Women Who Rule Award in Technology via Politico. She is a thought leader in tech inclusion and has spoken on the topic at events including Personal Democracy Forum, TedX Kansas City, Platform Summit, Big Ideas Festival and SXSW.

Sarah Guthals received her PhD from UCSD in Computer Science specializing in CS Education in 2014. During graduate school she built the beta version of CodeSpells, a 3D immersive video game designed to teach children to code through playing a wizard and writing "spells".

She went on to co-found ThoughtSTEM, a company that builds software (e.g. LearnToMod), curriculum, and pedagogies for teaching children to code and empowering K-12 teachers to teach their students.

She has written two books around modding Minecraft, launched a Coursera course for teachers interested in teaching coding and was recently named Forbes 30 under 30 in Science. Her passion is making coding accessible to everyone, with the goal of making it a basic literacy.

Wednesday Morning Plenary

Wednesday 11 May, 08:30

Room 220A

Marissa Mayer, President & CEO, Yahoo

in conversation with

Terry Winograd, Professor Emeritus, Computer Science, Stanford University

Marissa Mayer is President & CEO of Yahoo. Since joining Yahoo in 2012, Marissa has led Yahoo's focus as a guide to digital information discovery by informing, connecting, and entertaining users through search, communications, and digital content products. Marissa also helmed Yahoo's efforts across mobile, video, native, and social to transform Yahoo's digital advertising strategy. Under her leadership, Yahoo has grown to serve over 1 billion users worldwide, with over 600 million users now on mobile.

Prior to Yahoo, Marissa was Vice President of Local, Maps, and Location Services at Google. During her 13 years at Google, Marissa held numerous positions, including engineer, designer, product manager, and executive, and launched more than 100 well-known features and products. She played an instrumental role in Google search, leading the product management effort for more than 10 years. Previously, Marissa worked at the UBS research lab in Zurich, Switzerland and at SRI International in Menlo Park, California. She graduated with honors from Stanford University with a BS in Symbolic Systems and a MS in Computer Science.

Marissa serves on the board of directors of Walmart. She is also on the board of the San Francisco Museum of Modern Art and the San Francisco Ballet.

KEYNOTES AND PLENARIES

Terry Winograd's focus is on Human-Computer Interaction (HCI) design and the design of technologies for development. He founded and directed the teaching programs and HCI research in the Stanford Human-Computer Interaction Group. He was a founding faculty member of the Hasso Plattner Institute of Design at Stanford (the "d.school") and on the faculty of the Center on Democracy, Development, and the Rule of Law (CDDRL).

Winograd was a founding member and past president of Computer Professionals for Social Responsibility. He is on a number of journal editorial boards, including Human Computer Interaction, ACM Transactions on Computer Human Interaction, and Informatica. He has written or co-authored five books since 1972, his most recent: *Bringing Design to Software*. He has advised a number of companies started by his students, including Google. In 2011 he received the ACM SIGCHI Lifetime Research Award.

Thursday Morning Plenary

Thursday 12 May, 08:30

Room 220A

Alan Kay, Computing pioneer, Viewpoints Research Institute
in conversation with

Vishal Sikka, CEO Infosys

Alan Kay is best known for pioneering personal and laptop computers, and the inventions of the now ubiquitous overlapping-window interface (GUI), and modern object-oriented programming, as part of the larger Advanced Research Projects Agency and Xerox PARC research communities. He likes to say "No one owes more to his research community than I do".

His deep interests in developing children's learning and thinking were the catalysts for these ideas, and they continue to inspire his research.

He has intertwined "the Arts"—professional jazz musician in his early years, avid classical pipe organist to the present, deep involvements in theater and design—and "the Sciences" (which are also "Arts")—with a B.A. in Mathematics and Molecular Biology, with concentrations in Anthropology and English from the University of Colorado at Boulder, M.S. (1968) and Ph.D degrees in Computer Science from the University of Utah.

Recognition includes the ACM's Turing Award and Software Systems Awards, National Academy of Engineering's Draper Prize, the Kyoto Prize, and other awards and honorary degrees. He is a Fellow of the American Academy of Arts and Sciences, the National Academy of Engineering, the National Association for the Advancement of Science, Royal Society of Arts, and the Computer History Museum.

Vishal Sikka is Director of the Board, and Chief Executive Officer & Managing Director of Infosys. He is featured among the top 50 CEOs in Glassdoor's annual Employees' Choice Awards for the Highest Rated CEOs in 2015. Prior to joining Infosys, Dr. Sikka was a member of the Executive Board of SAP AG, leading all products and technologies, and driving innovation globally. In his 12 years at SAP, Dr. Sikka was instrumental in defining the company's technology and product strategy and architecture. He is credited with creating the in-memory data platform, SAP HANA. He accelerated SAP's development processes, bringing about a focus on design and user experience, transforming the company's innovation culture, expanding engagement with startups and venture investing, and leading product incubation and co-creation with customers. He is also the creator of the concept of 'timeless software', which articulates the principles for

the renewal of products without disruption to customer environments. He is especially known for his championship of technology as an amplifier of human potential, and his passion for applying software in purposeful ways to address some of the biggest global challenges.

His experience includes research in artificial intelligence, intelligent systems, programming languages and models, and information management – at Stanford University, at Xerox Palo Alto Labs, and as founder of two startup companies.

Dr. Sikka received his BS in Computer Science from Syracuse University. He holds a Ph.D. in Computer Science from Stanford University.

Closing Keynote

Thursday 12 May, 16:30

Room 220A

Salman Khan, Founder and CEO, Khan Academy

Salman "Sal" Khan is the founder and Chief Executive Officer of Khan Academy, a not-for-profit with the mission of providing a free, world-class education for anyone, anywhere. Khan Academy is a learning platform which is comprised of instructional videos, practice exercises, dashboard analytics and teacher tools which empower learners in and outside of the classroom to study at their own pace. Khan Academy currently reaches over 37 million registered students in 190 countries, features a library of over 7,000 video lessons in more than 36 languages and covers a variety of subjects from math to science, history, economics, computer science and more.

Khan holds three degrees from MIT and a MBA from Harvard Business School. Khan has been profiled by 60 Minutes, featured on the cover of Forbes Magazine, and recognized as one of TIME Magazine's "100 Most Influential People in the World". In late 2012, Khan released his book *The One World Schoolhouse: Education Reimagined*.

"Education Reimagined"

Join Salman "Sal" Khan as he tells the inspiring story of how he founded the not-for-profit Khan Academy and how the organization is educating millions of people worldwide. Sal will also share his thoughts on what education reimagined could look like and how his dream of "providing a free, world-class education for anyone, anywhere" could become a reality.



MONDAY 11:30 AM - 12:50 PM

210D Course: C01

Research Methods for Child Computer Interaction (1/2)
Janet C Read, Shuli Gilutz

210H Course: C03

Designing with the Mind in Mind: The Psychological Basis for UI Design Guidelines (1/2)
Jeff A Johnson

210C Course: C05

Introduction To Human Computer Interaction (1/2)
Jonathan Lazar, Simone D J Barbosa

210G Course: C06

Personal Fabrication: State of the Art and Future Research
Stefanie Mueller, Patrick Baudisch

210BF Papers: Supporting Vulnerable Populations

Chair: Lynn S Dombrowski
Designing for Transient Use: A Human-in-the-loop Translation Platform for Refugees
Deana Brown, Rebecca E Grinter
Syrian Refugees and Digital Health in Lebanon: Opportunities for Improving Antenatal Health
Reem Talhouk, Sandra Mesmar, Anja Thieme, Madeline Balaam, Patrick Olivier, Chaza Akik, Hala Ghattas
A Real-Time IVR Platform for Community Radio
Konstantinos Kazakos, Siddhartha Asthana, Madeline Balaam, Mona Duggal, Arney Elizabeth Holden, Limalemla Jamir, Saurabh Kumar, Papreen Nahar, Peter Phillimore, Shreyaswi Sathyanath, Pushpendra Singh, Meenu Singh, Pete Wright, Deepika Yadav, Patrick Olivier
Contextualizing Intermediated Use in the Developing World: Findings from India & Ghana
Ishita Ghosh

210AE Papers: Online Behaviors

Chair: Henriette Cramer
Deterring Cheating in Online Environments
Henry Corrigan-Gibbs, Nakul Gupta, Curtis Northcutt, Edward Cutrell, William Thies
Could This Be True? I Think So! Expressed Uncertainty in Online Rumoring
Kate Starbird, Emma S Spiro, Isabelle Edwards, Kaitlyn Zhou, Jim Maddock, Sindhuja Narasimhan
Order in the Warez Scene - Explaining an Underground Virtual Community with the CPR Framework
Priyank Chandra
Internet Censorship in China: Examining User Awareness and Attitudes
Dakuo Wang, Gloria Mark




112 SIG: Multiple Views on Safety-Critical Automation

Multiple Views on Safety-Critical Automation: Aircrafts, Autonomous Vehicles, Air Traffic Management and Satellite Ground Segments Perspectives
Michael Feary, Célia Martinie, Philippe Palanque, Manfred Tscheligi


114 Case Studies: Education

Chair: Eunice Sari
The Panda Hat of Doom
Andrew J Hunsucker, Daniela Gobbo, Michael Stallings, Martin A Siegel
Beyond the Lab: Using Technology Toys to Engage South African Youth in Computational Thinking
Veronica J Lin, Orit Shaer
Dear Diary: Student Meets World
Megan K McCracken
Diversity by Design: Female Students' Perception of a Spanish Language Learning Game
Yolanda A Rankin

LL21C Papers: Families and Assistive Technology

Chair: Erin L Brady
 Designing Smart Objects with Autistic Children - Four Design Exposés
Christopher Frauenberger, Julia Makhaeva, Katharina Spiel
Investigating the Influence of Avatar Facial Characteristics on the Social Behaviors of Children with Autism
Elizabeth J Carter, Jennifer Hyde, Diane L Williams, Jessica Hodgins
 Changing Family Practices with Assistive Technology: MOBERO Improves Morning and Bedtime Routines for Children with ADHD
Tobias Sonne, Jörg Müller, Paul Marshall, Carsten Obel, Kaj Grønbaek
 Incloodle: Evaluating an Interactive Application for Young Children with Mixed Abilities
Kiley Sobel, Kyle Rector, Susan Evans, Julie A Kientz

LL21D Papers: 3D Virtual Space

Chair: Matt Jones
 Dynamic Stereoscopic 3D Parameter Adjustment for Enhanced Depth Discrimination
Arun Kulshreshtha, Joseph J LaViola Jr.
Modeling the Impact of Depth on Pointing Performance
Izabelle F Janzen, Vasanth Kumar Rajendran, Kellogg S Booth
Compensating for Distance Compression in Audiovisual Virtual Environments Using Incongruence
Daniel J Finnegan, Eamonn J O'Neill, Michael J Proulx
miniStudio: Designers' Tool for Prototyping Ubicomp Space with Interactive Miniature
Han-Jong Kim, Ju-Whan Kim, Tek-Jin Nam

LL21E Papers: Mining Human Behaviors

Chair: Brian C Keegan
Unsupervised Clickstream Clustering for User Behavior Analysis
Gang Wang, Xinyi Zhang, Shiliang Tang, Haitao Zheng, Ben Y Zhao



Augur: Mining Human Behaviors from Fiction to Power Interactive Systems

Ethan Fast, William McGrath, Pranav Rajpurkar, Michael S Bernstein



Modeling and Understanding Human Routine Behavior

Nikola Banovic, Tofi Buzali, Fanny Chevalier, Jennifer Mankoff, Anind Dey

Setwise Comparison: Consistent, Scalable, Continuum Labels for Computer Vision

Advait Sarkar, Cecily Morrison, Jonas F Dorn, Rishi Bedi, Saskia Steinheimer, Jacques Boisvert, Jessica Burggraaff, Marcus D'Souza, Peter Kontschieder, Samuel Rota Bulò, Lorcan Walsh, Christian P Kamm, Yordan Zaykov, Abigail Sellen, Siân E Lindley

LL21F Papers: Social Media and Location Data

Chair: Louise Barkhuus



I Know Where You Live: Inferring Details of People's Lives by Visualizing Publicly Shared Location Data

Ilaria Liccardi, Alfie Abdul-Rahman, Min Chen

Not at Home on the Range: Peer Production and the Urban/Rural Divide

Isaac L Johnson, Yilun Lin, Toby Jia-Jun Li, Andrew Hall, Aaron Halfaker, Johannes Schöning, Brent Hecht

App Movement: A Platform for Community Commissioning of Mobile Applications

Andrew Garbett, Rob Comber, Edward Ian Jenkins, Patrick Olivier
Generating Personalized Spatial Analogies for Distances and Areas
Yea-Seul Kim, Jessica Hullman, Maneesh Agrawala

LL20A Papers: Front Stage on Social Media

Chair: Jessica Vitak

The Social Media Ecology: User Perceptions, Strategies and Challenges

Xuan Zhao, Cliff Lampe, Nicole B Ellison

Sharing Personal Content Online: Exploring Channel Choice and Multi-Channel Behaviors

Manya Sleeper, William Melicher, Hana Habib, Lujo Bauer, Lorrie Faith Cranor, Michelle L Mazurek

Snap Decisions? How Users, Content, and Aesthetics Interact to Shape Photo Sharing Behaviors

Sanjay Kairam, Joseph 'Jofish' Kaye, John Alexis Guerra-Gomez, David A Shamma

Does Saying This Make Me Look Good? How Posters and Outsiders Evaluate Facebook Updates

Yi-Chia Wang, Hayley Marie Hinsberger, Robert E Kraut

LL20D Papers: Behavioral Change

Chair: Jessica Pater

TimeAware: Leveraging Framing Effects to Enhance Personal Productivity

Young-Ho Kim, Jae Ho Jeon, Eun Kyoung Choe, Bongshin Lee, KwonHyun Kim, Jinwook Seo

Personal Tracking of Screen Time on Digital Devices

John Rooksby, Parvin Asadzadeh, Mattias Rost, Alistair Morrison, Matthew Chalmers

Crowd-Designed Motivation: Motivational Messages for Exercise Adherence Based on Behavior Change Theory

Roelof AJ de Vries, Khiet P Truong, Sigrid JM Kwint, Constance HC Drossaert, Vanessa Evers

Understanding the Mechanics of Persuasive System Design: a Mixed-Method Theory-driven Analysis of Freeletics

Hanna Schneider, Kilian Moser, Andreas Butz, Florian Alt

LL20B Papers: Collaborative Fabrication

Chair: Xiang 'Anthony' Chen

Understanding Newcomers to 3D Printing: Motivations, Workflows, and Barriers of Casual Makers

Nathaniel Hudson, Celena Alcock, Parmit K Chilana

How Novices Sketch and Prototype Hand-Fabricated Objects

Adrien Bousseau, Theophanis Tsandilas, Lora Oehlberg, Wendy E Mackay



RetroFab: A Design Tool for Retrofitting Physical Interfaces using Actuators, Sensors and 3D Printing

Raf Ramakers, Fraser Anderson, Tovi Grossman, George Fitzmaurice



HotFlex: Post-print Customization of 3D Prints Using Embedded State Change

Daniel Groeger, Elena Chong Loo, Jürgen Steimle

LL20C Papers: Learning Feedback

Chair: Niki Kittur

Effects of Pedagogical Agent's Personality and Emotional Feedback Strategy on Chinese Students' Learning Experiences and Performance: A Study Based on Virtual Tai Chi Training Studio

Yulong Bian, Chenglei Yang, Dongdong Guan, Sa Xiao, Fengqiang Gao, Chia Shen, Xiangxu Meng

MapSense: Multi-Sensory Interactive Maps for Children Living with Visual Impairments

Emeline Brule, Gilles Bailly, Anke Marei Brock, Frederic Valentin, Grégoire Denis, Christophe Jouffrais

Framing Feedback: Choosing Review Environment Features that Support High Quality Peer Assessment

Catherine M Hicks, Vineet Pandey, C Ailie Fraser, Scott R Klemmer



Revising Learner Misconceptions Without Feedback: Prompting for Reflection on Anomalous Facts

Joseph Jay Williams, Tania Lombrozo, Anne Hsu, Bernd Huber, Juho Kim

LL21B Papers: How Fast Can You Type on Your Phone?

Chair: Bongwon Suh

IJQwerty: What Difference Does One Key Change Make? Gesture Typing Keyboard Optimization Bounded by One Key Position Change from Qwerty

Xiaoju Bi, Shumin Zhai



DualKey: Miniature Screen Text Entry via Finger Identification

Aakar Gupta, Ravin Balakrishnan



One-Dimensional Handwriting: Inputting Letters and Words on Smart Glasses

Chun Yu, Ke Sun, Mingyuan Zhong, Xincheng Li, Peijun Zhao, Yuanchun Shi
A Cost-Benefit Study of Text Entry Suggestion Interaction
Philip Quinn, Shumin Zhai

MONDAY 14:30 PM - 15:50 PM

220A Panel: User Experience (UX) in India

User Experience (UX) in India - 'We are Not Like This Only' - We are World Class and Much More!

Apala Lahiri Chavan, Girish Prabhu, Sarit Arora, Janaki Kumar, Sudhindra V

220B alt.chi: Critical Theory and Pedagogy

Chair: Silvia Lindtner

The User Experience in Zen and the Art of Motorcycle Maintenance
Simon Harper

Meaning Reconstruction as an Approach to Analyze Critical Dimensions of HCI Research

Colin M Gray, Austin L Toombs, Christian McKay

Critical Realist HCI

Christopher Frauenberger

Making the Case for an Existential Perspective in HCI Research on Mortality and Death

Victor Kaptelinin

210D Course: C01

Research Methods for Child Computer Interaction (2/2)

Janet C Read, Shuli Gilutz

210H Course: C03

Designing with the Mind in Mind: The Psychological Basis for UI Design Guidelines (2/2)

Jeff A Johnson

210C Course: C05

Introduction To Human Computer Interaction (2/2)

Jonathan Lazar, Simone D J Barbosa

210G Course: C08

Game User Experience Evaluation (1/2)

Regina Bernhaupt, Florian Mueller

210BF Papers: Sociotechnical Assemblages

Chair: Jed Brubaker

The Ethics of Unaware Participation in Public Interventions

Annika Waern

The Poetics of Socio-Technical Space: Evaluating the Internet of Things Through Craft

Jessica Lingel

Object-Oriented Publics

Tom Jenkins, Christopher A Le Dantec, Carl DiSalvo,

Thomas James Lodato, Mariam Asad



Repurposing Bits and Pieces of the Digital

Vygandas Simbelis, Pedro Ferreira, Elsa Vaara, Jarmo Laaksolahti, Kristina Höök

210AE Papers: Thinking Critically

Chair: Beki Grinter

Sustainable Making? Balancing Optimism and Criticism in HCI Discourse

David Roedl, Shaowen Bardzell, Jeffrey Bardzell

Faceless Interaction - A Conceptual Examination of the Notion of Interface: Past, Present, and Future

Lars-Erik Janlert, Erik Stolterman

Five Provocations for Ethical HCI Research

Barry Brown, Alexandra Weilenmann, Donald McMillan, Airi Lampinen

Acting with Technology: Rehearsing for Mixed-Media Live Performances

Louise Barkhuus, Chiara Rossitto

112 SIG: Refugees and HCI

Refugees and HCI SIG: The Role of HCI in Responding To the Refugee Crisis

Reem Talhouk, Syed Ishtiaque Ahmed, Volker Wulf, Clara Crivellaro, Vasilis Vlachokyriakos, Patrick Olivier

114 Case Studies: Tools for Workers

Chair: Pernille Bjorn

Untethered Workspaces: A Zones Concept Towards Supporting Operator Movements in Control Rooms

Veronika Domova, Saad Azhar, Maria Ralph, Jonas Brönmark

From Two CSCW Frameworks to User Requirements Definition for a Retail Planning Collaborative Software

Grégory Petit, Justin Soles

Interactive Colormapping: Enabling Multiple Data Range and Detailed Views of Ocean Salinity

Francesca Samsel, Sebastian Klaassen, Mark Petersen, Terece L Turton,

Greg D Abram, David H Rogers, James Ahrens

Designing the Alarm Management User Experience for Patient Monitoring

Sharoda A Paul, Alexander K Carroll, Stephen Treacy

LL21C Papers: Computer Supported Parenting

Chair: Tejinder Judge



LGBT Parents and Social Media: Advocacy, Privacy, and Disclosure during Shifting Social Movements

Lindsay Blackwell, Jean Hardy, Tawfiq Ammari, Tiffany Veinot, Cliff Lampe, Sarita Schoenebeck

Information Seeking Practices of Parents: Exploring Skills, Face Threats and Social Networks

Betsy DiSalvo, Parisa Khanipour Roshan, Briana Morrison

"Best of Both Worlds:" Opportunities for Technology in Cross-Cultural Parenting

Svetlana Yarosh, Sarita Schoenebeck, Shreya Kothaneth, Elizabeth Bales



Screen Time Tantrums: How Families Manage Screen Media Experiences for Toddlers and Preschoolers

Alexis Hiniker, Hyewon Suh, Sabina Coo, Julie A Kientz

LL21D Papers: Real Reality Interfaces

Chair: Jessica Cauchard



The Augmented Climbing Wall: High-Exertion Proximity Interaction on a Wall-Sized Interactive Surface

Raine Kajastila, Leo Holsti, Perttu Hämäläinen

BitDrones: Towards Using 3D Nanocopter Displays as Interactive Self-Levitating Programmable Matter

Antonio Gomes, Calvin Rubens, Sean Braley, Roel Vertegaal

Promo: Projection Mapping on Movable 3D Object

Yi Zhou, Shuangjiu Xiao, Ning Tang, Zhi Yong Wei, Xu Chen

Combining Shape-Changing Interfaces and Spatial Augmented Reality Enables Extended Object Appearance

David Lindlbauer, Jens Emil Groenbaek, Morten Henriksen Birk, Kim Halskov, Marc Alexa, Joerg Mueller

LL21E Papers: Privacy - Social and Geolocated

Chair: Munmun De Choudhury

The Geography and Importance of Localness in Geotagged Social Media

Isaac L Johnson, Subhasree Sengupta, Johannes Schöning, Brent Hecht Usability and Security of Text Passwords on Mobile Devices

William Melicher, Darya Kurilova, Sean Segreti, Pranshu Oneil Kalvani, Richard Shay, Blase Ur, Lujo Bauer, Nicolas Christin, Lorrie Faith Cranor, Michelle L Mazurek

Evaluation of Personalized Security Indicators as an Anti-Phishing Mechanism for Smartphone Applications

Claudio Marforia, Ramya Jayaram Masti, Claudio Soriente, Kari Kostinen, Srdjan Capkun

Computationally Mediated Pro-Social Deception

Max Van Kleek, Dave Murray-Rust, Amy Guy, Kieron O'Hara, Nigel R Shadbolt

LL21F Papers: Personal informatics: Dear Data

Chair: Jason Wiese

GenomiX: A Novel Interaction Tool for Self-Exploration of Personal Genomic Data

Orit Shaer, Oded Nov, Johanna Okerlund, Martina Balestra, Elizabeth Stowell, Lauren Westendorf, Christina Pollalis, Jasmine Davis, Liliana Westort, Madeleine Ball

Taking 5: Work-Breaks, Productivity, and Opportunities for Personal Informatics for Knowledge Workers

Daniel A Epstein, Daniel Avrahami, Jacob T Biehl



Metadating: Exploring the Romance and Future of Personal Data

Chris Eldsen, Bettina Nissen, Andrew Garbett, David Chatting, David S Kirk, John Vines

Design Opportunities in Three Stages of Relationship Development between Users and Self-Tracking Devices

Da-jung Kim, Yeoreum Lee, Saeyoung Rho, Youn-kyung Lim

LL20A Papers: Social Media Engagement

Chair: Parmit K Chilana



Changes in Engagement Before and After Posting to Facebook

Nir Grinberg, P Alex Dow, Lada A Adamic, Mor Naaman

Fast, Cheap, and Good: Why Animated GIFs Engage Us

Saeideh Bakhshi, David A Shamma, Lyndon Kennedy, Yale Song, Paloma de Juan, Joseph 'Jofish' Kaye

Engineering Information Disclosure: Norm Shaping Designs

Daphne Chang, Erin L Krupka, Eytan Adar, Alessandro Acquisti



A Market in Your Social Network: The Effects of Extrinsic Rewards on Friendsourcing and Relationships

Haiyi Zhu, Sauvik Das, Yiqun Cao, Shuang Yu, Aniket Kittur, Robert E Kraut

LL20D Papers: Older Adult Support

Chair: Anne Marie Piper

Designing for the Other 'Hereafter': When Older Adults Remember about Forgetting

Laura Ramos, Elise van den Hoven, Laurie Miller

Typing Tutor: Individualized Tutoring in Text Entry for Older Adults Based on Input Stumble Detection

Toshiyuki Hagiya, Toshiharu Horiuchi, Tomonori Yazaki

Not For Me: Older Adults Choosing Not to Participate in a Social Isolation Intervention

Jenny Waycott, Frank Vetere, Sonja Pedell, Amee Morgans, Elizabeth Ozanne, Lars Kulik

Placing in Age: Transitioning to a New Home in Later Life

Siân E Lindley, Jayne Wallace

LL20B Papers: 3D Designing, Modelling & Printing

Chair: Patrick Baudisch

What you Sculpt is What you Get: Modeling Physical Interactive Devices with Clay and 3D Printed Widgets

Michael D Jones, Kevin Seppi, Dan R Olsen

On-The-Fly Print: Incremental Printing While Modelling

Huashu Peng, Rundong Wu, Steve Marschner, François Guimbretière

CardBoardiZer: Creatively Customize, Articulate and Fold 3D Mesh Models

Yunbo Zhang, Wei Gao, Luis Paredes, Karthik Ramani

ChronoFab: Fabricating Motion

Rubaiat Habib Kazi, Tovi Grossman, Cory Mogk, Ryan Schmidt, George Fitzmaurice

LL20C Papers: Learning @ School

Chair: Chris Quintana

Lessons Learned from In-School Use of rTAG: a Robo-Tangible Learning Environment

Victor Girotto, Cecil Lozano, Kasia Muldner, Winslow Burleson, Erin Walker



Human Proxies for Remote University Classroom Attendance

Clarissa Ishak, Carman Neustaedter, Dan Hawkins, Jason Procyk, Michael Massimi

Ingenium: Engaging Novice Students with Latin Grammar

Sharon Zhou, Ivy J Livingston, Mark Schiefsky, Stuart Shieber, Krzysztof Z Gajos Teaching and Developing Social and Emotional Skills with Technology Petr Slovák, Geraldine Fitzpatrick

LL21B Papers: Visual Design for Unconventional Displays

Chair: Karrie Karahalios

Designing Visual Complexity for Dual-screen Media

Timothy Neate, Michael Evans, Matt Jones

Hidden in Plain Sight: an Exploration of a Visual Language for Near-Eye Out-of-Focus Displays in the Peripheral View

Kris Luyten, Donald Degraen, Gustavo Alberto Rovelo Ruiz, Sven Coppers, Davy Vanacken

Investigating Text Legibility on Non-Rectangular Displays

Marcos Serrano, Anne Roudaut, Pourang P Irani

The Effect of Focus Cues on Separation of Information Layers

Patrick Bader, Niels Henze, Nora Broy, Katrin Wolf

MONDAY 16:30 PM - 17:50 PM

220A alt.chi: Food Fictions

Chair: *Luigina Ciolfi*

Data Edibilization: Representing Data with Food

Yun Wang, Xiaojuan Ma, Qiong Luo, Huamin Qu

Computational Agroecology: Sustainable Food Ecosystem Design

Barath Raghavan, Bonnie Nardi, Sarah T Lovell, Juliet Norton,

Bill Tomlinson, Donald J Patterson

Deciphering a Meal through Open Source Standards: Soylent and the Rise of Diet Hackers

Marketa Dolejsova

Printable Hydroponic Gardens: Initial Explorations and Considerations

Yuichiro Takeuchi

230C alt.chi: Confronting Power in HCI

Chair: *Morgan Ames*

Discussing about Sexual Harassment (Breaking Silence): The Role of Technology

Nova Ahmed

Does Technology Have Race?

David Hankerson, Imani Walker, Andrea R Marshall, Jennifer Booker,

Houda El Mimouni, Jennifer A Rode

Impromptu Crowd Science and the Mystery of the Bechdel-Wallace Test Movement

Cosima Rughinis, Razvan Rughinis, Bogdana Huma

The Smartphone: A Laconian Stain, A Tech Killer, and an Embodiment of Radical Individualism

Matthew P Aylett, Shaun Lawson

Designing for Others, and the Trap of HCI Methods & Practices

Bert Vandenbergh, Karin Slegers

220B Panel: On the Future of Personal Assistants

On the Future of Personal Assistants

Phil Cohen, Adam Cheyer, Eric Horvitz, Rana El Kaliouby, Steve Whittaker

210D Course: C02

Hands-on introduction to interactive electric muscle stimulation

Pedro Lopes, Max Pfeiffer, Michael Rohs, Patrick Baudisch

210H Course: C04

Visual Facilitation for Design Groups

Eileen M Clegg

210C Course: C07

An Introduction to Cognitive Aging and Dementia: A Clinical Neuropsychologist's Perspective

Allyson Rosen

210G Course: C08

Game User Experience Evaluation (2/2)

Regina Bernhaupt, Florian Mueller

210BF Papers: Sustainability, Design and the Environment

Chair: *Rob Comber*

Challenging the Car Norm: Opportunities for ICT to Support Sustainable Transportation Practices

Hanna Hasselqvist, Mia Hesselgren, Cristian Bogdan

Learning from Green Designers: Green Design as Discursive Practice

Earl Friedberg, Edward Lank



Understanding and Mitigating the Effects of Device and Cloud Service Design Decisions on the Environmental Footprint of Digital Infrastructure

Chris Preist, Daniel Schien, Eli Blevis

MyPart: Personal, Portable, Accurate, Airborne Particle Counting

Rundong Tian, Christine Dierk, Christopher Myers, Eric Paulos

210AE Papers: Interaction Design for Audio Interfaces

Chair: *Youn-kyung Lim*

Voices from the War: Design as a Means of Understanding the Experience of Visiting Heritage

Daniela Petrelli, Nick Dulake, Mark T Marshall, Anna Pisetti, Elena Not

Simplified Audio Production in Asynchronous Voice-Based Discussions

Venkatesh Sivaraman, Dongwook Yoon, Piotr Mitros

Tap the ShapeTones: Exploring the effects of crossmodal congruence in an audio-visual interface

Oussama Metatla, Nuno N Correia, Fiore Martin, Nick Bryan-Kinns, Tony Stockman

Maps and Location: Acceptance of Modern Interaction Techniques for Audio Guides

Philipp Wacker, Kerstin Kreutz, Florian Heller, Jan Borchers

112 SIG: Diversity in High Tech

Diversity In High Tech: Retaining Employees Once They're In the Door

Karen Holtzblatt, Carol Farnsworth

114 Course: C29

So, You Want To Be A CHI AC

Julie A Kientz, Hilary B Hutchinson

LL21C Papers: Physical and Digital Collections

Chair: *Carman Neustaedter*

Accountable Artefacts: The Case of the Carolan Guitar

Steve Benford, Adrian Hazzard, Alan Chamberlain, Kevin Glover,

Chris Greenhalgh, Liming Xu, Michaela Hoare, Dimitrios Darzentas

Things We Own Together: Sharing Possessions at Home

Jane Gruning, Siân E Lindley

Mailing Archived Emails As Postcards: Probing the Value of Virtual Collections

David Gerritsen, Dan Tasse, Jennifer K Olsen, Tatiana A Vlahovic,

Rebecca Gulotta, William Odom, Jason Wiese, John Zimmerman



Finding Email in a Multi-Account, Multi-Device World

Marta Elizabeth Cecchinato, Abigail Sellen, Milad Shokouhi, Gavin Smyth

LL21D Papers: Augmented AR and VR Experiences

Chair: *Alex Thayer, Therese Dugan*

Novel Optical Configurations for Virtual Reality: Evaluating User Preference and Performance with Focus-tunable and Monovision Near-eye Displays

Robert Konrad, Emily Cooper, Gordon Wetzstein



Augmenting the Field-of-View of Head-Mounted Displays with Sparse Peripheral Displays

Robert Xiao, Hrvoje Benko

SnapToReality: Aligning Augmented Reality to the Real World

Benjamin Nuernberger, Eyal Ofek, Hrvoje Benko, Andrew D Wilson

Virtual Objects as Spatial Cues in Collaborative Mixed Reality Environments:

How They Shape Communication Behavior and User Task Load

Jens Müller, Roman Rädle, Harald Reiterer

VR-STEP: Walking-in-Place using Inertial Sensing for Hands Free Navigation in Mobile VR Environments

Sam Tregillus, Eelke Folmer

LL21E Papers: Living Healthy

Chair: Eun Kyoung Choe



Staying the Course: System-Driven Lapse Management for Supporting Behavior Change

Elena Agapie, Daniel Avrahami, Jennifer Marlow

Designing for Future Behaviors: Understanding the Effect of Temporal Distance on Planned Behaviors

Minhyang (Mia) Suh, Gary Hsieh

ClimbAware - Investigating Perception and Acceptance of Wearables in Rock Climbing

Felix Kosmalla, Frederik Wiehr, Florian Daiber, Antonio Krüger, Markus Löchtefeld

Beyond Abandonment to Next Steps: Understanding and Designing for Life after Personal Informatics Tool Use

Daniel A Epstein, Monica Caraway, Chuck Johnston, An Ping, James

Fogarty, Sean A Munson

LL21F Papers: Paying Attention to Smartphones

Chair: Duncan P Brumby



Lock n' LoL: Group-based Limiting Assistance App to Mitigate Smartphone Distractions in Group Activities

Minsam Ko, Seungwoo Choi, Koji Yatani, Uichin Lee

"Silence Your Phones": Smartphone Notifications Increase Inattention and Hyperactivity Symptoms

Kostadin Kushlev, Jason Proulx, Elizabeth W Dunn

My Phone and Me: Understanding People's Receptivity to Mobile Notifications

Abhinav Mehrotra, Veljko Pejovic, Jo Vermeulen, Robert J Hendley, Mirco Musolesi

Examining Factors Influencing the Disruptiveness of Notifications in a Mobile Museum Context

Ido Beja, Joel Lanir, Tsvi Kuflik

LL20A Papers: Designing Quality in Social Media

Chair: Patrick Shih



Supporting Comment Moderators in Identifying High Quality Online News Comments

Deokgun Park, Simranjit Singh Sachar, Nicholas Diakopoulos, Niklas Elmqvist



"Popcorn Tastes Good": Participatory Policymaking and Reddit's "AMAgeddon"

Alissa Centivany, Bobby Glushko



Going Dark: Social Factors in Collective Action Against Platform Operators in the Reddit Blackout

J Nathan Matias

Surviving an "Eternal September": How an Online Community Managed a Surge of Newcomers

Charles Kiene, Andrés Monroy-Hernández, Benjamin Mako Hill

"This Post Will Just Get Taken Down": Characterizing Removed Pro-Eating Disorder Social Media Content

Stevie Chancellor, Zhiyuan Lin, Munmun De Choudhury

LL20D Papers: Technological Care for Autism

Chair: Erin Solovey

"Will I always be not social?": Re-Conceptualizing Sociality in the Context of a Minecraft Community for Autism

Kathryn E Ringland, Christine T Wolf, Heather A Faucett,

Lynn S Dombrowski, Gillian R Hayes

MONDAY 16:30 PM - 17:50 PM

Anxiety and Autism: Towards Personalized Digital Health

Will Simm, Maria Angela Ferrario, Adrian I Gradinar, Marcia Tavares Smith, Stephen Forshaw, Ian Smith, Jon Whittle

EnhancedTouch: A Smart Bracelet for Enhancing Human-Human Physical Touch

Kenji Suzuki, Taku Hachisu, Kazuki Iida

"This is how I want to learn": High Functioning Autistic Teens Co-Designing a Serious Game

Benoît Bossavit, Sarah Parsons

LL20B Papers: (Re)understanding Making

Chair: John Vines



Reconstituting the Utopian Vision of Making: HCI After Technosolutionism

Silvia Lindtner, Shaowen Bardzell, Jeffrey Bardzell

Values in Repair

Lara Houston, Steven J Jackson, Daniela K Rosner, Syed Ishtiaque Ahmed,

Meg Young, Laewoo Kang

Making Community: The Wider Role of Makerspaces in Public Life

Nick Taylor, Ursula Hurley, Philip Connolly



Continuing the Dialogue: Bringing Research Accounts Back into the Field

Sarah Fox, Daniela K Rosner

LL20C Papers: Learning Facilitation

Chair: Jason C Yip

Social Situational Language Learning through an Online 3D Game

Gabriel Culbertson, Shiyu Wang, Malte F Jung, Erik L Andersen

Using Gamification to Motivate Students with Dyslexia

Daniel J Gooch, Asimina Vasalou, Laura Jane Benton, Rilla Khaled

Local Standards for Sample Size at CHI

Kelly Caine

A Comparative Evaluation on Online Learning Approaches using Parallel Coordinate Visualization

Bum Chul Kwon, Bongshin Lee

LL21B Papers: Authentication and Privacy

Chair: Janice Tsai

Evaluating the Influence of Targets and Hand Postures on Touch-based Behavioural Biometrics

Daniel Buschek, Alexander De Luca, Florian Alt

Enhancing Mobile Content Privacy with Proxemics Aware Notifications and Protection

Huiyuan Zhou, Khalid Tearo, Aniruddha Waje, Elham Alghamdi,

Thamara Alves, Vinicius Ferreira, Kirstie Hawkey, Derek Reilly

CalendarCast: Setup-Free, Privacy-Preserving, Localized Sharing of Appointment Data

Florian Echter

SkullConduct: Biometric User Identification on Eyewear Computers Using Bone Conduction Through the Skull

Stefan Schneegass, Youssef Oualil, Andreas Bulling

Use Your Words: Designing One-time Pairing Codes to Improve User Experience

Sarah Wiseman, Gustavo Soto Mino, Anna L Cox, Sandy J J Gould,

Joanne Moore, Chris Needham

TUESDAY 9:30 AM - 10:50 AM

220A SIGCHI Social Impact Award

Having a Social Impact by Getting Outside of Your Comfort Zone
Jonathan Lazar

230C SIG: Technology for disabled and older people

Technology for disabled and older people: what have we achieved, where are we going?
Helen Petrie, Gerhard Weber

220B Panel: The Future of Robotic Telepresence

The Future of Robotic Telepresence: Visions, Opportunities and Challenges
Susan Herring, Susan R Fussell, Annica Kristoffersson, Bilge Mutlu, Carman Neustaedter, Katherine Tsui

210D Course: C09

Interaction Design for Online Video and Television (1/2)
David Geerts, Pablo Cesar, Marianna Obrist

210H Course: C11

Visual Analytics 101 (1/2)
Russ Burtner, Kris Cook, Jean Scholtz

210C Course: C13

Introduction to Creating Musical Interfaces (1/2)
Michael J Lyons, Sidney S Fels

210G Course: C15

An Introduction to Automotive User Interfaces (1/2)
Bastian Pfleging, Nora Broy, Andrew L Kun

210BF Papers: Citizenry and the Sciences

Chair: Carl DiSalvo
Everyday food science as a design space for community literacy and habitual sustainable practice
Stacey Kuznetsov, Christina Jean Santana, Elenore Long
You Put What, Where? Hobbyist Use of Insertable Devices
Kayla J Heffernan, Frank Vetere, Shanton Chang



On Looking at the Vagina through Labella
Teresa Almeida, Rob Comber, Gavin Wood, Dean Saraf, Madeline Balaam



Citizens for Science and Science for Citizens: The View from Participatory Design

Danial Qaurooni, Ali Ghazinejad, Inna Kouper, Hamid Ekbia
To Sign Up, or not to Sign Up? Maximizing Citizen Science Contribution Rates through Optional Registration
Caroline Jay, Robert Dunne, David Gelsthorpe, Markel Vigo

210AE Papers: Evaluating Educational Technology

Chair: Betsy DiSalvo
Teaching Recommender Systems at Large Scale: Evaluation and Lessons Learned from a Hybrid MOOC
Joseph A Konstan, JD Walker, D Christopher Brooks, Keith Brown, Michael D Ekstrand

Evaluating Peripheral Interaction Design

Saskia Bakker, Elise van den Hoven, Berry Eggen

Facilitator, Functionary, Friend or Foe? Studying the Role of iPads within Learning Activities Across a School Year

Anne-Marie Mann, Uta Hinrichs, Janet C Read, Aaron Quigley

112 SIG: Transparent Statistics in HCI

Special Interest Group on Transparent Statistics in HCI

Matthew Kay, Steve Haroz, Shion Guha, Pierre Dragicevic

114 Case Studies: New Markets and Localization

Chair: Edward Cutrell

Mobile Seva-Enabling mGovernance in India

Kapil Kant Kamal, Manish Kumar, Soumya Shrivastava, Priyesh C Pawel W Woźniak hourasia

What Makes a Successful Localized App? An International Case Study

Stephanie Rosenbaum, Jennifer Lee Carlson

Breaking the UCD process: The case study of a failed Mexican Government project

Mario A Moreno-Rocha, Carlos Alberto Martinez, Abril Inés Rodríguez

López, Jorge Andrés De la Cruz Pineda, Fernando Macias

Exploring Regional User Experience for Designing Ultra Low Cost Smart Phones

Sanjay Ghosh, Sarita Seshagiri, Aditya Ponnada

LL21C Papers: Work, Multitasking, and Distraction

Chair: Steven P Dow



Influence of Display Transparency on Background Awareness and Task Performance

David Lindlbauer, Klemen Lilija, Robert Walter, Joerg Mueller

Email Duration, Batching and Self-interruption: Patterns of Email Use on Productivity and Stress

Gloria Mark, Shamsi T Iqbal, Mary P Czerwinski, Paul R Johns, Akane Sano

'Don't Waste My Time': Use of Time Information Improves Focus

Steve Whittaker, Vaiva Kalnikaite, Victoria Hollis, Andrew Guydish

Neurotics Can't Focus: An in situ Study of Online Multitasking in the Workplace

Gloria Mark, Shamsi T Iqbal, Mary P Czerwinski, Paul R Johns, Akane Sano

LL21D Papers: VR for Collaboration

Chair: Jeff Huang

Head Mounted Projection Display & Visual Attention: Visual attentional processing of head referenced static and dynamic displays while in motion and standing

Çağlar Genç, Shoaib Soomra, Yalçın Duyan, Selim Ölçer, Fuat Balci, Hakan Ürey, Oguzhan Ozcan

Stabilized Annotations for Mobile Remote Assistance

Omid Fakourfar, Kevin Ta, Richard Tang, Scott Bateman, Anthony Tang

Parallel Eyes: Exploring Human Capability and Behaviors with Paralleled First Person View Sharing

Shunichi Kasahara, Mitsuhiro Ando, Kiyoshi Suganuma, Jun Rekimoto

Gaze Augmentation in Egocentric Video Improves Awareness of Intention

Deepak Akkil, Poika Isokoski

TUESDAY 9:30 AM - 10:50 AM

LL21E Papers: Quantifying Efficiency of Input Methods

Chair: Daniel Widgor

Modeling the Steering Time Difference between Narrowing and Widening Tunnels

Shota Yamanaka, Homei Miyashita

Modelling Error Rates in Temporal Pointing

Byungjoo Lee, Antti Oulasvirta

A Mouse With Two Optical Sensors That Eliminates Coordinate Disturbance During Skilled Strokes

Byungjoo Lee, Hyunwoo Bang

Differences and Similarities between Finger and Pen Stroke

Gestures on Stationary and Mobile devices

Huawei Tu, Xiangshi Ren, Shumin Zhai

LL21F Papers: Democratizing and Opening Data

Chair: William Odom

Open Data in Scientific Settings: From Policy to Practice

Irene V Pasquetto, Ashley E Sands, Peter T Darch, Christine L. Borgman

The Datacatcher: Batch Deployment and Documentation of 130 Location-Aware, Mobile Devices That Put Sociopolitically-Relevant Big Data in People's Hands: Polyphonic Interpretation at Scale

William W Gaver, Andy Boucher, Nadine Jarvis, David W T Cameron,

Mark Hauenstein, Sarah Pennington, John Bowers, James Pike, Robin Beitra



Physikit: Data Engagement Through Physical Ambient Visualizations in the Home

Steven Houben, Connie Golsteijn, Sarah Gallacher, Rose Johnson,

Saskia Bakker, Nicolai Marquardt, Licia Capra, Yvonne Rogers

Accountable: Exploring the Inadequacies of Transparent Financial Practice in the Non-Profit Sector

Matthew Marshall, David S Kirk, John Vines

LL20A Papers: The Economics of Being Online

Chair: Lilly C Irani

Designing for Labour: Uber and the On-Demand Mobile Workforce

Mareike Glöss, Moira McGregor, Barry Brown

'MASTERful' Matchmaking in Service Transactions: Inferred Abilities, Needs and Interests versus Activity Histories

Hyunggu Jung, Victoria M E Bellotti, Afsaneh Doryab, Dean Leitersdorf,

Jiawei Chen, Benjamin V Hanrahan, Sooyeon Lee, Dan Turner,

Anind K Dey, John M Carroll

Of Two Minds, Multiple Addresses, and One Ledger: Characterizing Opinions, Knowledge, and Perceptions of Bitcoin Across Users and Non-Users

Xianyi Gao, Gradeigh D Clark, Janne Lindqvist

Hosting via Airbnb: Motivations and Financial Assurances in Monetized Network Hospitality

Airi Lampinen, Coye Cheshire

LL20D Papers: Physical Disability and Assistive Technologies

Chair: Shaun Kane

An Intimate Laboratory? Prostheses as a Tool for Experimenting with Identity and Normalcy

Cynthia L Bennett, Keting Cen, Katherine M Steele, Daniela K Rosner

The Design of Assistive Location-based Technologies for People with Ambulatory Disabilities: A Formative Study

Kotaro Hara, Christine Chan, Jon E Froehlich

Helping Hands: Requirements for a Prototyping Methodology for Upper-limb Prosthetics Users

Megan Kelly Hofmann, Jeffrey Harris, Scott E Hudson, Jennifer Mankoff

Motivating Stroke Rehabilitation Through Music: A Feasibility Study Using Digital Musical Instruments in the Home

Pedro Kirk, Mick Grierson, Rebeka Bodak, Nick Ward, Fran Brander, Kate

Kelly, Nicholas Newman, Lauren Stewart

LL20B Papers: Designing Physical Games

Chair: Derek Hansen

Digitally Augmenting Sports: An Opportunity for Exploring and Understanding Novel Balancing Techniques

David Altimira, Florian Mueller, Jenny Clarke, Gun Lee, Mark Billingham,

Christoph Bartneck

SwimTrain: Exploring Exergame Design for Group Fitness Swimming

Woohyeok Choi, Jeongmin Oh, Darren Edge, Joohyun Kim, Uichin Lee

From England to Uganda: Children Designing and Evaluating Serious Games

Gavin Sim, Janet Read, Peggy Gregory, Diana Xu

Guidelines for the Design of Movement-Based Games and Their Relevance to HCI

Katherine Isbister, Florian Mueller

LL20C Papers: Learning Programming

Chair: Svetlana Yarosh

Programming, Problem Solving, and Self-Awareness: Effects of Explicit Guidance

Dastyni Loksa, Andrew J Ka, William Jernigan, Alannah Oleson, Christopher

J Mendez, Margaret M Burnett

Understanding Conversational Programmers: A Perspective from the Software Industry

Parmit K Chilana, Rishabh Singh, Philip J Guo

Blind Spots in Youth DIY Programming: Examining Diversity in Creators, Content, and Comments within the Scratch Online Community

Gabriela T Richard, Yasmin B Kafai

Skill Progression in Scratch Revisited

Jorge Nathan Matias, Sayamindu Dasgupta, Benjamin Mako Hill

LL21B Papers: Tracking Fingers

Chair: Simon T Perrault



SkinTrack: Using the Body as an Electrical Waveguide for Continuous Finger Tracking on the Skin

Yang Zhang, Junhan Zhou, Gierad Laput, Chris Harrison



Finexus: Tracking Precise Motions of Multiple Fingertips Using Magnetic Sensing

Ke-Yu Chen, Shwetak N Patel, Sean Keller



FingerIO: Using Active Sonar for Fine-Grained Finger Tracking

Rajalakshmi Nandakumar, Vikram Iyer, Desney Tan, Shyamnath Gollakota

DigitSpace: Designing Thumb-to-Fingers Touch Interfaces for One-Handed and Eyes-Free Interactions

Da-Yuan Huang, Liwei Chan, Shuo Yang, Fan Wang, Rong-Hao Liang, De-

Nian Yang, Yi-ping Hung, Bing-Yu Chen

TUESDAY 11:30 AM - 12:50 PM

230C SIG: Become a Volunteer at ACM SIGCHI

Become a Volunteer at ACM SIGCHI

Loren G Terveen, Helena M. Mentis, Susan R. Fussell, Regina Bernhaupt

210D Course: C09

Interaction Design for Online Video and Television (2/2)

David Geerts, Pablo Cesar, Marianna Obrist

210H Course: C11

Visual Analytics 101 (2/2)

Russ Burtner, Kris Cook, Jean Scholtz

210C Course: C13

Introduction to Creating Musical Interfaces (2/2)

Michael J Lyons, Sidney S Fels

210G Course: C15

An Introduction to Automotive User Interfaces (2/2)

Bastian Pfleging, Nora Broy, Andrew L Kun

210BF Papers: Infrastructure through a Critical Lens

Chair: Michael Prilla



Breaking Down While Building Up: Design and Decline in Emerging Infrastructures

Stephanie B Steinhardt

Logistics as Care and Control: An Investigation into the UNICEF Supply Division

Margaret Jack, Steven J Jackson



The Ins and Outs of HCI for Development

Nicola Dell, Neha Kumar

Design(ing) 'Here' and 'There': Tech Entrepreneurs, Global Markets and Reflexivity in Design Processes

Seyram Avle, Silvia Lindtner

210AE Papers: Shortcuts for More Efficient Input

Chair: Jeff Nichols

Evaluation of a Smart-Restorable Backspace Technique to Facilitate Text Entry Error Correction

Ahmed Sabbir Arif, Sunjun Kim, Wolfgang Stuerzlinger, Geehyuk Lee, Ali Mazalek



Living In A Prototype: A Reconfigured Space

Audrey Desjardins, Ron Wakkary

Reciprocal Drag-and-Drop

Caroline Appert, Olivier Chapuis, Emmanuel Pietriga, María-Jesús Lobo

112 SIG: SIGCHI Games

SIGCHI Games: The Scope of Games Research at CHI

Lennart E Nacke, Anna L Cox, Regan L Mandryk, Paul Cairns

114 Case Studies: User Research

Chair: Ben Steichen

Capturing & Measuring Emotions in UX

Sarah E Garcia, Laura Hammond

Practical Usability Rating by Experts (PURE): A Pragmatic Approach for Scoring Product Usability

Christian P Rohrer, James Wendt, Jeff Sauro, Frederick Boyle, Sara M Cole

Tackling User Research Challenges within the Finance Industry

Rina R Wehbe, Shahtab Wahid, Siddharth Gupta, Edward W Ishak

Lessons Learned from Conducting Group-Based Research on Facebook

Haley MacLeod, Ben Jelen, Annu Prabhakar, Lora Oehlberg, Katie A Siek, Kay Connelly

LL21C Papers: Displays and Shared Interactions

Chair: Julie Williamson

Negotiating for Space? Collaborative Work Using a Wall Display with Mouse and Touch Input

Mikkel R Jakobsen, Kasper Hornbæk

An Actionable Approach to Understand Group Experience in Complex, Multi-surface Spaces

Roberto Martinez-Maldonado, Peter Goodyear, Judy Kay, Kate Thompson, Lucila Carvalho

Shared Interaction on a Wall-Sized Display in a Data Manipulation Task

Can Liu, Olivier Chapuis, Michel Beaudouin-Lafon, Eric Lecolinet

Creating Your Bubble: Personal Space On and Around Large Public Displays

James R Wallace, Nancy Iskander, Edward Lank

Gaze-based Notetaking for Learning from Lecture Videos

Cuong Nguyen, Feng Liu

LL21D Papers: VR & Feedback

Chair: Ali Israr

Annexing Reality: Enabling Opportunistic Use of Everyday Objects as Tangible Proxies in Augmented Reality

Anuruddha Lakmal Hettiarachchi, Daniel Wigdor

Haptic Retargeting: Dynamic Repurposing of Passive Haptics for Enhanced Virtual Reality Experiences

Mahdi Azmandian, Mark Hancock, Hrvoje Benko, Eyal Ofek, Andrew D Wilson

HaptoClone (Haptic-Optical Clone) for Mutual Tele-Environment by Real-time 3D Image Transfer with Midair Force Feedback

Yasutoshi Makino, Yoshikazu Furuyama, Seki Inoue, Hiroyuki Shinoda

Dexmo: An Inexpensive and Lightweight Mechanical Exoskeleton for Motion Capture and Force Feedback in VR

Aler Gu, Yifei Zhang, Weize Sun, Yanzhe Bian, Dao Zhou, Per Ola Kristensson

SwiVRChair: A Motorized Swivel Chair to Nudge Users' Orientation for 360 Degree Storytelling in Virtual Reality

Jan Gugenheimer, Dennis Wolf, Gabriel Haas, Sebastian Krebs, Enrico Rukzio

LL21E Papers: HCI and Physiological Interactions

Chair: Daniel A Afergan

Adding Human Learning in Brain-Computer Interfaces (BCIs): Towards a Practical Control Modality

Nataliya Kosmyna, Franck Tarpin-Bernard, Bertrand Rivet

Conceptual Priming for In-game BCI Training

Nataliya Kosmyna

Framework for Electroencephalography-based Evaluation of User Experience

Jérémy Frey, Maxime Daniel, Julien Castet, Martin Hachet, Fabien Lotte
Intelligent Agents and Networked Buttons Improve Free-Improvised Ensemble Music-Making on Touch-Screens
Charles Martin, Henry Gardner, Michael Martin, Ben Swift

LL21F Papers: Mobile Behaviors

Chair: Kelly Caine
Monetary Assessment of Battery Life on Smartphones
Simo Johannes Hosia, Denzil ST Ferreira, Jorge Goncalves,
Niels van Berkel, Chu Luo, Muzamil Ahmed, Huber Flores, Vassilis Kostakos
Technology at the Table: Attitudes about Mobile Phone Use at Mealtimes

Carol Moser, Sarita Schoenebeck, Katharina Reinecke
"I thought she would like to read it": Exploring Sharing Behaviors in the Context of Declining Mobile Web Use

Frank R Bentley, S Tejaswi Peesapati, Karen Church



Forget-me-not: History-less Mobile Messaging

Mattias Rost, Christos Kitsos, Alexander Morgan, Martin Podlubny,
Pietro Romeo, Edoardo Russo, Matthew Chalmers

LL20A Papers: Visual Impairment and Technology

Chair: Amy Hurst



Haptic Wave: A Cross-Modal Interface for Visually Impaired Audio Producers

Atau Tanaka, Adam Parkinson



"I Always Wanted to See the Night Sky": Blind User Preferences for Sensory Substitution Devices

Giles Hamilton-Fletcher, Marianna Obrist, Phil Watten, Michele Mengucci,
Jamie Ward

Linespace: A Sensemaking Platform for the Blind

Saiganesh Swaminathan, Thijs Jan Roumen, Robert Kovacs, David Stangl,
Stefanie Mueller, Patrick Baudisch

Tangible Reels: Construction and Exploration of Tangible Maps by Visually Impaired Users

Julie Ducasse, Marc J-M Macé, Marcos Serrano, Christophe Jouffrais

LL20D Papers: Mental Health via Online Tools

Chair: Jina Huh



Discovering Shifts to Suicidal Ideation from Mental Health Content in Social Media

Munmun De Choudhury, Emre Kiciman, Mark Dredze, Glen Coppersmith,
Mrinal Kumar

Recovery Amid Pro-Anorexia: Analysis of Recovery in Social Media

Stevie Chancellor, Tanushree Mitra, Munmun De Choudhury



Health Technologies 'In the Wild': Experiences of Engagement with Computerised CBT

Stefan J Rennick-Egglestone, Sarah Knowles, Gill Toms, Penny Bee,
Karina Lovell, Peter Bower

Challenges for Designing New Technology for Health and Wellbeing in a Complex Mental Healthcare Context

Anja Thieme, John McCarthy, Paula Johnson, Stephanie Phillips,
Jayne Wallace, Siân E Lindley, Karim Ladha, Daniel Jackson,
Diana Nowacka, Ashur Rafiev, Cassim Ladha, Tom Nappey, Mathew Kipling,
Peter Wright, Thomas D Meyer, Patrick Olivier

LL20B Papers: Design, Labour and Peril in Crowdsourcing

Chair: Jeffrey P Bigham

"Why would anybody do this?": Understanding Older Adults' Motivations and Challenges in Crowd Work

Robin Brewer, Meredith Ringel Morris, Anne Marie Piper



The Knowledge Accelerator: Big Picture Thinking in Small Pieces

Nathan Hahn, Joseph Chee Chang, Ji Eun Kim, Aniket Kittur

Taking a HIT: Designing around Rejection, Mistrust, Risk, and Workers' Experiences in Amazon Mechanical Turk

Brian James McInnis, Dan Cosley, Chaebong Nam, Gilly Leshed

LL20C Papers: Gamification

Chair: Kristijan Lukanov

Personality-targeted Gamification: A Survey Study on Personality Traits and Motivational Affordances

Yuan Jia, Bin Xu, Yamini Karanam, Stephen Voida

Gamer Style: Performance Factors in Gamified Simulation

Surabhi Gupta, Tim Coles, Cedric Dumas, Simon J McBride, DanaKai Bradford

"Don't Whip Me With Your Games" - Investigating "Bottom-Up" Gamification

Pascal Lessel, Maximilian Altmeyer, Marc Müller, Christian Wolff, Antonio Krüger

'Choose a Game': Creation and Evaluation of a Prototype Tool to Support Therapists in Brain Injury Rehabilitation

Cynthia Putnam, Jinghui Cheng, Feng Lin, Sai Yalla, Stephanie Wu

LL21B Papers: Touchscreen Interactions

Chair: Luis A Leiva

Detecting Swipe Errors on Touchscreens using Grip Modulation

Mohammad Faizuddin Mohd Noor, Simon Rogers, John Williamson

Characterizing How Interface Complexity Affects Children's Touchscreen Interactions

Julia Woodward, Alex Shaw, Annie Luc, Brittany Craig, Juthika Das, Phillip Hall,
Akshay Holla, Germaine Irwin, Danielle Sikich, Quincy Brown, Lisa Anthony



Smart Touch: Improving Touch Accuracy for People with Motor Impairments with Template Matching

Martez E Mott, Radu-Daniel Vatavu, Shaun K Kane, Jacob O Wobbrock

Indirect 2D Touch Panning: How Does It Affect Spatial Memory and Navigation Performance?

Henri Palleis, Heinrich Hussmann

EyeSwipe: Dwell-free Text Entry Using Gaze Paths

Andrew T N Kurauchi, Wenxin Feng, Aijen D Joshi, Carlos H Morimoto,
Margrit Betke

TUESDAY 14:30 PM - 15:50 PM

220A Panel: Ask Me Anything: CHI Chairs

Ask Me Anything: CHI Chairs

Jofish Kaye, Allison Druin, Cliff Lampe, Gloria Mark, Susan Fussell, Regan Mandryk

230C SIG: Digital Civics

Digital Civics: Citizen empowerment with and through technology

Vasillis Vlachokyriakos, Clara Crivellaro, Christopher A Le Dantec, Eric Gordon, Pete Wright, Patrick Olivier

210H Course: C12

Designing Technology to Foster Psychological Wellbeing (1/2)

Rafael A Calvo, Dorian Peters

210C Course: C14

User Story Mapping: The Hands-on Course (1/2)

Stephanie Foehrenbach, Christian Heldstab

210G Course: C16

Designing and Assessing Interactive Systems Using Task Models (1/2)

Philippe Palanque, Celia Marinie

210BF Papers: HCI and Gender

Chair: *Neha Kumar*



An Archive of Their Own: A Case Study of Feminist HCI and Values in Design

Casey Fiesler, Shannon Morrison, Amy S Bruckman



Finding Gender-Inclusiveness Software Issues with GenderMag: A Field Investigation

Margaret M Burnett, Anicia N Peters, Charles Hill, Noha Elarief



HCI and Intimate Care as an Agenda for Change in Women's Health

Teresa Almeida, Rob Comber, Madeline Balaam

A Feminist HCI Approach to Designing Postpartum Technologies: "When I first saw a breast pump I was wondering if it was a joke."

Catherine D'Ignazio, Alexis Hope, Becky Michelson, Robyn Churchill, Ethan Zuckerman

210AE Papers: Game and Design

Chair: *Lennart E Nacke*

Game-play Breakdowns and Breakthroughs: Exploring the Relationship Between Action, Understanding and Involvement

Ioanna Iacovides, Anna L Cox, Patrick McAndrew, James Aczel, Eileen Scanlon

Designing Brutal Multiplayer Video Games

Joe Marshall, Conor Linehan, Adrian Hazzard

Thighrim and Calf-Life: A Study of the Conversion of Off-the-Shelf Video Games into Exergames

Mallory Ketcheson, Luke Walker, Nicholas Graham

The Lens of Intrinsic Skill Atoms: A Method for Gameful Design

Sebastian Deterding

112 SIG: Mind the Gap

Mind the Gap: A SIG on bridging the gap in research on body sensing, body perception and multisensory feedback

Aneesh Singh, Ana Tajadura-Jimez, Nadia Bianchi-Berthouze,

Nicolai Marquardt, Monica Tentori, Roberto Bresin, Dana Kulic

114 Case Studies: Organizational Change for Better UX

Chair: *Steven Drucker*

UX Strategy as a Kick-starter for Design Transformation in an Engineering Company

Lassi A Liikkanen

Embedding User Understanding in the Corporate Culture: UX Research and Accessibility at Yahoo

Maria Stone, Frank R Bentley, Brooke White, Mike Shebanek

UX Expeditions in Business-to-Business Heavy Industry—Lessons Learned

Virpi Roto, Eija Kaasinen, Maaria Nuutinen, Marko Seppänen

Why Designers Might Want to Redesign Company Processes to Get to Better UX Design - A Case Study

Meghan Ede, Garrett Dworman

LL21C Papers: Distance Still Matters

Chair: *Helena M Mentis*

RAMPARTS: Supporting Sensemaking with Spatially-Aware Mobile Interactions

Paweł Woźniak, Nitesh Goyal, Przemysław Kucharski, Lars Lischke, Sven Mayer, Morten Fjeld

Far but Near or Near but Far?: The Effects of Perceived Distance on the Relationship between Geographic Dispersion and Perceived Diversity

Lionel P Robert

Ritual Machines I & II: Making Technology at Home

David S Kirk, David John Chatting, Paulina Yurman, Jo-Anne Richard

Office Social: Presentation Interactivity for Nearby Devices

Debaleena Chattopadhyay, Kenton P O'Hara, Sean Rintel, Roman Rädle

Gazed and Confused: Understanding and Designing Shared Gaze for Remote Collaboration

Sarah D'Angelo, Darren Gergle

LL21D Papers: Enabling End-Users and Designers

Chair: *Sven Kratz*

Using and Exploring Hierarchical Data in Spreadsheets

Kerry Shih-Ping Chang, Brad A Myers

Airways: Optimization-Based Planning of Quadrotor Trajectories according to High-Level User Goals

Christoph Gebhardt, Benjamin Hepp, Tobias Nägeli, Stefan Stevsic, Otmar Hilliges

SelPh: Progressive Learning and Support of Manual Photo Color Enhancement

Yuki Koyama, Daisuke Sakamoto, Takeo Igarashi

A Live, Multiple-Representation Probabilistic Programming Environment for Novices

Maria Ivanova Gorinova, Advait Sarkar, Alan F Blackwell, Don Syme

LL21E Papers: Embodied Interaction

Chair: *Audrey Girouard*

Sketching Shape-changing Interfaces: Exploring Vocabulary, Metaphors Use, and Affordances

Majken Kirkegaard Rasmussen, Giovanni Troiano,

TUESDAY 14:30 PM - 15:50 PM

Marianne Graves Petersen, Jakob Grue Simonsen, Kasper Hornbæk
Understanding Affordance, System State, and Feedback in Shape-Changing Buttons

John Tiab, Kasper Hornbæk



Materiale: Rendering Dynamic Material Properties in Response to Direct Physical Touch with Shape Changing Interfaces

Ken Nakagaki, Luke Alexander Jozef Vink, Jared Counts, Daniel Windham, Daniel Leithinger, Sean Follmer, Hiroshi Ishii

High-Low Split: Divergent Cognitive Construal Levels Triggered by Digital and Non-digital Platforms

Geoff Kaufman, Mary Flanagan

ShapeCanvas: An Exploration of Shape-Changing Content Generation by Members of the Public

Aluna Everitt, Faisal Taher, Jason Alexander

LL21F Papers: Contextual Awareness

Chair: Loren G Terveen

The Impact of the Encoding View in Location-Based Reminders: Improving Prospective Remembering

Yao Wang, Mark Schlager, Manuel A Perez-Quinones



Technology and the Politics of Mobility: Evidence Generation in Accessible Transport Activism

Sunil Rodger, John Vines, Janice McLaughlin

Supporting Opportunities for Context-Aware Social Matching: An Experience Sampling Study

Julia M Mayer, Starr Roxanne Hiltz, Louise Barkhuus, Kaisa Väänänen, Quentin (Gad) Jones

Helping Computers Understand Geographically-Bound Activity Restrictions

Marcus Martin Michael Soll, Philipp Naumann, Johannes Schöning, Pavel Andreevich Samsonov, Brent Hecht

LL20A Papers: Curation and Algorithms

Chair: Alyson Young

First I "like" it, then I hide it: Folk Theories of Social Feeds

Motahhare Eslami, Karrie G Karahalios, Christian Sandvig, Kristen Vaccaro, Aimee N Rickman, Kevin Hamilton, Alex Kirlik

Accounting for Taste: Ranking Curators and Content in Social Networks

Haizi Yu, Biplab Deka, Jerry O Talton, Ranjitha Kumar

How Much Information?: Effects of Transparency on Trust in an Algorithmic Interface

René F Kizilcec

Communities Found by Users - not Algorithms: Comparing Human and Algorithmically Generated Communities

Alexandra Lee, Daniel Archambault

Hashtag Drift: Tracing the Evolving Uses of Political Hashtags Over Time

Kyle Booten

LL20D Papers: Interventions to Design Theory

Chair: Norman Su

Dynamics, Multiplicity and Conceptual Blends in HCI

Susanne Bødker, Clemens Klokrose

From Research Prototype to Research Product

William Odom, Ron Wakkary, Youn-kyung Lim, Audrey Desjardins,

Bart J Hengeveld, Richard Banks

Designing Media Architecture: Tools and Approaches for Addressing the Main Design Challenges

Peter Dalsgaard, Kim Halskov, Alexander Wiethoff

An Inclusive, Value Sensitive Design Perspective on Future Identity Technologies

Pam Briggs, Lisa Thomas

LL20B Papers: Crowdsourcing and Creation

Chair: Elizabeth Gerber



Enabling Designers to Foresee Which Colors Users Cannot See

Katharina Reinecke, David R Flatla, Christopher Brooks



Scaffolding Community Documentary Film Making using Commissioning Templates

Tom Bartindale, Guy Schofield, Peter Wright

Comparing Different Sensemaking Approaches for Large-Scale Ideation

Joel Chan, Steven Dang, Steven P Dow

Improving Comprehension of Numbers in the News

Pablo J Barrio, Daniel G Goldstein, Jake M Hofman

LL20C Papers: Complexity and Learning in Crowdsourcing

Chair: Kurt Luther

Toward a Learning Science for Complex Crowdsourcing Tasks

Shayan Doroudi, Ece Kamar, Emma Brunskill, Eric Horvitz

Learning From the Crowd: Observational Learning in Crowdsourcing Communities

Lena Mamykina, Thomas N Smyth, Jill P Dimond, Krzysztof Z Gajos

Atelier: Repurposing Expert Crowdsourcing Tasks as Micro-internships

Ryo Suzuki, Niloufar Salehi, Michelle S Lam, Juan C Marroquin, Michael S Bernstein

Supporting Collaborative Writing with Microtasks

Jaime Teevan, Shamsi T Iqbal, Curtis von Veh

LL21B Papers: In-Air Gesture

Chair: James Fogarty

M.Gesture: An Acceleration-Based Gesture Authoring System on Multiple Handheld and Wearable Devices

Ju-Whan Kim, Han-Jong Kim, Tek-Jin Nam

Do That, There: An Interaction Technique for Addressing In-Air Gesture Systems

Evan Freeman, Stephen A Brewster, Vuokko T Lantz

EMPress: Practical Hand Gesture Classification with Wrist-Mounted EMG and Pressure Sensing

Jess McIntosh, Charlie McNeill, Mike Fraser, Frederic Kerber,

Markus Löchtefeld, Antonio Krüger



Skeletons and Silhouettes: Comparing User Representations at a Gesture-based Large Display

Christopher James Ackad, Martin Tomitsch, Judy Kay

Proactive Sensing for Improving Hand Pose Estimation

Dun-Yu Hsiao, Min Sun, Christy Ballweber, Seth Cooper, Zoran Popovic

TUESDAY 16:30 PM - 17:50 PM

230C SIG: State of Accessibility at CHI

SIG on the State of Accessibility at CHI

Jennifer A Rode, Erin L Brady, Erin Buehler, Shaun K Kane, Richard Ladner, Kathryn E Ringland, Jennifer Mankoff

210D Course: C10

Make This! Introduction to Electronics Prototyping Using Arduino (2/2)
David Sirkin, Nikolas Martelaro, Wendy Ju

210H Course: C12

Designing Technology to Foster Psychological Wellbeing (2/2)
Rafael A Calvo, Dorian Peters

210C Course: C14

User Story Mapping: The Hands-on Course (2/2)
Stephanie Foehrenbach, Christian Heldstab

210G Course: C16

Designing and Assessing Interactive Systems Using Task Models (2/2)
Philippe Palanque, Celia Marinie

210BF Papers: Civic Tech, Participation and Society

Chair: Jofish Kaye



Data and the City

Donald McMillan, Arvid Engström, Airi Lampinen, Barry Brown

Reflections on Deploying Distributed Consultation Technologies with Community Organisations

Ian G Johnson, John Vines, Nick Taylor, Edward Jenkins, Justin Marshall

Re-Making Places: HCI, 'Community Building' and Change

Clara Crivellaro, Alex Taylor, Vasilis Vlachokyriakos, Rob Comber, Bettina Nissen, Peter Wright

Data, Design and Civics: An Exploratory Study of Civic Tech

Kirsten Boehner, Carl DiSalvo

210AE Papers: User Experience and Performance

Chair: Colin Gray

Predicting User Performance and Learning in Human-Computer Interaction with the Herbal Compiler

Jaehyon Paik, Jong W Kim, Frank E Ritter, David Reitter

The Impact of Causal Attributions on System Evaluation in Usability Tests

Adelka Niels, Sascha R Guczka, Monique Janneck

Personality of Interaction: Expressing Brand Personalities Through Interaction Aesthetics

Peter Tolstrup Agesen, Clint Heyer



Somaesthetic Appreciation Design

Kristina Höök, Martin P Jonsson, Anna Ståhl, Johanna Mercurio

112 SIG: Usability of Programming Languages

Usability of Programming Languages

Brad A Myers, Andreas Stefik, Stefan Hanenberg, Antti-Juhani Kaijanaho, Margaret M Burnett, Franklyn Turbak, Philip Wadler

114 Case Studies: Design Methodology

Chair: Susan Dray

API Design Reviews at Scale

Andrew Peter Macvean, Martin Maly, John M Daughtry

Adapting Design Thinking and Cultural Probes to the Experiences of Immigrant Youth: Uncovering the Roles of Visual Media and Music in ICT Wayfaring

Karen E Fisher, Katya Yefimova, Ann Peterson Bishop

User Research to Inform Product Design: Turning Failure into Small Successes

Joan Morris DiMicco, Nancy Mann

Lightweight Journey Mapping: The Integration of Marketing and User Experience through Customer Driven Narratives

Laura Dove, Stephen Reinach, Irwin Kwan

LL21C Papers: Workplace Social Performance

Chair: Jennifer Marlow

What is Your Organization 'Like'? A Study of Liking Activity in the Enterprise

Ido Guy, Inbal Ronen, Naama Zwerdling, Irena Zuyev-Grabovitch, Michal Jacovi

Find an Expert: Designing Expert Selection Interfaces for Formal Help-Giving

Sharoda A Paul

The Role of ICT in Office Work Breaks

Anya Skatova, Ben Bedwell, Victoria E Shipp, Yitong Huang, Alexandra Young, Tom Rodden, Emma Bertenshaw

Let's Stitch Me and You Together! Designing a Photo Co-creation Activity to Stimulate Playfulness in the Workplace

Di Lu, Casey Dugan, Rosta Farzan, Werner Geyer

LL21D Papers: Software and Programming Tools

Chair: Brent Hecht

Towards Providing On-Demand Expert Support for Software Developers

Yan Chen, Steve Oney, Walter S Lasecki

The Social Side of Software Platform Ecosystems

Cleudson R B de Souza, Fernando Figueira Filho, Müller Miranda, Renato Pina Ferreira, Christoph Treude, Leif Singer

Tales of Software Updates: The process of updating software

Kami Vaniea, Yasmeen Rashidi

Trigger-Action Programming in the Wild: An Analysis of 200,000 IFTTT Recipes

Blase Ur, Melwyn Pak Yong Ho, Stephen Brawner, Jiyun Lee, Sarah Mennicken, Noah Picard, Diane Schulze, Michael L Littman

Using Runtime Traces to Improve Documentation and Unit Test Authoring for Dynamic Languages

Jan-Peter Krämer, Joel R Brandt, Jan Borchers

LL21E Papers: Haptic Feedback Everywhere

Chair: Ali Sahami

Cross-Field Aerial Haptics: Rendering Haptic Feedback in Air with Light and Acoustic Fields

Yoichi Ochiai, Kota Kurnagai, Takayuki Hoshi, Satoshi Hasegawa, Yoshio Hayasaki

TUESDAY 16:30 PM - 17:50 PM

HapTurk: Crowdsourcing Affective Ratings of Vibrotactile Icons

Oliver S Schneider, Hasti Seifi, Salma Kashani, Matthew Chun,

Karon E MacLean

AmbiVibe: Design and Evaluation of Vibrations for Progress Monitoring

Jessica R Cauchard, Janette L Cheng, Thomas Pietrzak, James A Landay

Motion Guidance Sleeve: Guiding the Forearm Rotation through

External Artificial Muscles

Chia-Yu Chen, Yen-Yu Chen, Yi-Ju Chung, Neng-Hao Yu

GauntLev: A Wearable to Manipulate Free-floating Objects

Asier Marzo

LL21F Papers: Big Data and Local Society

Chair: Nicola Dell

Finding the Way to OSM Mapping Practices: Bounding Large Crisis Datasets for Qualitative Investigation

Marina Kogan, Jennings Anderson, Leysia Palen, Kenneth M Anderson, Robert Soden

Infrastructure in the Wild: What Mapping in Post-Earthquake Nepal Reveals about Infrastructural Emergence

Robert Soden, Leysia Palen

Why and How Traffic Safety Cultures Matter when Designing Advisory Traffic Information Systems?

MinJuan Wang, Sus Lundgren Lyckvi, Fang Chen

It's Just My History Isn't It?: Understanding Smart Journaling Practices


Chris Elsdén, Abigail C Durrant, David S Kirk

LL20A Papers: Managing Design for Life Disruptions

Chair: Sarita Schoenebeck

Transition Resilience with ICTs: 'Identity Awareness' in Veteran Re-Integration

Bryan C Semaan, Lauren M Britton, Bryan Doso

 Digital Footprints and Changing Networks During Online Identity Transitions

Oliver L Haimson, Jed R Brubaker, Lynn S Dombrowski, Gillian R Hayes

Legacy Contact: Designing and Implementing Post-mortem Stewardship at Facebook


Jed R Brubaker, Vanessa Callison-Burch

"PS. I Love You": Understanding the Impact of Posthumous Digital Messages

Sue Jamison-Powell, Pam Briggs, Shaun Lawson, Conor Linehan, Karen Windle, Harriet Gross

LL20D Papers: Patients' Participation in Mixed Settings

Chair: Myriam Lewkowicz

 The Quantified Patient in the Doctor's Office: Challenges & Opportunities

Peter West, Richard Giordano, Max G Van Kleek, Nigel R Shadbolt

 Breaking the Sound Barrier: Designing for Patient Participation in Audiological Consultations

Yngve Dahl, Geir Kjetil Hanssen

Who's the Doctor? Physicians' Perception of Internet Informed Patients in India

Rajesh Chandwani, Vaibhavi Kulkarni

"Not Just a Receiver": Understanding Patient Behavior in the Hospital Environment

Sonali R Mishra, Shefali Haldar, Ari H Pollack, Logan Kendall, Andrew D Miller, Maher Khelifi, Wanda Pratt

LL20B Papers: Microtasks and Crowdsourcing

Chair: Rajan Vaish



Chain Reactions: The Impact of Order on Microtask Chains

Carrie J Cai, Shamsi T Iqbal, Jaime Teevan

How One Microtask Affects Another

Edward D Newell, Derek Ruths

Embracing Error to Enable Rapid Crowdsourcing

Ranjay A Krishna, Kenji Hata, Stephanie Chen, Joshua Kravitz,

David A Shamma, Li Fei-Fei, Michael S Bernstein



Alloy: Clustering with Crowds and Computation

Joseph Chee Chang, Aniket Kittur, Nathan Hahn

LL20C Papers: Players' Motivations in Games

Chair: Seth Cooper

Fostering Intrinsic Motivation through Avatar Identification in Digital Games

Max V Birk, Cheralyn Atkins, Jason T Bowey, Regan L Mandryk



Negative Emotion, Positive Experience? Emotionally Moving Moments in Digital Games

Julia Ayumi Bopp, Elisa D Mekler, Klaus Opwis

The Effects of Social Exclusion on Experience and Hostile Cognitions in Digital Games

Max V Birk, Benjamin Buttler, Jason T Bowey, Susanne Pöller, Shelby Thomson,

Nicola Baumann, Regan L Mandryk

Designing Closeness to Increase Gamers' Performance

Lucas Colusso, Sean A Munson, Gary Hsieh

LL21B Papers: Touch Interaction

Chair: Caroline Appert

Expressy: Using a Wrist-worn Inertial Measurement Unit to Add Expressiveness to Touch-based Interactions

Gerard Wilkinson, Ahmed Kharrufa, Jonathan Hook, Bradley Pursglove,

Gavin Wood, Hendrik Haeuser, Nils Y Hammerla, Steve Hodges, Patrick Olivier

Partially-indirect Bimanual Input with Gaze, Pen, and Touch for Pan, Zoom, and Ink Interaction

Ken Pfeuffer, Jason Alexander, Hans Gellersen

Hammer Time! A Low-Cost, High Precision, High Accuracy Tool to Measure the Latency of Touchscreen Devices

Jonathan Deber, Bruno De Araujo, Ricardo Jota, Clifton Forlines, Darren Leigh,

Steven Sanders, Daniel Wigdor

Pre-Touch Sensing for Mobile Interaction

Ken Hinckley, Seongkook Heo, Michel Pahud, Christian Holz, Hrvoje Benko,

Abigail Sellen, Richard Banks, Kenton P O'Hara, Gavin Smyth, William Buxton

WEDNESDAY 9:30 AM - 10:50 AM

220A SIGCHI Lifetime Research Award

Chair: Steve Feiner

SIGCHI Lifetime Research Award - Online Communication and Psychological Well-Being

Robert E Kraut

230C alt.chi: Authorship and Reviews

Chair: Janet Vertesi

Peer Review and Design Fiction: "Honestly, they're not just made up"

Joseph Lindley, Paul Coulton

Alt.CHI: What Do Authors Value in the Reviews They Receive?

Yvonne Jansen, Kasper Hornbæk, Pierre Dragicevic

Solving the Battle of First-Authorship: Using Interactive Technology to Highlight Contributions

AC BD, Afsaneh Doryab, Christine Bauer

An Uninteresting Tour Through Why Our Research Papers Aren't Accessible

Jeffrey P Bigham, Erin L Brady, Cole Gleason, Anhong Guo, David A Shamma

220B Panel: Boundary Troubles

Boundary Troubles: Here, There, Design, Make, Research

Jeffrey Bardzell, Shaowen Bardzell, Lilly Irani, Silvia Lindtner, Kaiton Williams, John Zimmerman

210D Course: C17

Advances in Participatory Design (1/2)

Susanne Bødker, Christian Dindler, Ole Sejer Iversen, Kim Halskov

210C Course: C21

Empirical Research Methods for Human-Computer Interaction (1/2)

I Scott MacKenzie, Steven J Castellucci

210G Course: C23

Speech-based Interaction: Myths, Challenges, and Opportunities (1/2)

Cosmin Munteanu, Gerald Penn

210BF Papers: Participating in Well-Being and Family

Chair: Gilly Leshed

Shared Language and the Design of Home Healthcare Technology

Alison Burrows, Rachael Gooberman-Hill, David Coyle

Children's Perspectives on Ethical Issues Surrounding Their Past Involvement on a Participatory Design Team

Brenna McNally, Mona Leigh Guha, Matthew Louis Mauriello, Allison Druin

The Evolution of Engagements and Social Bonds During Child-Parent Co-design

Jason C Yip, Tamara Lynnette Clegg, June Ahn, Judith Odili Uchidiuna,

Elizabeth Bonsignore, Austin Beck, Daniel Pauw, Kelly Mills

ThoughtCloud: Exploring the Role of Feedback Technologies in Care Organisations

Andy Dow, John Vines, Rob Comber, Rob Wilson

210AE Papers: Input Technology

Chair: Katie Panciera

SonicAIR: Supporting Independent Living with Reciprocal Ambient

Audio Awareness

Hanif Baharin, Stephen A Viller, Sean Rintel

Interactivity Improves Usability of Geographic Maps for Visually Impaired People

Anke M Brock, Philippe Truillet, Bernard Oriola, Delphine Picard,

Christophe Jouffrais

Make It Big! The Effect of Font Size and Line Spacing on Online Readability

Luz Rello, Martin Pielot, Mari-Carmen Marcos

Fitts' Law and the Effects of Input Mapping and Stiffness on Flexible Display Interactions

Jesse Burstyn, Juan Pablo Carrascal, Roel Vertegaal

112 SIG: Leading Design Teams and Organizations

Leading Design Teams and Organizations

Carola F Thompson, Janice Rohn

114 Case Studies: Gaming, Gamifications and Arts

Chair: Mark Hancock

beEco - co-designing a game with children to promote environmental awareness - a Case Study

Nuno Jardim Nunes, Valentina Nisi, Kara Rennett

The Salome Experience: Opera Live Streaming and Beyond

Peter Reichl, Christian Loew, Svenja Schroeder, Thomas Schmidt, Bernhard

Schatzl, Valon Lushaj, Oliver Hoedl, Florian Güldenpfennig, Christopher Widauer

nDiVE: Gamified virtual reality environment for Logistics and

Supply Chain Management training

Marko Teras, Torsten Reiners, George Coldham, Lincoln C Wood

LL21C Papers: Comprehension through Visualization

Chair: Jessica Hullman



Towards Understanding Human Similarity Perception in the Analysis of Large Sets of Scatter Plots

Anshul Vikram Pandey, Josua Krause, Cristian Felix, Jeremy Boy, Enrico Bertini

Telling Stories about Dynamic Networks with Graph Comics

Benjamin Bach, Natalie Kerracher, Kyle William Hall, Sheelagh Carpendale,

Jessie Kennedy, Nathalie Henry

The Design and Evaluation of Interfaces for Navigating Gigapixel Images in Digital Pathology

Roy A Ruddle, Rhys G Thomas, Rebecca Randell, Philip Quirke, Darren Treanor

Visualizing Sets with Linear Diagrams

Peter Rodgers, Gem Stapleton, Peter Chapman

LL21D Papers: End-User Programming

Chair: Michael Nebeling

Crossed Wires: Investigating the Problems of End-User Developers in a Physical Computing Task

Tracey K Booth, Simone C Stumpf, Jon Bird, Sara V Jones

LondonTube: Overcoming Hidden Dependencies in Cloud-Mobile-Web Programming

Christopher Scaffidi, Andrew Dove, Tahmid Nabi



Foraging among an Overabundance of Similar Variants

Sruti Srinivasa Ragavan, Sandeep Kaur Kuttal, Charles Hill, Anita Sarma,

David J Piorkowski, Margaret M Burnett

Chronicle: Interactive Exploration of Source Code History

WEDNESDAY 9:30 AM - 10:50 AM

Moritz Wittenhagen, Christian Cherek, Jan Borchers

LL21E Papers: Haptic Sensation Meets Screens

Chair: Jaime Ruiz



Direct Manipulation in Tactile Displays

Aakar Gupta, Thomas Pietrzak, Nicolas Roussel, Ravin Balakrishnan

HapThimble: A Wearable Haptic Device towards Usable Virtual Touch Screen

Hwan Kim, Minhwan Kim, Woohun Lee

Haptic Edge Display for Mobile Tactile Interaction

Sungjune Jang, Lawrence H Kim, Kesler Tanner, Hiroshi Ishii, Sean Follmer

Tactile Presentation to the Back of a Smartphone with Simultaneous Screen Operation

Sugarragchaa Khurelbaatar, Yuriko Nakai, Ryuta Okazaki, Vibol Yern,

Hiroyuki Kajimoto

LL21F Papers: Designing for Attention and Multitasking

Chair: Mary P Czerwinski



Spatio-Temporal Modeling and Prediction of Visual Attention in Graphical User Interfaces

Pingmei Xu, Yusuke Sugano, Andreas Bulling

Now Check Your Input: Brief Task Lockouts Encourage Checking, Longer Lockouts Encourage Task Switching

Sandy J J Gould, Anna L Cox, Duncan P Brumby, Alice Wickersham

Getting Users' Attention in Web Apps in Likable, Minimally Annoying Ways

Dan Tasse, Anupriya Ankelekar, Joshua M Hailpern

Window Shopping: A Study of Desktop Window Switching

Andrew Warr, Ed H Chi, Helen Harris, Alexander Kuscher, Jenn Chen,

Robert Flack, Nicholas Jitkoff

LL20A Papers: Politics on Social Media

Chair: Scott Robertson

Constructing the Visual Online Political Self: An Analysis of Instagram Use by the Scottish Electorate

Jamie Mahoney, Tom Feltwell, Obinna Ajuruchi, Shaun Lawson

#Snowden: Understanding Biases Introduced by Behavioral Differences of Opinion Groups on Social Media

Q Vera Liao, Wai-Tat Fu, Markus Strohmaier

ICT Use by Prominent Activists in Republika Srpska

Borislav Tadic, Markus Rohde, Volker Wulf, David William Randall

Gender and Ideology in the Spread of Anti-Abortion Policy

Amy X Zhang, Scott Counts

LL20D Papers: Health Support

Chair: Sean A Munson

AugKey: Increasing Foveal Throughput in Eye Typing with

Augmented Keys

Antonio Diaz-Tula, Carlos H Morimoto

"Counting on the Group" Reconciling Online and Offline Social Support among Older Informal Caregivers

Matthieu Tixier, Myriam Lewkowicz

A Sociotechnical Mechanism for Online Support Provision

Joshua Introne, Bryan C Semaan, Sean Goggins

HaptiColor: Interpolating Color Information as Haptic Feedback to Assist the Color Blind

Marta G Carcedo, Soon Hau Chua, Simon T Perrault, Paweł W Woźniak,

Raj Joshi, Mohammad Obaid, Morten Fjeld, Shengdong Zhao

LL20C Papers: Supporting Player Performance

Chair: Zachary O Toups



The Mimesis Effect: The Effect of Roles on Player Choice in Interactive Narrative Role-Playing Games

Ignacio X Domínguez, Rogelio E Cardona-Rivera, James K Vance,

David L Roberts

Scaffolding Player Location Awareness through Audio Cues in First-Person Shooters

Colby G Johanson, Regan L Mandryk



How Disclosing Skill Assistance Affects Play Experience in a Multiplayer First-Person Shooter Game

Ansgar E Depping, Regan L Mandryk, Chengzhao Li, Carl Gutwin,

Rodrigo Vicencio-Moreira

Using an International Gaming Tournament to Study Individual Differences in MOBA Expertise and Cognitive Skills

Justin W Bonny, Lisa M Castaneda, Tom Swanson

LL21B Papers: Gesture Elicitation and Interaction

Chair: Andrés Lucero

Between-Subjects Elicitation Studies: Formalization and Tool Support

Radu-Daniel Vatavu, Jacob Wobbrock



User Elicitation on Single-hand Microgestures

Edwin Chan, Teddy Seyed, Wolfgang Stuerzlinger, Xing-Dong Yang,

Frank Maurer

PathSync: Multi-User Gestural Interaction with Touchless Rhythmic Path Mimicry

Marcus Carter, Eduardo Velloso, John Downs, Abigail Sellen, Kenton O'Hara,

Frank Vetere

Machine Learning of Personal Gesture Variation in Music Conducting

Álvaro Sarasúa, Baptiste Caramiaux, Atsu Tanaka



Fingers of a Hand Oscillate Together: Phase Synchronisation of Tremor in Hover Touch Sensing

John Williamson

WEDNESDAY 11:30 AM - 12:50

220A Student Game Competition Finals

Chairs: Jessica Hammer, Katherine Isbister, and Florian 'Floyd' Mueller

230C alt.chi: See this, hear this, touch this, keep this

Chair: Sean Follmer

From Inaction to Interaction: Concept and Application of the Null Gesture
Karsten Seipp, Katrien Verbert

You Can Touch This: Eleven Years and 258218 Images of Objects
Nina Runge, Johannes Schöning, Rainer Malaka, Alberto Frigo

A Remote Pointing Method with Dynamic C-D Ratio during a
Pinching Gesture for Large Tabletop Systems

Naoya Tochiwara, Toshiki Sato, Hideki Koike

From Ecological Sounding Artifacts Towards Sonic Artifact Ecologies
Cumhur Erkut, Stefania Serafin

Making It Real: Towards Practical Progress in the Management of
Personal Information

William Jones, Caleb Thorsteinson, Brandon Thepvongsa, Tanner Garrett

220B Panel: Design Leadership for Business Innovation

Design Leadership for Business Innovation

Janaki Kumar, Irene Au, Margaret Stewart, Todd Lefelt, Katie Dill

210D Course: C17

Advances in Participatory Design (2/2)

Susanne Bødker, Christian Dindler, Ole Sejer Iversen, Kim Halskov

210C Course: C21

Empirical Research Methods for Human-Computer Interaction (2/2)

I Scott MacKenzie, Steven J Castellucci

210G Course: C23

Speech-based Interaction: Myths, Challenges, and Opportunities (2/2)

Cosmin Munteanu, Gerald Penn

210BF Papers: Reflection on UX Design

Chair: Erik Stolterman

Stereotypes and Politics: Reflections on Personas

Nicola Marsden, Maren Haag

Pushing the Limits of Design Fiction: The Case For Fictional Research Papers
Joseph Lindley, Paul Coulton

"It's More of a Mindset Than a Method": UX Practitioners'
Conception of Design Methods

Colin M Gray

Why Design Method Development is not always carried out as
User-Centered Design

Gary S Dickson, Erik Stolterman

210AE Papers: Display and Visualizations

Chair: Niklas Elmqvist

The Effects of Changing Projection Geometry on Perception of 3D
Objects on and around Tabletops

Miguel A Nacenta, Mark Hancock, Carl Gutwin, Sheelagh Cappendale

Mid-Air Pointing on Ultra-Walls

Mathieu Nancel, Emmanuel Pietriga, Olivier Chapuis, Michel Beaudouin-Lafon
'A bit like British Weather, I suppose' Design and Evaluation of the
Temperature Calendar

Enrico Costanza, Ben Bedwell, Michael O Jewell, James A Colley, Tom Rodden

iVoLVER: Interactive Visual Language for Visualization Extraction
and Reconstruction

Gonzalo Gabriel Méndez, Miguel A Nacenta, Sebastien Vandenheste

112 SIG: The Masters Degree in HCI at 20

The Master's Degree in HCI at 20: Issues and Trends

Richard L Henneman, Laura Ballay, Linda Wagner

114 Case Studies: Activities and Health

Chair: Gabriela Marcu

Look! A Healthy Neighborhood: Means to Motivate Participants in
Using an App for Monitoring Community Health

Nazli Cila, Guido Jansen, Maarten Groen, Wouter Meys, Lea den Broeder, Ben Krose

How far in the future will we start from? Interacting with the
Stakeholders of a Nation-wide Patient Portal

Inês Rodolfo, Nuno Correia, Marta Sousa, Paulo Sá, Carlos Duarte

How to Save a Life: Could Real-Time Sensor Data Have Saved Mrs Elle?

Dana Bradford, Qing Zhang

Designing Mobility Eco-Feedback for Elderly Users

Johanna Meurer, Dennis Lawo, Lukas Janßen, Volker Wulf

LL21C Papers: Usability and User Burden

Chair: Erin Solovey

Understanding the Relationship between Frustration and the Severity of
Usability Problems: What can Psychophysiological Data (Not) Tell Us?

Anders Bruun, Effie Lai-Chong Law, Matthias Heintz, Lana HA Alkly



Developing and Validating the User Burden Scale: A Tool for
Assessing User Burden in Computing Systems

Hyewon Suh, Nina Shahriree, Eric Hekler, Julie A Kientz



COGCAM: Contact-free Measurement of Cognitive Stress During
Computer Tasks with a Digital Camera

Daniel J McDuff, Javier Hernandez, Sarah Gontarek, Rosalind W Picard

When Bad Feels Good: Assistance Failures and Interface Preferences

Philip Quinn, Andy Cockburn

Using fNIRS in Usability Testing: Understanding the Effect of Web
Form Layout on Mental Workload

Kristijan Lukanov, Horia A Maior, Max L Wilson

LL21D Papers: Making Interfaces Work for Each Individual

Chair: Marilyn Lennon

We Need Numbers! - Heuristic Evaluation during Demonstrations
(HED) for Measuring Usability in IT System Procurement

Mari Tyllinen, Johanna Kaipio, Tinja Lääveri, Marko HT Nieminen

Interface Design Optimization as a Multi-Armed Bandit Problem

James D Lomas, Jodi Forlizzi, Nikhil Poonwala, Nirmal Patel,

Sharan Shodhan, Kishan Patel, Kenneth Koedinger, Emma Brunskill



Anchored Customization: Anchoring Settings to the Application
Interface to Afford Customization

Antoine Ponsard, Joanna McGrenere

Heterogeneity in Customization of Recommender Systems By
Users with Homogenous Preferences

Jacob Solomon

WEDNESDAY 11:30 AM - 12:50 PM

LL21E Papers: Shape Changing Displays

Chair: Joerg Mueller

TableHop: An Actuated Fabric Display Using Transparent Electrodes

Deepak Ranjan Sahoo, Kasper Hornbæk, Sriram Subramanian

An Evaluation of Shape Changes for Conveying Emotions

Paul Strohmeier, Juan Pablo Carrascal, Bernard Cheng, Margaret Meban, Roel Vertegaal



Emergeables: Deformable Displays for Continuous Eyes-Free Mobile Interaction

Simon Robinson, Celine Coutrix, Jennifer Pearson, Juan Rosso,

Matheus Fernandes Torquato, Laurence Nigay, Matt Jones

DefSense: Computational Design of Customized Deformable Input Devices

Moritz Bächer, Benjamin Hepp, Fabrizio Pece, Paul Kry, Bernd Bickel,

Bernhard Thomaszewski, Otmar Hilliges

LL21F Papers: Smartphone Authentication

Chair: Serge Egelman

Free-Form Gesture Authentication in the Wild

Yulong Yang, Gradeigh D Clark, Janne Lindqvist, Antti Oulasvirta

SnapApp: Reducing Authentication Overhead with a Time-Constrained Fast Unlock Option

Daniel Buschek, Fabian Hartmann, Emanuel von Zezschwitz,

Alexander De Luca, Florian Alt



Do Users' Perceptions of Password Security Match Reality?

Blase Ur, Jonathan Bees, Sean Segreti, Lujio Bauer, Nicolas Christin, Lorrie Faith Cranor

On-Demand Biometrics: Fast Cross-Device Authentication

Christian Holz, Frank R Bentley

LL20A Papers: Online Community Identity and Behavior

Chair: Amanda Lee Hughes

Anonymity, Intimacy and Self-Disclosure in Social Media

Xiao Ma, Jeff Hancock, Mor Naaman

Look Before You Leap: Improving the Users' Ability to Detect Fraud in Electronic Marketplaces

Johannes Sanger, Norman Hänsch, Brian Daniel Glass, Zinaida Benenson,

Robert Landwirth, Angela Sasse

Voice in Virtual Worlds: The Design, Use and Influence of Voice Chat in Online Play

Greg Wadley, Marcus Carter, Martin R Gibbs

Action-Transferred Navigation Technique Design Approach

Supporting Human Spatial Learning

Ji Sun Kim, Denis Gracanin, Taeyoung Yang, Francis Quek

LL20D Papers: Affording Collective Action in Social Media

Chair: Bryan Semaan



Mediating the Undercurrents: Using Social Media to Sustain a Social Movement

Yong Ming Kow, Yubo Kou, Bryan C Semaan, Waikuen Cheng

Designing Cyberbullying Mitigation and Prevention Solutions through Participatory Design With Teenagers

Zahra Ashktorab, Jessica Vitak

Understanding Social Media Disclosures of Sexual Abuse Through the Lenses of Support Seeking and Anonymity

Nazanin Andalibi, Oliver L Haimson, Munmun De Choudhury, Andrea Forte



Dear Diary: Teens Reflect on Their Weekly Online Risk Experiences

Pamela J Wisniewski, Heng Xu, Mary Beth Rosson, Daniel F Perkins, John M Carroll

LL20B Papers: Motivating and Incentivising Crowdsourcing

Chair: Walter S Lasecki

Novices Who Focused or Experts Who Didn't? How Effort and Expertise Cues Affect Judgments of Crowd Work

Yu Wu, Brian P Bailey



Curiosity Killed the Cat, but Makes Crowdsourcing Better

Edith Law, Ming Yin, Joslin Goh, Kevin Chen, Michael A Terry, Krzysztof Z Gajos

Pay It Backward: Per-Task Payments on Crowdsourcing Platforms Reduce Productivity

Kazushi Ikeda, Michael S Bernstein

Investigating the Impact of 'Emphasis Frames' and Social Loafing on Player Motivation and Performance in a Crowdsourcing Game

Geoff Kaufman, Mary Flanagan, Sukdith Punjasthitkul

LL20C Papers: Designing New Player Experiences

Chair: Seth Cooper



Contextual Autonomy Support in Video Game Play: A Grounded Theory

Sebastian Deterding

Sensation: Measuring the Effects of a Human-to-Human Social Touch Based Controller on the Player Experience

Mert Canat, Mustafa Ozan Tezcan, Celalettin Yurdakul, Eran Tiza,

Buğra Can Sefercik, Idil Bostan, Oğuz Turan Buruk, Tilbe Goksun, Oguzhan Ozcan

"I love all the bits": the materiality of boardgames

Melissa J Rogerson, Martin Gibbs, Wally Smith

Destructive Games: Creating Value by Destroying Valuable Physical Objects

David Eickhoff, Stefanie Mueller, Patrick Baudisch

LL21B Papers: Fat Fingers, Small Watches

Chair: Niels Henze

WatchWriter: Tap and Gesture Typing on a Smartwatch Miniature Keyboard with Statistical Decoding

Mitchell Gordon, Tom Yu Ouyang, Shumin Zhai

Exploring Non-touchscreen Gestures for Smartwatches

Shaikh Shawon Arefin Shimon, Courtney Lutton, Zichun Xu,

Sarah Morrison-Smith, Christina Boucher, Jaime Ruiz

WearWrite: Crowd-Assisted Writing from Smartwatches

Michael Nebeling, Alexandra Ta, Anhong Guo, Adrian A de Freitas,

Jaime Teevan, Steven P Dow, Jeffrey P Bigham

Serendipity: Finger Gesture Recognition using an Off-the-Shelf Smartwatch

Hongyi Wen, Julian Andres Ramos Rojas, Anind K Dey

B2B-Swipe: Swipe Gesture for Rectangular Smartwatches from a Bezel to a Bezel

Yuki Kuba, Buntarou Shizuki, Jiro Tanaka

WEDNESDAY 14:30 PM - 15:50 PM

220A Student Design Competition Finals

Chairs: Anirudha Joshi, Scott Minneman

230C alt.chi: Design Fictions and HCI

Chair: Austin Toombs

Resistance is Fertile: Design Fictions in Dystopian Worlds

Nicholas S Dalton, Rebecca Moreau, Ross K Adams

Design Fiction: How to Build a Voight Kampff Machine

Miriam Sturdee, Paul Coulton, Joseph G Lindley, Mike Stead, Haider Ali, Andy Hudson-Smith

The Solution Printer: Magic Realist Design Fiction

Enrique Encinas, Mark Blythe

After death: Big Data and the promise of Resurrection by Proxy

Muhammad Aurangzeb Ahmad

220B Panel: Science and Service, Innovation and Inspiration

Science and Service, Innovation and Inspiration: Celebrating the Life of John Karat

Susan Dray, Clare-Marie Karat, John Carroll, Lorrie Cranor, Robin Jeffries, Zhengjie Liu, Arnold Lund, Ben Shneiderman, Gerrit van der Veer

210H Course: C19

Interactive Biotechnology: Building your own Biotic Game Setup to Play with Living Microorganisms (1/2)

Honesty Kim, Lukas C Gerber, Ingmar H Riedel-Kruse

210C Course: C22

Tools for Designing for Home Entertainment: Gesture Interfaces, Augmented Reality, and Smart Spaces (1/2)

Radu-Daniel Vatavu

210G Course: C24

User Interface Design In Agile Projects (1/2)

Karri-Pekka Laakso, Tuomas Husu, Mikko Romppainen, Janina Fagerlund, Marju Kettunen, Toni Standell

114 Course: C125

Mobile UX: Breaking the Glass to Richer User Experiences (1/2)

Matt Jones, Simon Robinson

210BF Papers: Participatory Design (PD) and Applications

Chair: Juan Pablo Hourcade

Multi-lifespan Design Thinking: Two Methods and a Case Study with the Rwandan Diaspora

Daisy Yoo, Katie Derthick, Shaghayegh Ghassemian, Jean Hakizimana, Brian T Gill, Batya Friedman

Participation Gestalt: Analysing Participatory Qualities of Interaction in Public Space

Peter Dalsgaard, Kim Halskov, Ole Sejer Iversen



Designing Movement-based Play With Young People Using Powered Wheelchairs

Kathrin Gerling, Kieran Hicks, Michael Kalyon, Adam Evans, Conor Linehan
Participatory Design through a Learning Science Lens
Betsy DiSalvo

210AE Papers: Legitimacy, Performance and the Crowd

Chair: Michael S Bernstein

The Power of Collective Endorsements: Credibility Factors in Medical Crowdfunding Campaigns

Jennifer G Kim, Ha Kyung Kong, Karrie Karahalios, Wai-Tat Fu, Hwajung Hong
Legitimacy Work: Invisible Work in Philanthropic Crowdfunding
Katie G Tanaka, Amy Vaida

Extracting Heart Rate from Videos of Online Participants

Thomas Muender, Matthew Miller, Max Valentin Birk, Regan L Mandryk

Highly Successful Projects Inhibit Coordination on Crowdfunding Sites
Jacob Solomon, Wenjuan Ma, Rick Wash

Stories We Tell About Labor: Turkopticon and the Trouble with "Design"

Lilly C Irani, M Six Silberman

112 SIG: Design Thinking Beyond Post-It Notes

Design Thinking Beyond Post-It Notes

Carol Farnsworth, Sally Lawler Kennedy, Janaki Mythily Kumar

LL21C Papers: How Does It Look? Evaluating Visual Design

Chair: Hao-Hua Chu



An EEG-based Approach for Evaluating Graphic Icons from the Perspective of Semantic Distance

Fu-Yin Cherng, Wen-Chieh Lin, Jung-Tai King, Yi-Chen Lee

Aesthetic Appeal and Visual Usability in Four Icon Design Eras

Johanna Maria Silvennoinen, Jussi P P Jokinen

The Effect of Thermal Stimuli on the Emotional Perception of Images

Moses Babafemi Akazue, Martin J Halvey, Lynne Baillie, Stephen A Brewster

Using Crowd Sourcing to Measure the Effects of System Response Delays on User Engagement

Brandon Thomas Taylor, Anind Dey, Dan Siewiorek, Asim Smailagic

LL21D Papers: Expressive HCI

Chair: Jonathan Hook

Storeboard: Sketching Stereoscopic Storyboards

Rorik Henrikson, Bruno De Araujo, Fanny Chevalier, Karan Singh, Ravin Balakrishnan

Skuid: Sketching Dynamic Illustrations Using the Principles of 2D Animation

Rubaiat Habib Kazi, Tovi Grossman, Nobuyuki Umetani, George Fitzmaurice



Object-Oriented Drawing

Haijun Xia, Bruno De Araujo, Tovi Grossman, Daniel Wigdor

The Ethical Implications of HCI's Turn to the Cultural

Steve Benford, Chris Greenhalgh, Bob Anderson, Rachel Jacobs,

Michael Golembewski, Marina Jirotko, Bernd Carsten Stahl, Job Timmermans, Gabriella Giannachi, Matt Adams, Ju Row Farr, Nicholas Tandavanti,

Kirsty Jennings

LL21E Papers: Everyday Objects as Interaction Surfaces

Chair: Mark W Newman



TouchTokens: Guiding Touch Patterns with Passive Tokens

Rafael Morales González, Caroline Appert, Gilles Bailly, Emmanuel Pietriga

Designing a Willing-to-Use-in-Public Hand Gestural Interaction Technique for Smart Glasses

Yi-Ta Hsieh, Antti Jylhä, Valeria Orso, Luciano Gamberini, Giulio Jacucci



Project Jacquard: Manufacturing Digital Textiles at Scale

Ivan Poupyrev, Nan-Wei Gong, Shiho Fukuhara, Mustafa Emre Karagozler, Carsten Schwesig, Karen Robinson

GaussMarbles: Spherical Magnetic Tangibles for Interacting with Portable Physical Constraints

Han-Chih Kuo, Rong-Hao Liang, Long-Fei Lin, Bing-Yu Chen

GaussRFID: Reinventing Physical Toys Using Magnetic RFID Development Kits

Rong-Hao Liang, Han-Chih Kuo, Bing-Yu Chen

LL21F Papers: Privacy over Time and Relationships

Chair: Kirstie Hawkey

Autonomous and Interdependent: Collaborative Privacy Management on Social Networking Sites

Haiyan Jia, Heng Xu



"We're on the Same Page": A Usability Study of Secure Email Using Pairs of Novice Users

Scott Ruoti, Jeff Andersen, Scott Heidbrink, Mark O'Neill, Elham Vaziripour, Justin Wu, Daniel Zappala, Kent Seamons



Enhancing Lifelogging Privacy by Detecting Screens

Mohammed Korayem, Robert Templeman, Dennis Chen, David J Crandall, Apu Kapadia

Sharing Steps in the Workplace: Changing Privacy Concerns Over Time

Nanna Gorm, Irina Shklovski

You Can't Watch This! Privacy-Respectful Photo Browsing on Smartphones

Emanuel von Zezschwitz, Sigrid Ebbinghaus, Heinrich Hussmann, Alexander De Luca

LL20A Papers: UX and Usability Methods

Chair: Karin Slegers



Momentary Pleasure or Lasting Meaning? Distinguishing Eudaimonic and Hedonic User Experiences

Elisa D Mekler, Kasper Hornbæk



Researcher-Centered Design of Statistics: Why Bayesian Statistics Better Fit the Culture and Incentives of HCI

Matthew Kay, Gregory L Nelson, Eric B Hekler

Does Herzberg's Notion of Hygienes and Motivators Apply to User Experience?

Alexandre N Tuch, Kasper Hornbæk

Utilizing Employees as Usability Participants: Exploring When and When Not to Leverage Your Coworkers

Joanne Locascio, Rushil Khurana, Yan He, Jofish Kaye

LL20D Papers: Health Support & Management

Chair: Erika Poole

Speeching: Mobile Crowdsourced Speech Assessment to support Self-Monitoring and management for People with Parkinson's

Roisin McNaney, Mohammad Othman, Dan Richardson, Paul Dunphy, Telmo Amaral, Nick Miller, Helen Stringer, Patrick Olivier, John Vines



Investigating the Heart Pump Implant Decision Process:

Opportunities for Decision Support Tools to Help

Qian Yang, John Zimmerman, Aaron Steinfeld, Lisa Carey, James F Antaki
Finding Significant Stress Episodes in a Discontinuous Time Series of Rapidly Varying Mobile Sensor Data

Hillol Sarker, Matthew Gerard Tyburski, Md Mahbubur Rahman, Karen Hovsepian, Moushumi Sharmin, David Epstein, Kenzie Preston, C Debra M Furr-Holden, Adam J Milam, Inbal Nahum-Shani, Mustafa al'Absi, Santosh Kumar

Designing Guidelines for Mobile Health Technology: Managing Notification Interruptions in the ICU

Preethi Srinivas, Anthony Faiola, Gloria Mark

Youth Advocacy in SNAs: Challenges for Addressing Health Disparities

Farnaz Irannejad Bisafar, Herman Saksono, Priscilla Andrea Baquerizo, Dana Elaine Moore, Andrea Parker

LL20B Papers: Designing for Marginalized Users

Chair: Andy Cockburn

User Interface Design for Low-literate and Novice Users: Past, Present and Future

Indrani Medhi-Thies

Crowdsourcing Accessibility: Human-Powered Access Technologies

Erin L Brady

LL20C Papers: Supporting Player Social Experiences

Chair: Casey Fiesler

Revisiting Computer-Mediated Intimacy: In-Game Marriage and Dyadic Gameplay in Audition

Guo Freeman, Jeffrey Bardzell, Shaowen Bardzell

Ping to Win? Non-Verbal Communication and Team Performance in Competitive Online Multiplayer Games

Alex Leavitt, Brian C Keegan, Joshua Clark

The Proficiency-Congruency Dilemma: Virtual Team Design and Performance in Multiplayer Online Games

Jooyeon Kim, Brian C Keegan, Sungjoon Park, Alice Oh

Design and Evaluation of a Multi-Player Mobile Game for Icebreaking Activity

Pradthana Jarusriboonchai, Aris Malapaschas, Thomas Olsson

LL21B Papers: Fingers and Technology

Chair: Helen Petrie

The Flat Finger: Exploring Area Touches on Smartwatches

Ian Oakley, Carina Lindahl, Khanh Le, DoYoung Lee, MD Rasel Islam

The Performance and Preference of Different Fingers and Chords for Pointing, Dragging, and Object Transformation

Alix Goguey, Mathieu Nancel, Géry Casiez, Daniel Vogel

How We Type: Movement Strategies and Performance in Everyday Typing

Anna Maria Feit, Daryl Weir, Antti Oulasvirta

Finger-Aware Shortcuts

Jingjie Zheng, Daniel Vogel

WEDNESDAY 16:30 PM - 17:50 PM

220A Student Research Competition Finals

Chairs: Jerry Fails, Tilde Bekker

220B Panel: HCI and International Public Policymaking

Chair: Jonathan Lazar

HCI and International Public Policymaking: A Framework for Understanding and Taking Future Actions

Panelists: Lorrie Cranor, Juan Pablo Hourcade, Gerrit Van der Veer, Ake Walldius, Ted Selker, Batya Friedman

210D Course: C19

Designing for an Aging Population: Toward Universal Design

Jeff A Johnson, Kate Finn

210C Course: C22

Tools for Designing for Home Entertainment: Gesture Interfaces, Augmented Reality, and Smart Spaces (2/2)

Radu-Daniel Vatavu

210G Course: C14

User Interface Design In Agile Projects (2/2)

Karri-Pekka Laakso, Tuomas Husu, Mikko Romppainen, Janina Fagerlund, Marju Kettunen, Toni Standell

114 Course: C125

Mobile UX: Breaking the Glass to Richer User Experiences (2/2)

Matt Jones, Simon Robinson

210BF Papers: The Boundaries of HCI Research

Chair: Jeff Bardzell



HCI Research as Problem-Solving

Antti Oulasvirta, Kasper Hornbæk

Anti-Solutionist Strategies: Seriously Silly Design Fiction

Mark Blythe, Kristina Andersen, Rachel Elizabeth Clarke, Peter Wright

Designing Speculative Civics

Carl DiSalvo, Tom Jenkins, Thomas James Lodato

Experimental Systems in Research through Design

Peter Dalsgaard

Social Inequality and HCI: The View from Political Economy

Hamid Ekbia, Bonnie Nardi

210AE Papers: How can Smartphones Fit Our Lives?

Chair: Matthew Lee

A Systematic Assessment of Smartphone Usage Gaps

Niels van Berkel, Chu Luo, Theodoros Anagnostopoulos, Denzil Ferreira, Jorge Goncalves, Simo Hosio, Vassilis Kostakos

Journeys & Notes: Designing Social Computing for Non-Places

Justin B Cranshaw, Andres Monroy-Hernandez, SA Needham

PowerShake: Power Transfer Interactions for Mobile Devices

Paul Worgan, Jarrod Knibbe, Mike Fraser, Diego Martinez Plasencia

MyTime: Designing and Evaluating an Intervention for Targeted Smartphone Non-Use

Alexis Hiniker, Sungsoo (Ray) Hong, Tadayoshi Kohno, Julie A Kientz

112 SIG: Jogging at CHI

Jogging at CHI

Florian Mueller, Joe Marshall, Rohit Ashok Khot, Stina Nylander, Jakob Tholander

LL21C Papers: Detecting User Emotion

Chair: Effie Law

AniSAM & AniAvatar – Animated visualizations of affective states

Andreas Sonderegger, Klaus Heyden, Alain Chavaillaz, Juerger Sauer

Hot Under the Collar: Mapping Thermal Feedback to Dimensional Models of Emotion

Graham Wilson, Dobromir Dobrev, Stephen A Brewster

UX Heatmaps: Mapping User Experience on Visual Interfaces

Vanessa Georges, François Courtemanche, Sylvain Senecal,

Thierry Baccino, Marc Fredette, Pierre-Majorique Leger

Understanding Programming Expertise: An Empirical Study of Phasic Brain Wave Changes

Igor Crk, Timothy Kluthe, Andreas Stefik

LL21D Papers: Robot Personalities

Chair: Jacki O'Neill

The Effect of Displaying System Confidence Information on the Usage of Autonomous Systems for Non-specialist Applications: A Lab Study

Jhim Kiel M Verame, Enrico Costanza, Sarvapali D Ramchurn

Why That Nao? How Humans Adapt to a Conversational Humanoid Robot in Taking Turns-at-Talk

Hannah R M Pelikan, Mathias Broth

ID-Match: A Hybrid Computer Vision and RFID System for Recognizing Individuals in Groups

Hanchuan Li, Peijin Zhang, Samer Al Moubayed, Shwetak N Patel, Alanson P Sample

Help Me Please: Robot Politeness Strategies for Soliciting Help From Humans

Vasant Srinivasan, Leila Takayama

LL21E Papers: Visualization Methods and Evaluation

Chair: Eytan Adar



Egocentric Analysis of Dynamic Networks with EgoLines

Jian Zhao, Michael Glueck, Fanny Chevalier, Yanhong Wu, Azam Khan

ResViz: Politics and Design Issues in Visualizing Academic Metrics

Chris Elsdon, Sebastian Mellor, Patrick Olivier, Pete Wheldon, David S Kirk, Rob Comber

Evaluating Information Visualization via the Interplay of Heuristic Evaluation and Question-Based Scoring

Marti Hearst, Paul Laskowski, Luis Silva

A Comparison of Cooperative and Competitive Visualizations for Co-located Collaboration

Sarah Tausch, Stephanie Ta, Heinrich Hussmann

The Effect of Richer Visualizations on Code Comprehension

Dimitar Asenov, Otmar Hilliges, Peter Müller

LL21F Papers: Privacy and Security Interfaces

Chair: Sameer Patil



The Anatomy of Smartphone Unlocking: A Field Study of Android Lock Screens

Marian Harbach, Alexander De Luca, Serge Egelman

Mapping User Preference to Privacy Default Settings

Jason S Watson, Heather Lipford, Andrew Besmer

On Multiple Password Interference of Touch Screen Patterns and Text Passwords

Weizhi Meng, Wenjuan Li, Lijun Jiang, Liying Meng



Keep on Lockin' in the Free World: A Multi-National Comparison of Smartphone Locking

Marian Harbach, Alexander De Luca, Nathan Malkin, Serge Egelman

LL20A Papers: Video Sharing

Chair: Susanne Bødker

Motives and Concerns of Dashcam Video Sharing

Sangkeun Park, Joohyun Kim, Rabeb Mizouni, Uichin Lee

Meerkat and Periscope: I Stream, You Stream, Apps Stream for Live Streams

John C Tang, Gina Venolia, Kori M Inkpen

The Tyranny of the Everyday in Mobile Video Messaging

Sean Rintel, Richard Harper, Kenton P O'Hara

Impact of Video Summary Viewing on Episodic Memory Recall – Design Guidelines for Video Summarizations

Huy Viet Le, Sarah Clinch, Corina Sas, Tilman Dingler, Niels Henze, Nigel Davies

LL20D Papers: Diverse Disabilities and Support

Chair: David R Flatla

Universal Design Ballot Interfaces on Voting Performance and Satisfaction of Voters with and without Vision Loss

Seunghyun Tina Lee, Yilin Elaine Liu, Ljilja Ruzic Kascak, Jon Sanford

SayWAT: Augmenting Face-to-Face Conversations for Adults with Autism

LouAnne E Boyd, Alejandro Rangel, Helen M Tomimbang,

Andrea Conejo-Toledo, Kanika Patel, Monica E Tentori, Gillian R Hayes

The AT Effect: How Disability Affects the Perceived Social

Acceptability of Head-Mounted Display Use

Halley P Profita, Reem Albaghli, Leah Findlater, Paul Jaeger, Shaun K Kane

Tickers and Talker: An Accessible Labeling Toolkit for 3D Printed Models

Lei Shi, Idan Zelzer, Catherine Feng, Shiri Azenkot

LL20C Papers: Search and Discovery

Chair: Tejas Peesapati

Peek-a-View: Smartphone Cover Interaction for Multi-Tasking

Koeun Choi, Hyunjoo Song, Kyle Koh, Jinwook Bok, Jinwook Seo



Pick me! Getting Noticed on Google Play

Aliaksei Miniukovich, Antonella De Angeli



Diving in at the Deep End: The Value of Alternative In-Situ Approaches for Systematic Library Search

Uta Hinrichs, Simon Butscher, Jens Müller, Harald Reiterer



Empath: Understanding Topic Signals in Large-Scale Text

Ethan Fast, Binbin Chen, Michael S Bernstein

LL21B Papers: Interaction with Small Displays

Chair: Eve Hoggan

Faster Command Selection on Touchscreen Watches

Benjamin Lafreniere, Carl Gutwin, Andy Cockburn, Tovi Grossman

Doppio: A Reconfigurable Dual-Face Smartwatch for Tangible Interaction

Teddy Seyed, Xing-Dong Yang, Daniel Vogel

Supporting Transitions to Expertise in Hidden Toolbars

Katherine Schramm, Carl Gutwin, Andy Cockburn

Investigating Effects of Post-Selection Feedback for Acquiring Ultra-Small Targets on Touchscreen

Chun Yu, Hongyi Wen, Wei Xiong, Xiaojun Bi, Yuanchun Shi

THURSDAY 9:30 AM - 10:50 AM

220A SIGCHI Lifetime Practice Award

Chair: Terry Winograd

SIGCHI Lifetime Practice Award - Mind The Gap

Jeff A Johnson

220B Panel: Beyond the Pipeline

Beyond The Pipeline: Addressing Diversity In High Tech

Karen Holtzblatt, Aruna Balakrishnan, Troy Effner, Emily Rhodes, Tina Tuan

210D Course: C25

Presumptive Design: Design Thinking In Service of Research (1/3)

Leo Frishberg, Charles Lambdin

210H Course: C26

Creative Worthwhile Interaction Design (1/3)

Gilbert Cockton

210C Course: C27

A Dummy's Guide to your Next EXPeriment: Experimental Design and Analysis Made Easy (1/3)

Shengdong Zhao, Xiaojun Meng, Pin Sym Foong, Simon T Perrault

210G Course: C28

Practical UX Research Methodologies (1/3)

Sarah E Garcia, Laura Hammond

210BF Papers: Representing User Experience

Chair: Zhicheng Liu

Data-driven Personas: Constructing Archetypal Users with Clickstreams and User Telemetry

Xiang Zhang, Hans-Frederick Brown, Anil Shankar

Evaluating the Paper-to-Screen Translation of Participant-Aided Sociograms with High-Risk Participants

Bernie Hogan, Joshua R Melville, Gregory Lee Phillips II, Patrick Janulis,

Noshir Contractor, Brian S Mustanski, Michelle Birkett

An Investigation of Metrics For the in-situ Detection of Software Expertise

Tovi Grossman, George Fitzmaurice

Understanding Mass Interactions in Online Sports Viewing: Chatting Motives and Usage Patterns

Minsam Ko, Seungwoo Choi, Joonwon Lee, Uichin Lee, Aviv Segev

210AE Papers: Transportation and HCI

Chair: Barry Brown



Peer-to-peer in the workplace: A view from the road

Syed Ishtiaque Ahmed, Nicola J Bidwell, Himanshu Zade,

Srihari H Muralidhar, Anupama M Dhareshwar, Baneen Karachiwala,

Cedrick N Tandong, Jacki O'Neill

A Design Space to Support the Development of Windshield Applications for the Car

Renate Haeuslschmid, Bastian Pfleging, Florian Alt

When (ish) is My Bus? User-centered Visualizations of Uncertainty in Everyday, Mobile Predictive Systems

Matthew Kay, Tara Kola, Jessica R Hullman, Sean A Munson

Error Recovery in Multitasking While Driving

Ja Young Lee, Madeleine C Gibson, John D Lee

112 SIG: Child-Computer Interaction

Child-Computer Interaction SIG: New Challenges and Opportunities

Juan Pablo Hourcade, Glenda Revell, Anja Zeising, Ole Sejer Iversen,

Narcis Pares, Tilde Bekker, Janet C Read

LL21C Papers: Natural User Interfaces for InfoVis

Chair: Steve Oney

TimeFork: Interactive Prediction of Time Series

Sriram Karthik Badam, Jieqiong Zhao, Shivalik Sen, Niklas Elmqvist,

David Ebert



The Effect of Visual Appearance on the Performance of Continuous Sliders and Visual Analogue Scales

Justin Matejka, Michael Glueck, Tovi Grossman, George Fitzmaurice

Making Sense of Temporal Queries with Interactive Visualization

Leilani Battle, Danyel Fisher, Robert DeLine, Mike Barnett, Badrish

Chandramouli, Jonathan Goldstein

Investigating Time Series Visualisations to Improve the User Experience

Muhammad Adnan, Mike Just, Lynne Baillie

LL21D Papers: Eye Gaze

Chair: Pernilla Qvarfordt



Building a Personalized, Auto-Calibrating Eye Tracker from User Interactions

Michael Xuelin Huang, Tiffany CK Kwok, Grace Ngai, Stephen CF Chan,

Hong Va Leong

Can Eye Help You?: Effects of Visualizing Eye Fixations on Remote Collaboration Scenarios for Physical Tasks

Keita Higuchi, Ryo Yonetani, Yoichi Sato

Gaze-contingent Manipulation of Color Perception

Michael Maunder, David R Flatla, Miguel A Nacenta

Spotlights: Attention-Optimized Highlights for Skim Reading

Byungjoo Lee, Olli Savisaari, Antti Oulasvirta

LL21F Papers: Mental Models of Privacy

Chair: Florian Schaub

"If You Put All The Pieces Together..." - Attitudes Towards Data Combination and Sharing Across Services and Companies

Igor Bilogrevic, Martin Ortlieb

Privacy Personas: Clustering Users via Attitudes and Behaviors toward Security Practices

Janna-Lynn M Dupree, Richard Devries, Daniel M Berry, Edward Lank



It's Creepy, But it Doesn't Bother Me

Chanda Phelan, Cliff Lampe, Paul Resnick

Make it Simple, or Force Users to Read? Paraphrased Design Improves Comprehension of End User License Agreements

Thomas F Waddell, Joshua Auriemma, S Shyam Sundar



Behavior Ever Follows Intention? A Validation of the Security Behavior Intentions Scale (SeBIS)

Serge Egelman, Marian Harbach, Eyal Peer

LL20A Papers: Making Music on the Brain

Chair: David England



Learn Piano with BACH: An Adaptive Learning Interface that Adjusts Task Difficulty Based on Brain State

Beste F Yuksel, Kurt B Oleson, Lane Harrison, Evan M Peck,

Daniel A Afergan, Remco Chang, Robert JK Jacob



#Scanners: Exploring the Control of Adaptive Films using Brain-Computer Interaction

Matthew Pike, Richard Ramchurn, Steve Benford, Max L Wilson

Inspect, Embody, Invent: A Design Framework for Music Learning and Beyond

Xiao Xia, Hiroshi Ishii

Physiopucks: Increasing User Motivation by Combining Tangible and Implicit Physiological Interaction

Sebastian Mealla Cincuegrani, Sergi Jorda, Aleksander Väljamäe

LL20D Papers: Design for Health Care

Chair: Aneesha Singh



Technological Caregiving: Supporting Online Activity for Adults with Cognitive Impairments

Anne Marie Piper, Raymundo Cornejo, Lisa B Hurwitz, Caitlin E Unumb

Closing the Gap: Supporting Patients' Transition to Self-Management after Hospitalization

Ari H Pollack, Uba Backonja, Andrew D Miller, Sonali R Mishra,

Maier Khelifi, Logan Kendall, Wanda Pratt

Care Partnerships: Toward Technology to Support Teens' Participation in their Health Care

Matthew K Hong, Lauren Wilcox, Daniel Machado, Thomas Olson,

Stephen F Simoneaux

Self-Care Technologies in HCI: Trends, Tensions, and Opportunities

Francisco Nunes, Nervo Xavier Verdezoto, Geraldine Fitzpatrick,

Morten Kyng, Erik Grönvall, Cristiano Storni

LL20C Papers: Living in Smart Environments

Chair: Jesper Kjeldskov

It is too Hot: An In-Situ Study of Three Designs for Heating

Alper Turan Alan, Mike Shann, Enrico Costanza, Sarvapali D Ramchurn, Sven Seuken

"Like Having a Really bad PA": The Gulf between User Expectation and Experience of Conversational Agents

Ewa A Luger, Abigail Sellen

LivingDesktop: Augmenting Desktop Workstation with Actuated Devices

Gilles Bailly, Sidharth Sahdev, Sylvain Malacria, Thomas Pietrzak

LL21B Papers: Interaction Techniques for Mobile Interfaces

Chair: Christian Holz

Personalized Compass: A Compact Visualization for Direction and Location

Daniel Miao, Steven K Feiner

SymmetriSense: Enabling Near-Surface Interactivity on Glossy Surfaces using a Single Commodity Smartphone

Chungkuk Yoo, Inseok Hwang, Eric Rozner, Yu Gu, Robert F Dickerson



FlexCase: Enhancing Mobile Interaction with a Flexible Sensing and Display Cover

Christian Rendl, David Kim, Patrick Parzer, Sean Fanella, Martin Zirkel,

Gregor Scheipl, Michael Haller, Shahram Izadi

TapBoard 2: Simple and Effective Touchpad-like Interaction on a Multi-Touch Surface Keyboard

Sunjun Kim, Geehyuk Lee

THURSDAY 11:30 AM - 12:50 PM

220B Panel: Algorithmic Authority

Algorithmic Authority: the Ethics, Politics, and Economics of Algorithms that Interpret, Decide, and Manage

Caitlin Lustig, Katie Pine, Bonnie Nardi, Lilly Irani, Min Kyung Lee, Dawn Nafus, Christian Sandvig

210D Course: C25

Presumptive Design: Design Thinking In Service of Research (2/3)

Leo Frishberg, Charles Lambdin

210H Course: C26

Creative Worthwhile Interaction Design (2/3)

Gilbert Cockton

210C Course: C27

A Dummy's Guide to your Next EXperiment: Experimental Design and Analysis Made Easy (2/3)

Shengdong Zhao, Xiaojun Meng, Pin Sym Foong, Simon T Perrault

210G Course: C28

Practical UX Research Methodologies (2/3)

Sarah E Garcia, Laura Hammond

210BF Papers: Social Media and Health

Chair: Paul Resnick

"With most of it being pictures now, I rarely use it": Understanding Twitter's Evolving Accessibility to Blind Users

Meredith Ringel Morris, Annuska Perkins, Catherine Yao, Sina Bahram, Jeffrey P Bigham, Shaun K Kane

Sleep Debt in Student Life: Online Attention Focus, Facebook, and Mood

Gloria Mark, Yiran Wang, Melissa Niiya, Stephanie M Reich

"Tell It Like It Really Is": A Case of Online Content Creation and Sharing Among Older Adult Bloggers

Robin Brewer, Anne Marie Piper

Social Media Image Analysis for Public Health

Venkata Rama Kiran Garimella, Abdulrahman Alfayad, Ingmar Weber

It Matters If My Friends Stop Smoking: Social Support for Behavior Change in Social Media

Corbin Reno, Erika S Poole

210AE Papers: New Materials and Manufacturing Skills

Chair: Stefanie Mueller

Steel-Sense: Integrating Machine Elements with Sensors by Additive Manufacturing

Tatyana Vasilevitsky, Amit Zoran

xPrint: A Modularized Liquid Printer for Smart Materials Deposition

Guanyun Wang, Lining Yao, Wen Wang, Jifei Ou, Chin-Yi Cheng, Hiroshi Ishii

Cilllia - 3D Printed Micro-Pillar Structures for Surface Texture, Actuation and Sensing

Jifei Ou, Gershon Dublon, Chin-Yi Cheng, Felix Heibeck, Karl DD Willis, Hiroshi Ishii

Foldem: Heterogeneous Object Fabrication via Selective Ablation of Multi-Material Sheets

Varun Perumal C, Daniel Wigdor

112 SIG: Conflict & HCI

Conflict & HCI: Preventing, De-Escalating and Recovering

Juan Pablo Hourcade, Lisa P Nathan, Panayiotis Zaphiris, Yoram I Chisik, Cuauhtémoc Rivera-Loaiza, Jason C Yip

LL21D Papers: Eye Tracking Applications

Chair: Saleema Amershi

A Model Relating Pupil Diameter to Mental Workload and Lighting Conditions

Bastian Pfleging, Drea K Fekety, Albrecht Schmidt, Andrew L Kun



Pointing while Looking Elsewhere: Designing for Varying Degrees of Visual Guidance during Manual Input

Baris Serim, Giulio Jacucci

EyeGrip: Detecting Targets in a Series of Uni-directional Moving Objects Using Optokinetic Nystagmus Eye Movements

Shahram Jalaliniya, Diako Mardanbegi

Eye-Trace: Segmentation of Volumetric Microscopy Images with Eyegaze

Thomas J Templier, Kenan Bektas, Richard HR Hahnloser

LL21F Papers: Food as Method and Inquiry

Chair: Andrea Parker

"My Doctor is Keeping an Eye on Me!": Exploring the Clinical Applicability of a Mobile Food Logger

Yoojung Kim, Sookyong Ji, Hyunjeong Lee, Jeong-Whun Kim, Sooyoung Yoo, Joongseek Lee

Crumbs: Lightweight Daily Food Challenges to Promote Engagement and Mindfulness

Daniel A Epstein, Felicia Cordeiro, James Fogarty, Gary Hsieh, Sean A Munson

Evaluation of a Food Portion Size Estimation Interface for a Varying Literacy Population

Beenish M Chaudhry, Christopher Schaeffbauer, Ben Jelen, Katie A Siek, Kay Connelly

Examining Unlock Journaling with Diaries and Reminders for In Situ Self-Report in Health and Wellness

Xiaoyi Zhang, Laura R Pina, James Fogarty

LL20A Papers: Supporting Information Seeking

Chair: Max L Wilson

Age-related Differences in the Content of Search Queries when Reformulating

Saraschandra Karanam, Herre van Oostendorp

Automatic Internationalization for Just In Time Localization of Web-based User Interfaces

Luis A Leiva, Vicent Alabau

The 32 Days Of Christmas: Understanding Temporal Intent in Image Search Queries

Frank R Bentley, Joseph 'Jofish' Kaye, David A Shamma, John Alexis Guerra-Gomez

Influence of Content Layout and Motivation on Users' Herd Behavior in Social Discovery

Yanzhen Yue, Xiaojuan Ma, Zhenhui Jiang

LL20D Papers: Medical Device Sensing

Chair: Cosmin Munteanu

Delineating the Operational Envelope of Mobile and Conventional EDA Sensing on Key Body Locations

Panagiotis Tsiamyrtzis, Malcolm Dcosta, Dvijesh J Shastri, Eswar Prasad, Ioannis T Pavlidis



SpiroCall: Measuring Lung Function over a Phone Call

Mayank Goel, Elliot Saba, Maia Stiber, Eric Whitmire, Josh Fromm, Eric C Larson, Gaetano Borriello, Shwetak N Patel

Interacting with Predictions: Visual Inspection of Black-box Machine Learning Models

Josua Krause, Adam Perer, Kenney Ng

Musically Informed Sonification for Chronic Pain Rehabilitation: Facilitating Progress & Avoiding Over-Doing

Joseph W Newbold, Nadia Berthouze, Nicolas E Gold, Ana Tajadura-Jiménez, Amanda Williams

KeDiary: Using Mobile Phones to Assist Patients in Recovering from Drug Addiction

Chuang-wen You, Ya-Fang Lin, Cheng-Yuan Kelvin Li, Yu-Lun Tsai, Ming-Chyi Huang, Chao-Hui Lee, Hao-Chuan Wang, Hao-Hua Chu

LL20C Papers: Engaging Players in Games

Chair: Sebastian Deterding

Designing Engaging Games Using Bayesian Optimization

Mohammad M Khajah, Brett D Roads, Robert V Lindsey, Yun-En Liu, Michael C Mozer

Operationalising and Evaluating Sub-Optimal and Optimal Play Experiences through Challenge-Skill Manipulation

Madison Klarkowski, Daniel Johnson, Peta Wyeth, Mitchell McEwan, Cody Phillips, Simon Smith

How to Present Game Difficulty Choices? Exploring the Impact on Player Experience

Jan David Smeddinck, Regan L Mandryk, Max Valentin Birk, Kathrin M Gerling, Dietrich Barsilowski, Rainer Malaka



Peak-End Effects on Player Experience in Casual Games

Carl Gutwin, Christianne Rooke, Andy Cockburn, Regan L Mandryk, Benjamin Lafreniere

LL21B Papers: Multi-Device Interaction

Chair: Daniel Avrahami

Smartwatch *in vivo*

Stefania Pizza, Barry Brown, Donald McMillan, Airi Lampinen

When Tablets meet Tabletops: The Effect of Tabletop Size on Around-the-Table Collaboration with Personal Tablets

Johannes Zagermann, Ulrike Pfeil, Roman Rädle, Hans-Christian Jetter, Clemens Klokmoose, Harald Reiterer



Enhancing Cross-Device Interaction Scripting with Interactive Illustrations

Pei-Yu (Peggy) Chi, Yang Li, Björn Hartmann

XDBrowser: User-Defined Cross-Device Web Page Designs

Michael Nebeling, Anind K Dey

THURSDAY 14:30 PM - 15:50 PM

210D Course: C25

Presumptive Design: Design Thinking In Service of Research (3/3)
Leo Frishberg, Charles Lambdin

210H Course: C26

Creative Worthwhile Interaction Design (3/3)
Gilbert Cockton


210C Course: C27

A Dummy's Guide to your Next EXperiment: Experimental Design and Analysis Made Easy (3/3)
Shengdong Zhao, Xiaojun Meng, Pin Sym Foong, Simon T Perrault

210G Course: C28

Practical UX Research Methodologies (3/3)
Sarah E Garcia, Laura Hammond


210AE Papers: Seams of Craft, Design and Fabrication

Chair: Ian Oakley
Expanding on Wabi-Sabi as a Design Resource in HCI
Vasiliki Tsaknaki, Ylva Fernaeus
The Hybrid Bricolage - Bridging Parametric Design With Craft through Algorithmic Modularity
Tamara Anna Efrat, Moran Mizrahi, Amit Zoran
ExoSkin: On-Body Fabrication
Madeline Gannon, Tovi Grossman, George Fitzmaurice
 Mimetic Machines: Collaborative Interventions in Digital Fabrication with Arc
Hidekazu Saegusa, Thomas Tran, Daniela K Rosner



112 SIG: Rethinking Mobile Interfaces for Older Adults

Rethinking Mobile Interfaces for Older Adults
Neil Charness, Mark Dunlop, Cosmin Munteanu, Emma Nicol, Antti Oulasvirta, Xiangshi Ren, Sayan Sarcar, Chaklam Silpasuwanchai


LL21C Papers: IoT and HCI ASAP!

Chair: Florian Mueller
Pressing Not Tapping: Comparing a Physical Button with a Smartphone App for Tagging Music in Radio Programmes
Lianne Kerlin, Jasmine Cox, Stephen Jolly, Michael Evans, George Green, David Regan
PaperID: A Technique for Drawing Functional Battery-Free Wireless Interfaces on Paper
Hanchuan Li, Eric Brockmeyer, Elizabeth J Carter, Josh Fromm, Scott E Hudson, Shwetak N Patel, Alanson P Sample
 Rapid: A Framework for Fabricating Low-Latency Interactive Objects with RFID Tags
Andrew Spielberg, Alanson P Sample, Scott E Hudson, Jennifer Mankoff, James McCann
Snap-To-It: A User-Inspired Platform for Opportunistic Device Interactions
Adrian A de Freitas, Michael Nebeling, Xiang 'Anthony' Chen, Junrui Yang, Akshaye Shreenithi Kirupa Karthikeyan Ranithangam, Anind K Dey

LL21D Papers: Body and Fashion

Chair: Björn Hartmann
Embodied Sketching
Elena Márquez Segura, Laia Turmo Vidal, Asreen Rostami, Annika Waern
 "I don't want to wear a screen": Probing perceptions of and possibilities for dynamic displays on clothing
Laura Devendorf, Joanne Lo, Noura Howell, Jung Lin Lee, Nan-Wei Gong, Mustafa Emre Karagozler, Shiho Fukuhara, Ivan Poupyrev, Eric Paulos, Kimiko Ryokai
BeUpright: Posture Correction Using Relational Norm Intervention
Jaemyung Shin, Bumsoo Kang, Taiwoo Park, Jina Huh, Jinhan Kim, Junehwa Song
 Body Integrated Programmable Joints Interface
Sang-won Leigh, Pattie Maes
Mirror Mirror: An On-Body T-shirt Design System
Daniel P Saakes, Hui-Shyong Yeo, Seung-Tak Noh, Gyeol Han, Woontack Woo

LL20C Papers: Smart Homes, Devices and Data

Chair: Chuang-Wen You
"She'll just grab any device that's closer": A Study of Everyday Device & Account Sharing in Households
Tara Matthews, Kerwell Liao, Anna Turner, Marianne Berkovich, Robert Reeder, Sunny Consolvo
"Just whack it on until it gets hot": Working with IoT Data in the Home
Joel E Fischer, Andy Crabtree, Tom A Rodden, James A Colley, Enrico Costanza, Michael Jewell, Sarvapali D Ramchurn
 Designing for Domestic Memorialization and Remembrance: A Field Study of Fenestra in Japan
Daisuke Uriu, William Odom
Integrating the Smart Home into the Digital Calendar
Sarah Mennicken, David Kim, Elaine Huang

LL21B Papers: Large Display Interaction

Chair: Aaron Quigley
The Bicycle Barometer: Design and Evaluation of Cyclist-Specific Interaction for a Public Display
Sandy Claes, Karin Slegers, Andrew Vande Moere
HandMark Menus: Rapid Command Selection and Large Command Sets on Multi-Touch Displays
Md. Sami Uddin, Carl Gutwin, Benjamin Lafreniere
Glowworms and Fireflies: Ambient Light on Large Interactive Surfaces
Florian Perteneder, Eva-Maria Beatrix Grossauer, Joanne Leong, Wolfgang Stuerzlinger, Michael Haller
Off-Limits: Interacting Beyond the Boundaries of Large Displays
Anders Markussen, Sebastian Boring, Mikkel R Jakobsen, Kasper Hornbæk, Ambra Trotto, Jeroen Peeters, Stoffel Kuenen

A large grid of small dots, arranged in approximately 30 rows and 40 columns, covering the majority of the page. The dots are light gray and serve as a guide for writing notes.

WORKSHOPS & SYMPOSIA

WORKSHOPS & SYMPOSIA

SATURDAY & SUNDAY WORKSHOPS

W01: Art.CHI II: Digital Art in a Post-Digital World

Room 210B

David England, Celine E Latulipe, Nick Bryan-Kinns, Ernest a Edmonds, Sean Clark

W03: For Richer, for Poorer, in Sickness or in Health... The Long-Term Management of Personal Information

Room 112

William Jones, Victoria Bellotti, Robert G. Capra, Gloria Mark, Catherine C. Marshall, Karyn A Moffatt, Jaime Teevan, Maximus Van Kleek, Jesse David Dinneen

W04: Design patterns, principles, and strategies for Sustainable HCI

Room 213

Bran Knowles, Adrian K Clear, Samuel Mann, Eli Bleviss, Maria Håkansson

W05: Designing Speech and Multimodal Interactions for Mobile, Wearable, and Pervasive Applications

Room 214

Cosmin Munteanu, Pourang P Irani, Sharon L. Oviatt, Matthew P. Aylett, Gerald Penn, Shimei Pan, Nikhil Sharma, Frank Rudzicz, Randy Gomez, Keisuke Nakamura, Kazuhiro Nakadai

W06: Development Consortium: HCI Across Borders

Room LL20A

Neha Kumar, Susan Dray, Andy Dearden, Nicola Dell, Melissa Densmore, Rebecca E. Grinter, Zhengjie Liu, Mario A Moreno-Rocha, Anicia Peters, Eunice Sari, William Thies, Indrani Medhi-Thies, William D Tucker, Elba Valderrama Bahamondez, Susan Wyche

W07: Workshop on Interactive Systems in Healthcare (WISH)

Room LL20D (Saturday), Room VIP 2, 3rd Floor (Sunday)

Lena Mamykina, Madhu Reddy, Katie A Siek, Gabriela Marcu, Leslie S. Liu

SATURDAY WORKSHOPS

W08: Touch, Taste, & Smell User Interfaces: The Future of Multisensory HCI

Room LL21C

Marianna Obrist, Carlos Velasco, Chi Thanh Vi, Nimesha Ranasinghe, Ali Israr, Adrian David Cheok, Charles Spence, Ponnampalam Gopalakrishnakone

W09: Exploring Social Justice, Design, and HCI

Room 230B

Sarah Fox, Mariam Asad, Katherine Lo, Lynn S Dombrowski, Jill P Dimond, Shaowen Bardzell

W10: Move to be Moved

Room LL21B

Kristina Höök, Martin Jonsson, Anna Ståhl, Jakob Tholander, Toni Robertson, Patrizia Marti, Dag Svanaes, Marianne Graves Petersen, Jodi L Forlizzi, Thecla Schiphorst, Katherine Isbister, Caroline Hummels, Sietske Klooster, Lian Loke, George Poonkhin Khut

W11: Proxemic Mobile Collocated Interactions

Room 230C

Martin Porcheron, Andrés Lucero, Aaron Quigley, Nicolai Marquardt, James Clawson, Kenton P O'Hara

W12: Pervasive Play

Room 232

June Ahn, Elizabeth Bonsignore, Derek L Hansen, Kari Kraus Kraus, Carman Neustaedter

W14: Sharing Methods for Involving People with Impairments in Design: Exploring the Method Story Approach

Room 210D

Karin Slegers, Niels Hendriks, Pieter Duysburgh, Rita Maldonado Branco, Bert Vandenberghe, Eva Brandt

W15: Music and HCI

Room 210A

Simon Holland, Andrew P McPherson, Wendy E. Mackay, Marcelo M Wanderley, Michael D Gurevich, Tom W Mudd, Sile O'Modhrain, Katie L Wilkie, Joseph W Malloch, Jérémie Garcia, Andrew Johnston

W16: Involving the Crowd in Future Museum Experience Design

Room 210G

Arnold P.O.S. Vermeeren, Licia Calvi, Amalia Sabiescu, Raffaella Trocchianesi, Dagny Stuedahl, Elisa Giaccardi

W17: HCI Goes to the Zoo

Room LL21D

Sarah Webber, Marcus Carter, Jason Watters, Bethany Krebs, Sally Sherwen, Clara Mancini, Kenton P O'Hara

W18: Career Development Workshop for Recent PhDs

Room LL20B

Susan R. Fussell, Luigina Ciolfi

W19: Cross-Surface: Challenges and Opportunities for 'bring your own device' in the wild

Room LL20C

Steven Houben, Nicolai Marquardt, Jo Vermeulen, Johannes Schöning, Clemens Klokmoose, Harald Reiterer, Henrik Korsgaard, Mario Schreiner

W20: Autism and Technology - Beyond Assistance & Intervention

Room 111

Christopher Frauenberger, Judith Good, Narcis Pares

W21: My Life On Film

Room LL21F

Matthew P. Aylett, Lisa Thomas, David Philip Green, David A Shamma, Pam Briggs, Finola Kerrigan

W22: Ethical Encounters in Human-Computer Interaction

Room 210H

Jenny Waycott, Cosmin Munteanu, Hilary Davis, Anja Thieme, Wendy Moncur, Roisin C McNaney, John Vines, Stacy Branham

W24: Following User Pathways: Cross Platform and Mixed Methods Analysis in Social Media Studies

VIP 2, 3rd Floor

Margaret Hall, Athanasios Mazarakis, Isabella Peters, Martin J Chorley, Simon Caton, Jens-Erik Mai, Markus Strohmaier

W25: Future of Human-Building Interaction

Room 210E

Hamed S Alavi, Denis Lalanne, Julien Nembrini, Elizabeth F Churchill, David S Kirk, Wendy Moncur

WORKSHOPS & SYMPOSIA

W26: Bridging the Gap between Privacy by Design and Privacy in Practice Room 210C

*Luke Stark, Jennifer King, Xinru Page, Airi Lampinen, Jessica Vitak,
Pamela J Wisniewski, Tara Whalen, Nathaniel Good*

W27: Attending to Objects as Outcomes of Design Research Room 114

*Tom Jenkins, Kristina Andersen, William W Gaver, William Odom, James Pierce,
Anna Vallgård*

SATURDAY SYMPOSIA

W13: Japanese HCI Symposium: Emerging Japanese HCI Research Collection Room LL21E

*Kohei Matsumura, Masa Ogata, Saki Sakaguchi, Takashi Ijiri, Takeshi Nishida,
Jun Kato, Hiromi Nakamura, Daisuke Sakamoto, Yoshifumi Kitamura*

W23: SEACHI 2016: Smart Cities for Better Living with HCI and UX VIP Lounge, 3rd Floor

*Eunice Sari, Adi Tedjasaputra, Masitah Ghazali, Ellen Yi-Luen Do, Henry
Been-Lirn Duh, Artur Lugmayr, Erica Hanson*

SUNDAY WORKSHOPS

W02: Sharing Perspectives on the Design of Shape-Changing Interfaces Room 210C

*Paul Strohmeier, Antonio Gomes, Giovanni Maria Troiano, Aske Mottelson,
Timothy Merritt, Jason Alexander*

W28: CrossFAB: Bridging the Gap between Personal Fabrication Research in HCI, Computer Graphics, Robotics, Art, Architecture, and Material Science Room 111

*Stefanie Mueller, Laura Devendorf, Stelian Coros, Yoichi Ochiai, Madeline Gannon,
Patrick Baudisch*

W29: Computing in Mental Health Room LL20D

Rafael A Calvo, Karthik Dinakar, Rosalind Picard, Pattie Maes

W30: Mid-Air Haptics and Displays: Systems for Un-instrumented Mid-air Interactions Room 230B

Sriram Subramanian, Sue Ann Seah, Hiroyuki Shinoda, Eve E Hoggan, Loic Corenthy

W31: ACM SIGCHI Local Chapters Workshop 2016 VIP Lounge, 3rd Floor

Tuomo Kujala

W32: Advances in DIY Health and Wellbeing Room 230C

*Aisling Ann O'Kane, Amy Hurst, Gerrit Niezen, Nicolai Marquardt, Jon Bird, Gregory
D Abowd*

W33: Tangibles for Health Workshop Room LL21F

*Audrey Girouard, David K McGookin, Peter D Bennett, Orit Shaer, Katie A Siek,
Marilyn R Lennon*

W34: Inviscid Text Entry and Beyond Room 210A

*Keith Vertanen, Mark Dunlop, James Clawson, Per Ola Kristensson,
Ahmed Sabbir Arif*

W36: Productivity Decomposed: Getting Big Things Done with Little Microtasks Room LL21B

*Jaime Teevan, Shamsi T Iqbal, Carrie J Cai, Jeffrey P Bigham, Michael S. Bernstein,
Elizabeth M Gerber*

W37: The Art of Everyday Food Science: Foraging for Design Opportunities Room 210E

Stacey Kuznetsov, Christina Jean Santana, Elenore Long, Rob Comber, Carl DiSalvo

W40: Connecting Online Work and Online Education at Scale Room 210F

Markus Krause, Margeret Hall, Joseph Jay Williams, Simon Caton, John Prpić

W41: HCI and Autonomous Vehicles: Contextual Experience Informs Design Room LL21C

*Alexander Meschtscherjakov, Manfred Tscheligi, Dalila Szostak, Sven Krome,
Bastian Pfleging, Rabindra Ratan, Ioannis Politis, Sonia Baltodano, Dave Miller,
Wendy Ju*

W42: Fabrication & HCI: Hobbyist Making, Industrial Production, and Beyond Room 210G

Verena Fuchsberger, Martin Murer, Manfred Tscheligi, Silvia Lindtner,

Shaowen Bardzell, Jeffrey Bardzell, Andreas Josef Reiter, Pernille Bjorn

W43: Human-Centred Machine Learning Room 210H

*Marco Gillies, Rebecca Fiebrink, Atsu Tanaka, Baptiste Caramiaux, Jérémie Garcia,
Frédéric Bevilacqua, Alexis Heloir, Fabrizio Nunnari, Wendy E. Mackay,
Saleema Amershi, Bongshin Lee, Nicolas d'Alessandra, Joëlle Tilmanne, Todd Kulesza*

W44: Everyday Surveillance Room LL20B

Pam Briggs, Elizabeth F Churchill, Mark Levine, James Nicholson,

Gary William Pritchard, Patrick Olivier

W45: NatureCHI - Unobtrusive User Experiences with Technology in Nature Room LL20C

*Jonna Häkkinä, Keith Cheverst, Johannes Schöning, Nicola J Bidwell,
Simon Robinson, Ashley Colley*

W47: Lightweight Games User Research for Indies and Non-Profit Organizations Room 114

*Lennart E. Nacke, Christiane Moser, Anders Drachen, Pejman Mirza-Babaei,
Andrea M Abney, Zhu Zhenyu*

W48: Crowd Dynamics: Exploring Conflicts and Contradictions in Crowdsourcing Room LL21D

*Karin Hansson, Michael Muller, Tanja Aitamurto, Lilly Irani, Athanasios Mazarakis,
Neha Gupta, Thomas Ludwig*

SUNDAY SYMPOSIUM

W39: Chinese CHI 2016 Symposium Room LL21E

Xiaojun Bi, Lu Xiao, Feng Tian, Xianghua Ding, Yong Ming Kow

COURSES

COURSES

SATURDAY

Room 210F

C00: Research Methods for HCI: Understanding People Using Interactive Technologies

Duncan P. Brumby, Ann E. Blandford, Anna L. Cox, Sandy J.J. Gould, Paul Marshall

MONDAY

C01: Research Methods for Child Computer Interaction

Room 210D

11:30 a.m. - 12:50 p.m., 2:30 p.m. - 3:50 p.m.

Janet C Read, Shuli Gilutz

C03: Designing with the Mind in Mind: The Psychological Basis for UI Design Guidelines

Room 210H

11:30 a.m. - 12:50 p.m., 2:30 p.m. - 3:50 p.m.

Jeff A Johnson

C05: Introduction To Human Computer Interaction

Room 210C

11:30 a.m. - 12:50 p.m., 2:30 p.m. - 3:50 p.m.

Jonathan Lazar, Simone D J Barbosa

C06: Personal Fabrication: State of the Art and Future Research

Room 210G

11:30 a.m. - 12:50 p.m.

Stefanie Mueller, Patrick Baudisch

C08: Game User Experience Evaluation

Room 210 G

2:30 p.m. - 3:50 p.m., 4:30 p.m. - 5:50 p.m.

Regina Bernhaupt, Florian Mueller

C02: Hands-on introduction to interactive electric muscle stimulation

Room 210D

4:30 p.m. - 5:50 p.m.

Pedro Lopes, Max Pfeiffer, Michael Rohs, Patrick Baudisch

C04: Visual Facilitation for Design Groups

Room 210H

4:30 p.m. - 5:50 p.m.

Eileen M. Clegg

C07: An Introduction to Cognitive Aging and Dementia: A Clinical Neuropsychologist's Perspective

Room 210C

4:30 p.m. - 5:50 p.m.

Allyson Rosen

C29: So, You Want To Be A CHI AC

Room 114

4:30 p.m. - 5:50 p.m.

Julie A Kientz, Hilary B Hutchinson

TUESDAY

C09: Interaction Design for Online Video and Television

Room 210D

9:30 a.m. - 10:50 a.m., 11:30 a.m. - 12:50 p.m.

David Geerts, Pablo Cesar, Marianna Obrist

C11: Visual Analytics 101

Room 210H

9:30 a.m. - 10:50 a.m., 11:30 a.m. - 12:50 p.m.

Russ Burtner, Kris Cook, Jean Scholtz

C13: Introduction to Creating Musical Interfaces

Room 210C

9:30 a.m. - 10:50 a.m., 11:30 a.m. - 12:50 p.m.

Michael J Lyons, Sidney S Fels

C15: An Introduction to Automotive User Interfaces

Room 210G

9:30 a.m. - 10:50 a.m., 11:30 a.m. - 12:50 p.m.

Bastian Pflöging, Nora Broy, Andrew L Kun

C10: Make This! Introduction to Electronics Prototyping Using Arduino

Room 210D

2:30 p.m. - 3:50 p.m., 4:30 p.m. - 5:50 p.m.

David Sirkin, Nikolas Martelaro, Wendy Ju

C12: Designing Technology to Foster Psychological Wellbeing

Room 210H

9:30 a.m. - 10:50 a.m., 11:30 a.m. - 12:50 p.m.

Rafael A. Calvo, Dorian Peters

C14: User Story Mapping: The Hands-on Course

Room 210C

2:30 p.m. - 3:50 p.m., 4:30 p.m. - 5:50 p.m.

Stephanie Foehrenbach, Christian Heldstab

C16: Designing and Assessing Interactive Systems Using Task Models

Room 210G

2:30 p.m. - 3:50 p.m., 4:30 p.m. - 5:50 p.m.

Philippe Palanque, Celia Marinie

WEDNESDAY

C17: Advances in Participatory Design

Room 210D

9:30 a.m. - 10:50 a.m., 11:30 a.m. - 12:50 p.m.

Susanne Bødker, Christian Dindler, Ole Sejer Iversen, Kim Halskov

C21: Empirical Research Methods for Human-Computer Interaction

Room 210C

9:30 a.m. - 10:50 a.m., 11:30 a.m. - 12:50 p.m.

I. Scott MacKenzie, Steven J. Castellucci

C20: Mobile UX: Breaking the Glass to Richer User Experiences

Room 114

2:30 p.m. - 3:50 p.m., 4:30 p.m. - 5:50 p.m.

Matt Jones, Simon Robinson

VIDEO SHOWCASE

C23: Speech-based Interaction: Myths, Challenges, and Opportunities

Room 210G

9:30 a.m. - 10:50 a.m., 11:30 a.m. - 12:50 p.m.

Cosmin Munteanu, Gerald Penn

C19: Interactive Biotechnology: Building your own Biotic Game Setup to Play with Living Microorganisms

Room 210H

2:30 PM - 3:50 PM

Honesty Kim, Lukas C Gerber, Ingmar H Riedel-Kruse

C22: Tools for Designing for Home Entertainment: Gesture Interfaces, Augmented Reality, and Smart Spaces

Room 210C

2:30 p.m. - 3:50 p.m., 4:30 p.m. - 5:50 p.m.

Radu-Daniel Vatavu

C24: User Interface Design In Agile Projects

Room 120G

2:30 p.m. - 3:50 p.m., 4:30 p.m. - 5:50 p.m.

Karri-Pekka Laakso, Tuomas Husu, Mikko Romppainen, Janina Fagerlund, Marju Kettunen, Toni Standell

C18: Designing for an Aging Population: Toward Universal Design

Room 210D

4:30 PM - 5:50 PM

Jeff A Johnson, Kate Finn

THURSDAY

C25: Presumptive Design: Design Thinking In Service of Research

Room 210D

9:30 a.m. - 10:50 a.m., 11:30 a.m. - 12:50 p.m., 2:30 p.m. - 3:50 p.m.

Leo Frishberg, Charles Lambdin

C26: Creative Worthwhile Interaction Design

Room 210H

9:30 a.m. - 10:50 a.m., 11:30 a.m. - 12:50 p.m., 2:30 p.m. - 3:50 p.m.

Gilbert Cockton

C27: A Dummy's Guide to your Next EXperiment: Experimental Design and Analysis Made Easy

Room 210C

9:30 a.m. - 10:50 a.m., 11:30 a.m. - 12:50 p.m., 2:30 p.m. - 3:50 p.m.

Shengdong Zhao, Xiaojun Meng, Pin Sym Foong, Simon T Perrault

C28: Practical UX Research Methodologies

9:30 a.m. - 10:50 a.m., 11:30 a.m. - 12:50 p.m., 2:30 p.m. - 3:50 p.m.

Sarah E Garcia, Laura Hammond

VIDEO SHOWCASE

ID-Match: A Hybrid Computer Vision and RFID System for Recognizing Individuals in Groups

Hanchuan Li, Peijin Zhang, Samer Al Moubayed, Shwetak N Patel, Alanson P Sample

Reality Editor

Valentin Heun, Eva Stern-Rodriguez, Marc Teyssier, Pattie Maes

Video Showcase: Using Expressy to Showcase Expressiveness in Touch-based Interactions

Gerard Wilkinson, David Philip Green, Gavin Wood, Ahmed Kharrufa, Jonathan Hook, Bradley Pursglove, Hendrik Haeuser, Nils Y Hammerla, Steve Hodges, Patrick Olivier

SKUID: Sketching Stylized Animated Drawings with Motion Amplifiers

Rubaiat Habib Kazi, Tovi Grossman, Nobuyuki Umetani, George Fitzmaurice

GaussRFID: Reinventing Physical Toys Using Magnetic RFID Development Kits

Rong-Hao Liang, Han-Chih Kuo, Bing-Yu Chen

MirrorFugue for the Composer, Performer and Improviser

Xiao Xiao, Lamtharn "Hanoi" Hantrakul, Hiroshi Ishii

SATURNO: a Shadow-Pushing Lamp for Better Focusing and Reading

Yunwoo Jeong, Boram Noh, Young-Woo Park

Second Skin: Biological Garment Powered by and Adapting to Body in Motion

Lining Yao, Helene Steiner, Wen Wang, Guanyun Wang, Chin-Yi Cheng, Jifei Ou, Hiroshi Ishii

TactileVR: Integrating Physical Toys into Learn and Play Virtual Reality Experiences

Judith Amores, Xavier Benavides, Lior Shapira

MoCap Tango: Materialising Movement Qualities

Ambra Trotta, Jeroen Peeters, Stoffel Kuenen

Access: A Mobile Application to Improve Accessibility

Yi Yang, Yunqi Hu, Yidi Hong, Varun Joshi, Radhika Kolathumani

PsychicVR: Increasing mindfulness by using Virtual Reality and Brain Computer Interfaces

Judith Amores, Xavier Benavides, Pattie Maes



Haptic Retargeting Video Showcase: Dynamic Repurposing of Passive Haptics for Enhanced Virtual Reality Experience

Mahdi Azmandian, Mark Hancock, Hrvoje Benko, Eyal Ofek, Andrew D. Wilson

INTERACTIVITY EXHIBITS

INTERACTIVITY EXHIBITS

Listings include numbers that correspond to the Exhibit Hall Map, pg. 74

Personalized Compass: A Demonstration of a Compact Visualization of Direction and Location Booth 1

Daniel Miao, Steven Feiner

FlexTiles: A Flexible, Stretchable, Formable, Pressure-Sensitive, Tactile Input Sensor Booth 2

Patrick Parzer, Kathrin Probst, Teo Babic, Christian Rendl, Anita Vogl, Alex Olwal, Michael Haller

Dranimate: Paper Becomes Tablet, Drawing Becomes Animation Booth 3

Ali Momeni, Zachary Rispoli

bioSync: Synchronous Kinesthetic Experience among People Booth 4

Jun Nishida, Kenji Suzuki

FaceTouch: Touch Interaction for Mobile Virtual Reality Booth 5

Jan Gugenheimer, David Dobbstein, Christian Winkler, Gabriel Haas, Enrico Rukzio

Constructing Interactive Visualizations with iVoLVER Booth 6

Gonzalo Gabriel Méndez, Miguel A. Nacenta

A Demonstration of Haptic Retargeting: Dynamic Repurposing of Passive Haptics for Enhanced Virtual Reality Experience Booth 7

Mahdi Azmandian, Mark Hancock, Hrvoje Benko, Eyal Ofek, Andrew D Wilson

Trajectoires: A Mobile Application for Controlling Sound Spatialization Booth 8

Jérémie Garcia, Xavier Favory, Jean Bresson

The Anonymous Audience Analyzer – Visualizing Audience Behavior in Public Space Booth 9

Jiamin Shi, Florian Alt

HoloFlex: A Flexible Holographic Smartphone with Bend Input Booth 10

Daniel Gotsch, XuJing Zhang, Jesse Burstyn, Roel Vertegaal

PicMemory: Enriching Intergenerational Family Interaction and Memory Collection Booth 11

Hung-Chi Lee, Jane Yung-jen Hsu

MMM Ball: Showcasing the Massive Mobile Multiuser Framework Booth 12

Tim Weißker, Andreas Berst, Johannes Hartmann, Florian Ehtler

ReFabricator: Integrating Everyday Objects for Digital Fabrication Booth 13

Suguru Yamada, Hironao Morishige, Hiroki Nozaki, Masaki Ogawa, Takuro Yonezawa, Hideyuki Tokuda

Interactivity: Using Expressy to Demonstrate Expressiveness in Touch-based Interactions Booth 14

Gerard Wilkinson, Gavin Wood, Jonathan Hook, Tom Nappey, Ahmed Kharrufa, Bradley Pursglove, Hendrik Haeuser, Nils Hammerla, Steve Hodges, Patrick Olivier

Body Integrated Programmable Joints Interface Booth 15

Sang-won Leigh, Pattie Maes

GaussBox: Prototyping Movement Interaction with Interactive Visualizations of Machine Learning Booth 16

Jules Françoise, Frederic Bevilacqua, Thecla Schiphorst

VibroVision: An On-Body Tactile Image Guide for the Blind Booth 17

Philipp Wacker, Chat Wacharamanotham, Daniel Spelmezan, Jan Thar, David Antón Sánchez, René Bohne, Jan Borchers

Don't Say Yes, Say Yes: Interacting with Synthetic Speech Using Tonetable Booth 18

Matthew P. Aylett, Graham Pullin, David A Braude, Blaise Potard, Shannon Hennig, Marilia Antunes Ferreira

Tango Apart: Moving Together Booth 19

Ernest Edmonds, Sean Clark

Magnetio: Getting People Together Using Embodied Interaction Approach Booth 20

Kamila Koźmiałńska, Magdalena Kurowska, Wiesław Bartkowski

Sketchplore: Sketch and Explore Layout Designs with an Optimiser Booth 21

Kashyap Todi, Daryl Weir, Antti Oulasvirta

AFFDEX SDK: A Cross-Platform Real-Time Multi-Face Expression Recognition Toolkit Booth 22

Daniel McDuff, Abdelrahman Mahmoud, Mohammad Mavadati, May Amr, Jay Turcot, Rana el Kaliouby

Zishi: a smart garment for posture monitoring Booth 23

Qi Wang, Marina Toeters, Wei Chen, Annick Timmermans, Panos Markopoulos

ShareTable Application for HP Sprout Booth 24

Baris Unver, Sarah A McRoberts, Sabirat Rubya, Haiwei Ma, Zuoyi Zhang, Svetlana Yarosh

Tactile Presentation to the Back of a Smartphone with Simultaneous Screen Operation Booth 25

Sugarragchaa Khurelbaatar, Yuriko Nakai, Ryuta Okazaki, Vibol Yem, Hiroyuki Kajimoto

Embodied Encounters Studio: a Tangible Platform for Sensemaking Booth 26

Caroline Hummels

The Soma Mat and Breathing Light Booth 27

Anna Ståhl, Martin Jonsson, Johanna Mercurio, Anna Karlsson, Kristina Hök, Eva-Carin Banka Johnson

Maintaining Relationships With Our Devices Booth 29

Sarah Homewood

What We Have Lost / What We Have Gained: Embodied Interfaces for Live Performance and Art Exhibitions Booth 31

Matthew Mosher

New Scenic Subjects: Explorations of a System of Autonomous On-Stage Observers Booth 32

Ludvig Elblaus, Åsa Unander-Scharin, Carl Unander-Scharin

Hotaru: The Lightning Bug Game Booth 33

Kaho Abe, Katherine Isbister

Threadsteading: Playful Interaction for Textile Fabrication Devices Booth 34

Lea Albaugh, April Grow, Chenxi Liu, James McCann, Gillian Smith, Jennifer Mankoff

Fear Division; Archiving the Intangible Booth 35

Dorien Neema Koelemeijer, Franziska Maria Tachtler

#Scanners: A BCI Enhanced Cinematic Experience Booth 36

Matthew Pike, Max L Wilson, Steve Benford, Richard Ramchurn

A Participatory Live Music Performance with the Open Symphony System Booth 37

Kate Hayes, Mathieu Barthet, Yongmeng Wu, Leshao Zhang, Nick Bryan-Kinns

INTERACTIVITY EXHIBITS

A Theatrical Turing Test: An Encounter of Telematic Bodies

Sahar Sajadieh, Nathan Weitzner

Booth 38, 41, 56, 61

A Wearable Force Feedback Toolkit with Electrical Muscle Stimulation

Max Pfeiffer, Tim Dünthe, Michael Rohs

Booth 39

MagicWand: Exploring Physical Affordances with a Handheld Cylindrical Display Object

Booth 40

Lahiru akmal Priyadarshana, Victoria Porter, Juan Pablo Carrascal, Aaron Visser, Roel Vertegaal

Experiencing the Carolan Guitar

Booth 42

Steve Benford, Adrian Hazzard, Alan Chamberlain, Kevin Glover, Chris Greenhalgh, Liming Xu, Michaela Hoare, Dimitrios Darzentas

Tattoo: Fabrication of Aesthetic and Functional Temporary Tattoos

Booth 43

Hsin-Liu (Cindy) Kaa, Paul Johns, Asta Roseway, Mary Czerwinski

Motion Echo Snowboard: Visualizing Weight Distribution on Snowboard

Hyung Kun Park, Woohun Lee

Booth 44

FrontPanel: Tangible User Interface for Touch-Screens Dedicated to Elderly

Mounia Ziat, Hsin-Yun Yao, Rachel Schmitt, Vincent Hayward

Booth 45

Kinemic Wave: A Mobile Freehand Gesture And Text-Entry System

Booth 46

Christoph Amma, Marcus Georgi, Tomt Lenz, Fabian Winnen

Text Entry for Ultra-Small Touchscreens Using a Fixed Cursor and Movable Keyboard

Booth 47

Tomoki Shibata, Daniel Afergan, Danielle Kong, Beste F Yuksel, Scott MacKenzie, Robert J.K. Jacob

SolidNoise: Tools For Making Musical Robots

Booth 48

Jiffer Harriman, Matthew Bethancourt, Abhishek Narula, Michael Theodore, Mark Gross

Manipulating Tabletop Objects to Interactively Query a Database

Booth 49

Ana Jofre, Steve Szigeti, Stephen Tiefenbach-Keller, Lan-Xi Dong, Sara Diamond

TimeLight - Helping Children Understand And Learn Time Durations

Heiko Müller, Christian Pieper, Wilko Heuten, Susanne Boll

Booth 50

Interactivity: Looking at the Vagina through Labella

Booth 51

Teresa Almeida, Gavin Wood, Rob Comber, Madeline Balaam

Experiencing Human-to-Human Touch in Digital Games

Booth 52

Mert Canat, Mustafa Ozan Tezcan, Celalettin Yurdakul, Oğuz Turan Buruk, Oguzhan Ozcan

RAPAE: Wearable Technology and Serious Game for Rehabilitation

Booth 53

Hoyeong Song, Soobin Lee, Hyunsoo Kim, Gunmin Jang, Younggeun Choi, Dongseok Yang

The Haptic Wave: A Device for Feeling Sound

Booth 54

Adam Parkinson, Atau Tanaka

Wag Your Tail and Flap Your Ears: The Kinesthetic User Experience of Extending Your Body

Booth 55

Dag Svanaes, Martin Solheim

ConnectUs: A New Toolkit for Teaching about the Internet of Things

Booth 57

Zuzanna Lechelt, Yvonne Rogers, Nicolai Marquardt, Venus Shum

ChromoSkin: Towards Interactive Cosmetics Using Thermochromic Pigments

Booth 58

Hsin-Liu (Cindy) Kaa, Manisha Mohan, Chris Schmandt, Joseph A. Paradiso, Katia Vega

INTACT: Instant Interaction for 3D Printed Objects

Booth 57

Charles Hudin, Sabrina Panëels, Steven Strachan

'Choose a Game': A Prototype Tool to Support Therapists Use Games in Brain Injury Rehabilitation

Booth 58

Jinghui Cheng, Cynthia Putnam

Synthesis in the Audiovisual

Booth 59

Vygandas "Vegas" Šimbelis, Anders Lundström

SharedSpaces Mingle

Booth 60

Leif Handberg, Charlie Gullstrom, Joke Kort, Jimmy Nyström

STUDENT EVENTS

DOCTORAL CONSORTIUM

Exploring and Supporting Today's Collaborative Writing

Dakuo Wang

Proprioceptive Interaction: the user's muscles as input and output device

Pedro Lopes

Paper Books, Digital Books: How the Medium of an Object Affects its Use

Jane Gruning

Unobtrusive Interaction for Wearable Computing

David Dobbelsstein

Live Media Places: Participation in Online Education through Composition

William A Hamilton

Online Help-Seeking in Communities of Novice Innovators

Julie S Hui

Supporting Bodily Communication in Video-based Clinical Consultations

Deepti Aggarwal

From Smart Cities to Social Cities: Technology to Support Community Life

Andre de Oliveira Bueno

bump2bump: Online Peer Support in First-Time Pregnancy

Nikki Newhouse

Performing Play: Cultural Production on Twitch.tv

Anthony J Pellicone

Canine Behavior and Working Dog Suitability from Quantimetric Data

Joelle Alcacidinho

Interactive Technology for Inclusive Play

Kiley Sobel

AgentSmith: Exploring Agentic Systems

David B Miller

Rare World: Designing for Dispersed Populations with Rare Diseases

Haley MacLeod

Adaptive Biofeedback for Mind-Body Practices

Bin Yu

STUDENT RESEARCH COMPETITION

Older Users and In-Vehicle Navigation Map Design Elements

Crystal Tobias

Crowdnection: Connecting High-level Concepts with Historical Documents via Crowdsourcing

Nai-Ching Wang

Improving Social Communication Skills Using Kinesics Feedback

Roghayeh Barmaki

Veri-Pen: A Pen-based Identification Through Natural Biometrics Extraction

Jihoon Suh

Error Correction of Speech Recognition by Custom Phonetic Alphabet Input for Ultra-Small Devices

Kazuki Fujiwara

User Adaptability to System Delay

Brian D Hall

Species Identification in Citizen Science: Effects of Interface Design and Image Difficulty on User Performance and Workload

Nirwan Sharma

Bounce: A Mobile Behavioral Intervention Technology for Breast Cancer Survivors

Meghan M Plank, Nishtha H Dalal

The Memory Tree: Using Sound to Support Reminiscence

Keisha Jayaratne

Making Science Simulations Accessible For Students With Vision Impairments

Emily Randall

Learnersourcing Thematic and Inter-Contextual Annotations from Islamic Texts

Amna Basharat

STUDENT EVENTS

STUDENT DESIGN COMPETITION

LifeKey: Emergency Communication Tool for the Deaf

Leeyat Slyper, Min Kyung Kim, Yooyoung Ko, Ismael Sobek

EMIE: Using 3D Printing to Help People Living with Ataxia

Stéphanie Rouleau, Marjolaine Cazes, Rémi Dupont, Tarik Benadda, Serenela Piazza

Dot-it: Managing Nausea and Vomiting for A Peaceful Pregnancy with Personal Pattern Exploration

Tzu-I Lee, Yih-Harn Chiang, Jiayi Guo, Mu-Tsz Chen, Yue Chen

Moments A Wearable Device for Early Stage AD Patients to Maintain Their Autonomy

Chieh-Lin Wu, Bing-Hsun Wu, Yun-Ting Lin, Pengfei Wang, Yining Zhou

AwareMe: Addressing Fear of Public Speech through Awareness

Mark Babel, Ruiwen Jiang, Christine H Lee, Wen Shi, Audrey Tse

LaneMate: Car Sensing System for the Deaf

Sangwook Lee, Yunho Kang, YuKyoung Lee

EGDE, A Soft Keyboard for Fast Typing for the Visually Challenged

Chandni Rajendran, Chinmay Parab, Shreya Gupta

Touch and #Tag: Improving Clothing Experiences of People with Visual Impairment

Ting-Ying Hsu, Zong-Yu Li, Hung-Yeh Lin, Yu-Han Liou, Chia-Ling Tsai

Saathi : Making it Easier for Children with Learning Disabilities to understand the concept of Time

Vikram Aditya, Suprabho Dhenki, Likhith Amarvaj, Ajinkya Karale, Harmeet Singh

CarryLine: A Tool for Management and Rehabilitation of Post-Natal Chronic Back Pain

Daniilo Di Cuia, Jelizaveta Janovica, Zuzanna Lechelt, Sheng Li, Harpreet Purewal

Readful-U: Improving Reading Experience and Social Interaction for Low Vision Elders

Ninglu Wang, Kai Yu, Junhui Li, Ruofan Zhang, Fei Ren

BringUBus: Matching Buses to Passengers with Lower Mobility

Yi-Tien Lin, Hsiao-Ching Su, I-Wen Lo, Po-Lin Chou

STUDENT GAME COMPETITION

FitPlay Games: Increasing Exercise Motivation Through Asynchronous Social Gaming

Sarah Justine Guy Skriloff, Dario C Gonzalez, Kurtis C Christensen, Logan J Bentley, Cody V Mortensen

BoomChaCha: A Rhythm-based, Physical Role-Playing Game that Facilitates Cooperation among Players

Fengyuan Zhu, Wangshu Sun, Carrie Zhang, Rebecca Ricks

AS IF: a Kinect Game as an Empathy Tool for Experiencing Activity Limitations of Chronic Pain Patients

Weina Jin, Servet Ulas, Xin Tong

Garden: A Mixed Reality Experience Combining Virtual Reality and 3D Reconstruction

Keng Hua Sing, Wei Xie

PinchFun: A Fine Motor Training Game for Preschool Children with Developmental Delay

I-Fang Wang, Dennis Wang, Chia-Yu Chen, Jyun-Fong Jheng

Household Survival: Immersive Room-Sized Gaming Using Everyday Objects as Weapons

Brent Berghmans, Axel Faes, Matthijs Kaminski, Kashyap Todi

Human and Dog: Explore the Game Design of Unequal Communicative Patterns

Kuan-Ting Chou, Hsincheng Hou, Michael Shen, Te-Yuan Chen, Cynthia Liu, Pei-Jung Wu

VR-Drop: Exploring the Use of Walking-in-Place to Create Immersive VR Games

Sam Tregillus

Bad News: A Game of Death and Communication

James Owen Ryan, Adam J Summerville, Ben Samuel

LATE-BREAKING WORK: MONDAY / TUESDAY

LATE BREAKING WORK | MON-TUES

INTERACTION IN SPECIFIC DOMAINS

SeismoTracker: Upgrade any Smart Wearable to Enable a Sensing of Heart Rate, Respiration Rate, and Microvibrations

Marian Haescher, Denys JC Matthies, John Trimpop, Bodo Urban

A Wearable Social Interaction Aid for Children with Autism

Peter Y Washington, Catalin Voss, Nick Haber, Serena Tanaka, Jena Daniels, Carl Feinstein, Terry Winograd, Dennis Wall

CompuWoven: A Computer-Aided Fabrication Approach to Hand-Woven Craft

Ye Tao, Nannan Lu, Caowei Zhang, Guanyun Wang, Cheng Yao, Fangtian Ying

Bending Blindly: Exploring Bend Gestures for the Blind

Matthew C Ernst, Audrey Girouard

EcoMeal: A Smart Tray for Promoting Healthy Dietary Habits

Jaejeung Kim, Joonyoung Park, Uichin Lee

GazeTouchPass: Multimodal Authentication Using Gaze and Touch on Mobile Devices

Mohamed Khamis, Florian Alt, Mariam Hassib, Emanuel von Zezschwitz, Regina Hasholzner, Andreas Bulling

Endorsement, Prior Action, and Language: Modeling Trusted Advice in Computerized Clinical Alerts

Debateena Chattopadhyay, Jon D Duke, Davide Bolchini

VapeTracker: Tracking Vapor Consumption to Help E-cigarette Users Quit

Abdallah El Ali, Andrii Matvienko, Yannick Feld, Wilko Heuten, Susanne CJ Boll

Practicing DIYBiology In An HCI Setting

Piyum Fernando, Matthew Pandelakis, Stacey Kuznetsov

Tableur: Handwritten Spreadsheets

Emanuel Zraggen, Robert Zeleznik, Philipp Eichmann

ToPIN: A Visual Analysis Tool for Time-anchored Comments in Online Educational Videos

Ching-Ying Sung, Xun-Yi Huang, Yicong Shen, Fu-Yin Cherng, Wen-Chieh Lin, Hao-Chuan Wang

PaperQuest: a Visualization Tool to Support Literature Review

Antoine Ponsard, Francisco Escalona, Tamara Munzner

Negotiation as an Interaction Mechanism for Deciding App Permissions

Tim Baarslag, Alper T Alan, Richard C Gomer, Ilaria Liccardi, Helia Marreiros, Enrico H Gerding, m.c. schraefel

Season's Greetings: An Analysis of Christmas Card Use

Daniel Gooch, Ryan Kelly

Investigating Instructional Pacing Supports for Teaching Students with Intellectual Disability

Rodrigo Laiola Guimarães, Andrea Britto Mattos, Carlos Henrique Cardonha

Comparing Three Task Guidance Interfaces for Wire Harness Assembly

Mark Rice, Hong Huei Tay, Jamie Ng, Calvin Lim, Senthil Kumar Selvaraj, Ellick Wu

Shop Together, Search Together: Collaborative E-commerce

YanJun Gao, Madhu Reddy, Bernard J. Jansen

Towards Computer Assisted Crowd Aware Architectural Design

Brandon Haworth, Muhammad Usman, Glen Berseth, Mahyar Khayatkhoei, Mubbassir Kapadia, Petros Faloutsos

Evaluating Item-Item Similarity Algorithms for Movies

Lucas Colucci, Prachi Doshi, Kun-Lin Lee, Jiajie Liang, Yin Lin, Ishan Vashishtha, Jia Zhang, Alvin Jude

Sonifying Internet Security Threats

Akbar Siami Namin, Rattikorn Hewett, Keith Jones, Rona Pogrund

Effects of Simple Personalized Goals on the Usage of a Physical Activity App

Ashik Khatri, Dvijesh Shastri, Panagiotis Tsiamyrtzis, Ilyas Uyanik, Ergun Akleman, Ioannis Pavlidis

MelissAR: Towards Augmented Visual Analytics of Honey Bee Behaviour

Ulrich Engelke, Holly Hutson, Huyen Nguyen, Paulo de Souza

Mythologies of Business Intelligence

Nitya Verma, Amy Voida

Exploring Haptics for Learning Bend Gestures for the Blind

Matthew C Ernst, Audrey Girouard

EXTENDING USER CAPABILITIES

Multiwave: Doppler Effect Based Gesture Recognition in Multiple Dimensions

Corey Pittman, Pamela Wisniewski, Conner Brooks, Joseph J LaViola Jr.

HeartPlotter: Visualizing Bio-data by Drawing on Paper

Bin Yu, Rogier Arents, Mathias Funk, Jun Hu, Loe MG Feijs

Sonification Platform for Interaction with Real-Time Particle Collision Data from the ATLAS Detector

Juliana Cherston, Ewan Hill, Steven Goldfarb, Joseph Paradiso

Interactive Cheek Haptic Display with Air Vortex Rings for Stress Modification

Ryoko Ueoka, Mami Yamaguchi, Yuka Sato

Mapping Abstract Visual Feedback to a Dimensional Model of Emotion

Graham Wilson, Pietro Romea, Stephen A Brewster

Attending to Attention: Detecting and Combating Mind Wandering during Computerized Reading

Sidney D'Mello, Kristopher Kopp, Robert Earl Bixler, Nigel Bosch

Hajukone: Developing an Open Source Olfactory Device

David K McGookin, Dariela Escobar

MiLa: an Audiovisual Instrument for Learning the Curwen Hand Signs

Matt H. Y. Hong, William S. Hicks, Michael S. Horn

Clocks, Bars and Balls: Design and Evaluation of Alternative GNomon Widgets for Children with Disabilities

Sebastián Aced López, Fulvio Corno, Luigi De Russis

Using Psychophysiological Parameters to Support Users in Setting Effective Activity Goals

Katja Herrmann, Nils Beckmann, Katrin Nachbar, Hanno Sauer, Juergen Ziegler, Aysegül Dogangün

Towards the Creation of Interspecies Digital Games: An Observational Study on Cats' Interest in Interactive Technologies

Patricia Pons, Javier Jaen

Designing for Interactive Loving and Kindness Meditation on Mobile

Ralph Vacca

Movement Fluidity Analysis Based on Performance and Perception

Stefano Piana, Paolo Alborn, Radoslaw Niewiadomski, Maurizio Mancini, Gualtiero Volpe, Antonio Camurri

LATE-BREAKING WORK: MONDAY / TUESDAY

COLLABORATIVE TECHNOLOGIES

Designing a Trip Planner Application for Groups: Exploring Group Tourists' Trip Planning Requirements

Lanyun Zhang, Xu Sun

Among the Machines: Human-Bot Interaction on Social Q&A Websites

Alessandro Murgia, Daan Janssens, Serge Demeyer, Bogdan Vasilescu

Exploring the Potential of Children in Crowdsourcing

Stefan Manojlovic, Katerina Gavrilov, Jan de Wit, Vassilis-Javed Khan, Panos Markopoulos

An Analysis of Cognitive Learning Context in MOOC Forum Messages

Jian-Syuan Wong, Bart Pursel, Anna Divinsky, Bernard J. Jansen

Exploring the Use of Visual Annotations in a Remote Assistance Platform

Mark Rice, Shue Ching Chia, Hong Huei Tay, Marcus Wan, Liyuan Li, Jamie Ng, Joo Hwee Lim

You Can't Always Get What You Want: Challenges in P2P Resource Sharing

Ross McLachlan, Claire Opila, Neha Shah, Emily Sun, Mor Naaman

Exploring Editorial Content Optimization for Websites through a Statistical Ranking of Articles

Dan Sarkar, Brynne McGarry

Understanding Participatory Hashtag Practices on Instagram: A Case Study of Weekend Hashtag Project

Changhoon Oh, Taeyoung Lee, Yoojung Kim, SoHyun Park, Bongwon Suh

Empathy Glasses

Katsutoshi Masai, Kai Kunze, Maki Sugimoto, Mark Billinghurst

PerSoN-Vis: Visualizing Personal Social Networks (Ego Networks)

Hafez Ezaiza, Shah Rukh Humayoun, Ragaad AlTarawneh, Achim Ebert

First-time Security Audits as a Turning Point? Challenges for Security Practices in an Industry Software Development Team

Andreas Poller, Laura Kocksch, Katharina Kinder-Kurlanda, Felix Anand Epp

Feelbook: A Social Media App for Teens Designed to Foster Positive Online Behavior and Prevent Cyberbullying

Mingyue Fan, Lique Yu, Leanne Bowler

Electronic Posters to Support Formative Assessment

Salman Cheema, Kurt VanLehn, Hugh Burkhardt, Daniel Pead, Alan Schoenfeld

DESIGNING INTERACTIVE SYSTEMS

Design Fiction Film-Making: A Pipeline for Communicating Experiences

Marco Gilardi, Patrick Holroyd, Carly Brownbridge, Phil Watten, Marianna Obrist

Sharing a Robotic Pet as a Maintenance Strategy for Romantic Couples in Long-Distance Relationships. An Autobiographical Design Exploration

Wei-Chi Chien, Marc Hassenzahl, Julika Welge

Beyond the Bandscape: Utilizing Aesthetics in Digital Cartography

Adrian I Gradinar, Jonny Huck, Paul Coulton, Lara Salinas

CoPRA- Design Exemplar for Habitable, Cyber-physical Environment

Yixiao Wang, Keith E Green, Ian Walker

SubjectBook: Hypothesis-Driven Ubiquitous Visualization for Affective Studies

Salah M. Taamneh, Malcolm Dcosta, Kyeong-An Kwon, Ioannis T Pavlidis

Enabling Designers to Sketch Immersive Fulldome Presentations

Danwei Tran Luciani, Jonas Lundberg

Embodied Reading: A Multisensory Experience.

Susana Sanchez, Tilman Dingler, Heng Gu, Kai Kunze

Motion, Emotion, and Form: Exploring Affective Dimensions of Shape

Edward F Melcer, Katherine Isbister

Designing with Concrete For Enhancing Everyday Interactions

Yanan Wang, Shuai Liu, Yujia Lu, Jun Duan, Cheng Yao, Fangtian Ying

Design Frictions for Mindful Interactions: The Case for Microboundaries

Anna L Cox, Sandy J J Gould, Marta E Cecchinato, Ioanna Iacovides, Ian Renfree

GAMES & PLAYFUL INTERACTION

Applying Exergaming Input to Standard Commercial Digital Games

Matthew Hudson

Exploring the Impact of Avatar Color on Game Experience in Educational Games

Dominic Kao, D Fox Harrell

Time Pressure as Video Game Design Element and Basic Need Satisfaction

Irem Gokce Yildirim

Evaluation of StarCraft Artificial Intelligence Competition Bots by Experienced Human Players

Man-Je Kim, Kyung-Joong Kim, SeungJun Kim, Anind Dey

Diary Methods in AAA Games User Research

Serena Hillman, Tad Stach, Jason Procyk, Veronica L Zammitto

Playing with the Artworks: Engaging with Art through an Augmented Reality Game

Klen Čopič Pucihar, Matjaž Kljun, Paul Coulton

Exploring the Effects of Encouragement in Educational Games

Dominic Kao, D. Fox Harrell

e-Seesaw: A Tangible, Ludic, Parent-child, Awareness System

Yingze Sun, Matthew P. Aylett, Yolanda Vazquez-Alvarez

Are We in Flow Neurophysiological Correlates of Flow States in a Collaborative Game

Elise Labonte-LeMoyné, Pierre-Majorique Leger, Beverly Resseguier, Marie-Christine Bastarache-Roberge, Marc Fredette, Sylvain Senecal, François Courtemanche

CustomConsole: A Framework for Supporting Cross-device Videogames

Asier Marzo

Remote Heart Rate Sensing and Projection to Renew Traditional Board Games and Foster Social Interactions

Jérémy Frey

betaCube - Enhancing Training for Climbing by a Self-Calibrating Camera-Projection Unit

Frederik Wiehr, Felix Kosmalla, Florian Daiber, Antonio Krüger

Player Type Models – Towards Empirical Validation

Marc Busch, Elke Mattheiss, Rita Orji, Peter Fröhlich, Michael Lankes, Manfred Tscheligi

LATE-BREAKING WORK: MONDAY / TUESDAY

NOVEL INTERACTIONS

Liquido: Embedding Liquids into 3D Printed Objects to Sense Tilting and Motion

Martin Schmitz, Andreas Leister, Niloofar Dezfuli, Jan Riemann, Florian Müller, Max Mühlhäuser

Building Blocks for Designing Future Multi-Device Interaction

Yongkwan Kim, Hanbit Kim, Seok-Hyung Bae, SangJeong Lee, Chul-Joo Kim

CubeLendar: Design of a Tangible Interactive Event Awareness Cube

Andrii Matvienko, Sebastian Horwege, Lennart Frick, Christoph Ressel, Susanne CJ Boll

VRSurus: Enhancing Interactivity and Tangibility of Puppets in Virtual Reality

Ruofei Du, Liang He

SPOCK: A Smooth Pursuit Oculomotor Control Kit

Simon Schenk, Philipp Tiefenbacher, Gerhard Rigoll, Michael Dorr

Unconstrained Pedestrian Navigation Based on Vibro-tactile Feedback Around the Wristband of a Smartwatch

David Dobbstein, Philipp Henzler, Enrico Rukzio

Exploring the Layered Use of Transparent Display on a Large Tabletop Display

Chang Min Kim, Tek-Jin Nam

Natural Voting Interactions for Collaborative Work with Mobile Devices

Romina Kühn, Mandy Korzetz, Lukas Büschel, Christina Korger, Philip Manja, Thomas Schlegel

Investigating Interaction Techniques for State-of-the-Art Smartwatches

Frederic Kerber, Tobias Kiefer, Markus Löchtefeld

Towards a Pattern Language for Distributed User Interfaces

Ilya Shmorgun, David Lamas, Eduardo Mercer

Slowee: A Smart Eating-Speed Guide System with Light and Vibration Feedback

Joohee Kim, Kwang-Jae Lee, Mankyung Lee, Na Hyeon Lee, Byung-Chull Bae, Genehee Lee, Juhee Cha, Young Mog Shim, Jun Dong Cho

Tangible Interface for Controlling Toys-To-Life Characters Emotions

Marc Antonijoan, David Miralles

Exploring the Front Touch Interface for Virtual Reality Headsets

Jihyun Lee, Byungmoon Kim, Bongwon Suh, Eunye Koh

Projected Fiducial Markers for Dynamic Content Display on Guided Tours

Jonna Häkikilä, Juho Rantakari, Lasse Virtanen, Ashley Colley, Keith Cheverst

MonoTouch: Single Capacitive Touch Sensor that Differentiates Touch Gestures

Ryosuke Takada, Buntarou Shizuki, Jiro Tanaka

INTACT: Instant Interaction with 3D Printed Objects

Charles Hudin, Sabrina Panëels, Steven Strachan

Follow the Force: Steering the Index Finger towards Targets using EMS

Oliver Beren Kaul, Max Pfeiffer, Michael Rohs

HapticHead – 3D Guidance and Target Acquisition through a Vibrotactile Grid

Oliver Beren Kaul, Michael Rohs

Reporting and Visualizing Fitts's Law: Dataset, Tools and Methodologies

Alvin Jude, Darren Guinness, G. Michael Poor

Interacting with Connected Devices through a Drawable User Interface

Marc Exposito, David Miralles

Ringteraction: Coordinated Thumb-index Interaction Using a Ring

Sarthak Ghosh, Hyeong Cheol Kim, Yang Cao, Arne Wessels, Simon T Perrault, Shengdong Zhao

Input Techniques to the Surface around a Smartphone using a Magnet Attached on a Stylus

Tetsuya Abe, Buntarou Shizuki, Jiro Tanaka

Investigating Accuracy of Tilting Operation on Wrist-worn Devices with Touchscreens

Keigo Shima, Kazusa Onishi, Ryosuke Takada, Takuya Adachi, Buntarou Shizuki, Jiro Tanaka

Force-enabled TouchPad in Cars: Improving Target Selection using Absolute Input

Mohamed Sheik-Nainar, Jochen Huber, Raja Bose, Nada Matic

Mobile Phone Usage Cycles: A Torus Topology for Spherical Visualisation

Julie R Williamson, John Williamson, Vassilis Kostakos, Keith Hamilton, Jeremy Green

PEOPLE AND CONTEXTS

Understanding Colour Impact on Warning Messages: Evidence from US and India

Mario Silic

Supporting Retirement Socially and Musically by Technology: an Ethnographic Study of Local Community Musicians

Mao Mao, Alan F Blackwell, Johanna M Lukate, David A Good

Investigating Effects of Exergames on Exercise Intentions Among Young-Old and Old-Old

Xuexin Xu, Yin-Leng Theng, Jinhui Li, Tan Phat Pham

Smile or Cry? – The Impact of a Victim's Facial Expression on Helping Behavior in Emergency Applications

André Dahlinger, Felix Wortmann

Social or Financial Goals? Comparative Analysis of User Behaviors in Couchsurfing and Airbnb

Jiwon Jung, Susik Yoon, SeungHyun Kim, SangKeun Park, KunPyo Lee, Uichin Lee

The WEAR Scale: Developing a Measure of the Social Acceptability of a Wearable Device

Norene Kelly, Stephen B Gilbert

Design Opportunities for Supporting Informal Caregivers

Lilian Bernadina Josefina Bosch, Marije Kanis

Conflict Management in Multi-user Applications for People with Disabilities

Claudia Loitsch, Diana Hille, Gerhard Weber

Running: A Flexible Situated Study

Elizaveta Temir, Aisling Ann O'Kane, Paul Marshall, Ann Blandford

Reflections on 5 Years of Personal Informatics: Rising Concerns and Emerging Directions

Amid Ayobi, Paul Marshall, Anna L Cox

Towards Reusable Personas for Everyday Design

Ciaran O'Leary, Fred Mtenzi, Claire McAvinia

User Disbelief in Privacy Paradox: Heuristics that determine Disclosure

Andrew Gambino, Jinyoung Kim, S. Shyam Sundar, Jun Ge, Mary Beth Rosson

Beyond Smartphone Overuse: Identifying Addictive Mobile Apps

Xiang Ding, Jing Xu, Guanling Chen, Chenren Xu

SoundGuides: Adapting Continuous Auditory Feedback to Users

Jules Françoise, Olivier Chapuis, Sylvain Hanneton, Frédéric Bevilacqua

LATE-BREAKING WORK: MONDAY / TUESDAY

ENGINEERING OF INTERACTIVE SYSTEMS

Eye Movement Biometrics on Wearable Devices: What Are the Limits?

Evgeniy Abdulin, Ioannis Rigas, Oleg Komogortsev

On the Verge: Voluntary Convergences for Accurate and Precise Timing of Gaze Input

Dominik Kirst, Andreas Bulling

Integrated Driving Aware System in the Real-World: Sensing, Computing and Feedback

Jung Wook Park, SeungJun Kim, Anind Dey

Freetop: Finding Free Spots for Projective Augmentation

Jan Riemann, Mohammadreza Khalilbeigi, Martin Schmitz, Sebastian Doeweling, Florian Müller, Max Mühlhäuser

iBeacon and HCI in Special Education: Micro-Location Based Augmentative and Alternative Communication for Children with Intellectual Disabilities

Rosanna Yuen-Yan Chan, Xue Bai, Xi Chen, Shuang Jia, Xiao-hong Xu

InspectorWidget: a System to Analyze Users Behaviors in Their Applications

Christian Frisson, Sylvain Malacria, Gilles Bailly, Thierry Dutoit

Drill Sergeant: Supporting Physical Construction Projects through an Ecosystem of Augmented Tools

Eldon Schoop, Michelle Nguyen, Daniel Lim, Valkyrie Savage, Sean Follmer, Björn Hartmann

Co-Viewing Room: Mobile TV Content Sharing in Social Chat

Pei-Yun Tu, Mei-Ling Chen, Chi-Lan Yang, Hao-Chuan Wang

USABLE, USEFUL, AND DESIRABLE

Gamification of a Workday. A Study on the Effects in Sheltered Employment

Oliver Korn, Johannes Lang, Andreas Korge, Haris Causegic, Albrecht Schmidt

Using the Kano Model to Balance Delight and Frustration for an Enterprise Application

Jinghui Cheng, James Mulholland, Anil Shankar

Usability of Lightweight Defibrillators for UAV Delivery

Mathias S Fleck

Biomechanics of Thumb Touch Gestures on Handheld Devices

Philipp Tiefenbacher, Amir Chouchane, Daniel Merget, Simon Schenk, Gerhard Rigoll

Shorter Wait Times: The Effects of Various Loading Screens on Perceived Performance

Jess Hohenstein, Hani Khan, Kramer Canfield, Samuel Tung, Rocio Perez Cano

An Exploration of Designing for Playfulness in a Business Context

Sherif Mekky, Andrés Lucero

Contextual Inquiry of Future Commuting in Autonomous Cars

Sven Krome, Steffen P Walz, Stefan Greuter

Automatic Body Part Measurement of Dressed Humans Using Single RGB-D Camera

Camila Dorin, Barak Hurwitz

How to Report App Feedback? Analyzing Feedback Reporting Behavior

Jeungmin Oh, SangJeong Lee, Uichin Lee

Between the Lines: A Comparative Study of Freeform-Based Knowledge-Map-Creation with Paper and Tablet

Marius Brade, Anja Sehl, Rainer Groh

Defining Usability Problems

Pavel Manakhov, Vyacheslav D. Ivanov

A Phrase Set for Bengali Text Entry Evaluations Based on Actual Text Messages

Ahmed Sabbir Arif, Sarah Fardeen

Usability and Effectiveness Evaluation of Adaptivity in E-Learning Systems

Mohammad Alshammari, Rachid Anane, Robert J Hendley

Designing a Literacy-Based Mobile Application for Adult Learners

Jennifer Hill, Rahul Simha

Finding “Interesting” Correlations in Multi-Faceted Personal Informatics Systems

Simon L Jones, Ryan M Kelly

Unsupervised Detection of Abnormal Moments for Usability Testing of Mobile Apps

Jing Xu, Xiang Ding, Ke Huang, Guanling Chen

Comparison of Kansei Engineering and AttrakDiff to Evaluate Kitchen Products

Nigel Bevan, Zhengjie Liu, Cathy Barnes, Marc Hassenzahl, Weijie Wei

Games User Research (GUR) for Indie Studios

Naeem Moosajee, Pejman Mirza-Babaei

Murphy Miserable Robot – A Companion to Support Children's Well-being in Emotionally Difficult Situations

Daniel Ullrich, Sarah Diefenbach, Andreas Butz

LATE-BREAKING WORK: WEDNESDAY / THURSDAY

LATE BREAKING WORK | WED-THUR

INTERACTION IN SPECIFIC DOMAINS

Smartphone Notifications in Context: a Case Study on Receptivity by the Example of an Advertising Service

Tilo Westermann, Ina Wechsung, Sebastian Möller

Identifying Opportunities to Support Family Caregiving in Chile

Francisco J. Gutierrez, Sergio F. Ochoa, Julita Vassileva

Digital Neighborhood Watch: To Share or Not to Share?

Cristina Kadar, Yiea-Funk Te, Raquel Rosés Brüngger, Irena Pletikosa Cvijikj

Simplifying Overviews of Temporal Event Sequences

Matthew Louis Mauriello, Ben Shneiderman, Fan Du, Sana Malik, Catherine Plaisant

Using Persuasive Mobile Apps to Enhance Children's Health and Well Being: A Sri Lankan Experience

Omar Mubin, Jayathri Wijayarathne, Muneeb Imtiaz Ahmad, Roshan Hewapathirana, Athula Ginige

In the Eye of the Beholder: The Impact of Frame Rate on Human Eye Blink

Benjamin Tag, Junichi Shimizu, Chi Zhang, Kai Kunze, Naohisa Ohta, Kazunori Sugiura

Multivariate Networks - A Novel Edge Visualization Approach for Graph-based Visual Analysis Tasks

Sebastian Schöffel, Johannes Schwank, Jan Stärz, Achim Ebert

Bridging the Physical Divide: A Design Framework for Embodied Learning Games and Simulations

Edward F. Melcer, Katherine Isbister

ReHappy - The House Elf that Serves your Rehabilitation Exercises

Karin Coninx, Tom De Weyer, Rianne Lemmens, Kris Luyten

Dynamic and Interactive Lighting for Fashion Store Windows

Paolo Cremonesi, Antonella Di Rienzo, Franca Garzotto, Luigi Oliveto, Pietro Piazzolla

Let's Get Lost: Exploring Social Norms In Predominately Blind Environments

William Easley, Michele A. Williams, Ali Abdolrahmani, Caroline Galbraith, Stacy M. Branham, Amy Hurst, Shaun K. Kane

Can DiCoT Improve Infection Control? A Distributed Cognition Study of Information Flow in Intensive Care

Mustafa Hussain, Nadir Weibel

Design of a Human-Machine Interface for Truck Platooning

Shadan Sadeghian Borojeni, Thomas Friedrichs, Wilko Heuten, Andreas Luedtke, Susanne C.J. Boll

Helping Users Set Rules for Defining Short-Term Activity Goals

Jisoo Lee, Eric B. Hekler, Emil Chiauzzi, Auriell Towner, Marcy Fitz-Randolph

Keeping Watch: Exploring Wearable Technology Designs for K-12 Teachers

Rebecca Quintana, Chris Quintana, Cheryl Madeira, James D. Slotta

Not All Who Wander Are Lost: Smart Tracker for People with Dementia

Joy Ng, Haixun Kong

Rekindling Imagination in Dementia Care with the Resonant Interface Rocking Chair

Peter Bennett, Heidi Hinder, Kirsten Cater

My Scrawl Hides It All: Protecting Text Messages Against Shoulder Surfing With Handwritten Fonts

Malin Eiband, Emanuel von Zezschwitz, Daniel Buschek, Heinrich Hußmann

Is This Good or Bad? Redesigning Visual Displays of Medical Test Results in Patient Portals to Provide Context and Meaning

Jacob B. Solomon, Aaron M. Scherer, Nicole L. Exe, Holly O. Witteman, Angela Fagerlin, Brian J. Zikmund-Fisher

Lernanto: Using an Ambient Display During Differentiated Instruction

Erik van Alphen, Saskia Bakker

ReWear: Early Explorations of a Modular Wearable Construction Kit for Young Children

Majeed Kazemitabaar, Liang He, Katie Wang, Chloe Aloimonos, Tony Cheng, Jon E. Froehlich

Supporting Pakistani Farmers Through Digital Means: An Exploratory Study

Syed Ali, Harris Durrani, Muhammad Naeem, Waleed Riaz, Suleman Shahid

BITxBIT: Encouraging Behavior Change with N=2 Experiments

Natasha Jaques, Travis Rich, Karthik Dinakar, Nijia Farve, Weixuan Chen, Pattie Maes, Rosalind Picard, Kevin Slavin

Differences in Perceived Impact of Person-Centered Technology on Older Adults' Quality of Life

Galina Madjaroff, Helena Mentis, Judah Ronch

EXTENDING USER CAPABILITIES

Toward a Systematic Understanding of Children's Touchscreen Gestures

Alex Shaw, Lisa Anthony

Prototyping the Machine-Human Dialogues in a Smartphone Voice Call Application With Task Resumption Support

W. L. Yeung, Simon Y. W. Li

Scented Material: Changing Features of Physical Creations based on Odors

Olivia Jezler, Elia Gatti, Marco Gilardi, Marianna Obrist

Movement Fluidity Analysis Based on Performance and Perception

Stefano Piana, Paolo Alborn, Radoslaw Niewiadomski, Maurizio Mancini, Gualtiero Volpe, Antonio Camurri

MAGIC-Pointing on Large High-Resolution Displays

Lars Lischke, Valentin Schwind, Kai Friedrich, Albrecht Schmidt, Niels Henze

Pactolus: A Method for Mid-Air Gesture Segmentation within EMG

Yineng Chen, Xiaojun Su, Feng Tian, Jin Huang, Xiaolong (Luke) Zhang, Guozhong Dai, Hongan Wang

Toward Real-time Brain Sensing for Learning Assessment: Building a Rich Dataset

Shelby Keating, Erin Walker, Anil Motupali, Erin Solovey

Evaluating Haptic Feedback on a Steering Wheel in a Simulated Driving Scenario

Gözel Shakeri, Stephen A. Brewster, John Williamson, Alexander Ng

Embodied Interactions for Novel Immersive Presentational Experiences

Fabrice Matulic, Lars Engeln, Christoph Träger, Raimund Dachsett

Using Brain Signals in Adaptive Smart Spaces for Disabled Children

Franca Garzotto, Mirko Gelsomini, Alessandro Pappalardo, Claudio Sanna, Erica Stella, Michele Zanella

Using Sound to Help Visually Impaired Children Play Independently

Euan Freeman, Stephen A. Brewster

LATE-BREAKING WORK: WEDNESDAY / THURSDAY

COLLABORATIVE TECHNOLOGIES

The Use of Digital Technology to Evaluate School Pupils' Grasp of Energy Sustainability

Christopher Weeks, Charles Delalonde, Chris Preist

Practical Study of Positive-feedback Button for Brainstorming with Interjection Sound Effects

Natsuko Yoshida, Shogo Fukushima, Daiya Aida, Takeshi Naemura

Team Dating: A Self-Organized Team Formation Strategy for Collaborative Crowdsourcing

Ioanna Lykourantzou, Shannon Wang, Robert E. Kraut, Steven P Dow

HandVis: Visualized Gesture Support for Remote Cross-Lingual Communication

Kuan-Yu Lin, Seraphina Yong, Shuo-Ping Wang, Chien-Tung Lai, Hao-Chuan Wang

SlideQA: Supporting Effective Q&A in an Offline Academic Presentation

Juyoun Kim, Yoochan Kim, Sangkeun Park, Uichin Lee

LockDoll: Providing Ambient Feedback of Smartphone Usage within Social Interaction

Seungwoo Choi, Hayeon Jeong, Minsam Ko, Uichin Lee

Task-Based Focus and AdHoc-Focus-Territory – Novel Concepts for Shared Interactive Surfaces

Mirko Fetter, David Bimamisa, Tom Gross

GazeTorch: Enabling Gaze Awareness in Collaborative Physical Tasks

Deepak Akkil, Jobin Mathew James, Poika Isokoski, Jari Kangas

User Reviews and Language: How Language Influences Ratings

Scott A Hale

Online Dating Coaches' User Evaluation Strategies

Douglas Zytka, Sukeshini A. Grandhi, Quentin (Gad) Jones

Improving Plagiarism Detection in Coding Assignments by Dynamic Removal of Common Ground

Christian Domin, Henning Pohl, Markus Krause

Understanding Roles of Social Media in Academic Engagement and Satisfaction for Graduate Students

Kyungsik Han, Svitlana Volkova, Courtney D. Corley

StreamBED: Training Citizen Scientists to Make Qualitative Judgments Using Embodied Virtual Reality Training

Alina Striner, Jenny Preece

"That Neighborhood is Sketchy!": Examining Online Conversations about Social Disorder in Transitioning Neighborhoods

Sheena Erete, Love Nicole, Jesse Mumm, Anfal Boussayoud, Ihudiya Finda Ogbonnaya-Ogburu

DESIGNING INTERACTIVE SYSTEMS

Designing Children's Digital-Physical Play in Natural Outdoors Settings

Jon Back, Caspar Heffer, Susan Paget, Andreas Rau, Eva Lotta Sallnäs Pysander, Annika Waern

The Dial: Exploring Computational Strangeness

Kristina Andersen, Peter Knees

"Hold My Hand, Baby": Understanding Engagement through the Illusion of Touch between Human and Agent

David Jan Mercado, Gilles Bailly, Catherine Pelachaud

Investigating the Impact of Feedback on Gaming Performance on Motivation to Interact with Public Displays

Jiamin Shi, Daniel Buschek, Florian Alt

Investigating User Needs for Bio-sensing and Affective Wearables

Mariam Hassib, Mohamed Khamis, Stefan Schneegass, Ali Sahami Shirazi, Florian Alt

Keep Calm and Carry On: Exploring the Social Determinants of Indoor Environment Quality

Stephen Snow, Anna Soska, Shre Kumar Chatterjee, m.c. schraefel

Transcendance: A Game to Facilitate Techno-Spiritual Design

Elizabeth Buie

Computational Layout Perception using Gestalt Laws

Janin Koch, Antti Oulasvirta

As Simple as Possible but No Simpler: Creating Flexibility in Personal Informatics

Dawn Nafus, Pete Denman, Lenitra Durham, Omar Florez, Lama Nachman, Saurav Sahay, Evan Savage, Sangita Sharma, Devon Strawn, Rita H Wouhaybi

COPPA COMPLIANCE: A Cooperative Inquiry Perspective

Zachary A Pease, Greg Walsh

Constructivist Design for Interactive Machine Learning

Advait Sarkar

GAMES & PLAYFUL INTERACTION

3D Virtual Tracing and Depth Perception Problem on Mobile AR

Leo Gombač, Klen Čopič Pucihar, Matjaž Kljun, Paul Coulton, Jan Grbac

Lights Out: An Interactive Tangible Game for Training of Post-Stroke Reaching

Pan Wang, Raymond K.C. Koh, Christian Gilles Boucharenc, Ching-Chiuan Yen

Studying the Impact of Spatial Involvement on Training Mental Rotation with Minecraft

Anna Nguyen, Stefan Rank

TwitchViz: A Visualization Tool for Twitch Chatrooms

Rui Pan, Lyn Bartram, Carman Neustaedter

DEEP: A Biofeedback Virtual Reality Game for Children At-risk for Anxiety

Marieke M. van Rooij, Adam Lobel, Owen L. Harris, Niki Smit, Isabela Granic

Psychophysiology of Challenge in Play: EDA and Self-Reported Arousal

Madison Klarkowski, Daniel Johnson, Peta Wyeth, Cody Phillips, Simon Smith

WaterCoaster: A Device to Encourage People in a Playful Fashion to Reach Their Daily Water Intake Level

Pascal Lessel, Maximilian Altmeyer, Frederic Kerber, Michael Barz, Cornelius Leidinger, Antonio Krüger

Evaluating Physical Movement as Trigger for Transitioning Between Environments in Virtual Reality

Josh Kohn, Stefan Rank

Invasion of the Energy Monsters: A Family Board Game about Energy Consumption

Amartya Banerjee, Michael S. Horn, Pryce Davis

Sonic-Badminton: Audio-Augmented Badminton Game for Blind People

Shin Kim, Kun-pyo Lee, Tek-Jin Nam

Gameplay as Exercise

Kristoffer Hagen, Konstantinos Chorianopoulos, Alf Inge Wang, Letizia Jaccheri, Stian Weie

Designing and Utilizing Biofeedback Games for Emotion Regulation: The Case of Nevermind

Adam Lobel, Marientina Gotsis, Erin Reynolds, Michael Annetta, Rutger C.M.E. Engels, Isabela Granic

Data-driven Prediction Games

Gabriel Dzodan, Frank Shipman

LATE-BREAKING WORK: WEDNESDAY / THURSDAY

NOVEL INTERACTIONS

Tangible Interfaces for Interactive Evolutionary Computation

Thomas Mitchell, Peter Bennett, Sebastian Madgwick, Edward Davies, Philip Tew

SoundFORMS: Manipulating Sound Through Touch

Aubrey Colter, Patlapa Davivongsa, Donald Derek Haddad, Halla Moore, Brian Tice, Hiroshi Ishii

Using a Mobile Device Fingerprint Sensor as a Gestural Input Device

Anna Ostberg, Mohamed Sheik-Nainar, Nada Matic

Evaluation of Callout Design for Ultra-small Touch Screen Devices

Akira Ishii, Buntarou Shizuki, Jiro Tanaka

ThumbSlide: An Interaction Technique for Smartwatches using a Thumb Slide Movement

Shuhei Aoyama, Buntarou Shizuki, Jiro Tanaka

PressTact: Side Pressure-Based Input for Smartwatch Interaction

Rajkumar Darbar, Prasanta Kr Sen, Debasis Samanta

Force Attraction Pen: A Haptic Pen with Variable Attraction Force

James Burnside, Ben Elgar, Sam Healer, Alexander Hill, Zac Ioannidis, Luke Mitchell, Paul Worgan, Anne Roudaut

IStage: An Interactive Stage System

Christos Chacholiades, Cesar Flores Cano, Yuying Wang, Eman Meldah, Themis Omirou, Anne Roudaut

NotiFall – Ambient Sonification System Using Water

Alex Harman, Hristo Dimitrov, Ruisha Ma, Sam Whitehouse, Yiu Li, Paul Worgan, Themis Omirou, Anne Roudaut

FlexStylus: A Deformable Stylus for Digital Art

Nicholas Fellion, Alexander Keith Eady, Audrey Girouard

Purpose-Centric Appropriation of Everyday Objects as Game Controllers

Kashyap Todi, Donald Degraen, Brent Berghmans, Axel Faes, Matthijs Kaminski, Kris Luyten

ProxiWatch: Enhancing Smartwatch Interaction through Proximity-based Hand Input

Florian Müller, Sebastian Günther, Niloofar Dezfuli, Mohammadreza Khalilbeigi, Max Mühlhäuser

Exploring Interaction Modalities and Task Allocation for Household Robotic Arms

Sascha Herr, Tom Gross, Michael Gradmann, Dominik Henrich

DooBoo: Pet-Like Interactive Dashboard towards Emotional Electric Vehicle

Yea-Kyung Row, Chang Min Kim, Tek-Jin Nam

Finger Placement and Hand Grasp during Smartphone Interaction

Huy Viet Le, Sven Mayer, Katrin Wolf, Niels Henze

Privacy Itch and Scratch: On Body Privacy Warnings and Controls

Vikram Mehta, Arosha K Bandara, Blaine A Price, Bashar Nuseibeh

MarkAirs: Around-Device Interactions with Tablets Using Fiducial Markers – An Evaluation of Precision Tasks

Fernando Garcia-Sanjuan, Javier Jaen, Geraldine Fitzpatrick, Alejandro Catala

GazeLaser: A Hands-Free Highlighting Technique for Presentations

Oleg Špakov, Harri Siirtola, Howell Istance, Kari-Jouko Räihä

The Interaction Material Profile: Understanding and Inspiring How Physical Materials Shape Interaction

Tanja Döring

U ok? Txt me the Colour of ur Mood!

Andra Balta, Janet C Read

Grabrics: A Foldable Two-Dimensional Textile Input Controller

Nur Al-huda Hamdan, Florian Heller, Chat Wacharamanotham, Jan Thar, Jan Borchers

User Attention with Head-Worn Displays

Niaja Farve, Tal Achituv, Pattie Maes

SolidNoise: Making Musical Robots

Jiffer Harriman, Matthew Bethancourt, Abhishek Narula, Michael Theodore, Mark D Gross

What Can Doodles on the Arm Teach Us about On-Body Interaction?

Paul Strohmeier, Juan Pablo Carrascal, Kasper Hornbæk

Smart Ubiquitous Projection: Discovering Surfaces for the Projection of Adaptive Content

Fabrice Matulic, Wolfgang Büschel, Michael Yang, Stephan Ihrke, Anmol Ramraika, Carsten Rother, Raimund Dachsel

PEOPLE AND CONTEXTS

The Web Is Flat: The Inflation of Uncommon Experiences Online

Danaë Metaxa-Kakavouli, Gili Rusak, Jaime Teevan, Michael S Bernstein

Does Social Endorsement Influence Physiological Arousal?

Soo Youn Oh, Soohee Kim

Accept the Banana: Exploring Incidental Cognitive Bias Modification Techniques on Smartphones

Charlie Pinder, Rowanne Fleck, Rosa Lilia Segundo Díaz, Russell Beale, Robert J Hendley

Exploring Interactions with a Flexible Tactile Device for Multi-Context Interaction

Sabrina Panëels, Steven Strachan, Hanna Yousef, Sylvain Bouchigny

Measuring Trust: The Simpler the Better?

Denise Christine Rieser, Orlando Bernhard

Towards Understanding How Speech Output Affects Navigation System Credibility

Benjamin R. Cowan, Derek Gannon, Jenny Walsh, Justin Kinneen, Eanna O'Keefe, Linxin Xie

ABC: Using Object Tracking to Automate Behavioural Coding

Aitor Apaolaza, Robert Haines, Amaia Aizpurua, Andy Brown, Michael Evans, Stephen Jolly, Simon Harper, Caroline Jay

Life Review in End of Life Care: A Practitioner's Perspective

Corina Sas, Shuang Ren, Alina Coman, Sarah Clinch, Nigel Davies

Don't Kick the Habit: The Role of Dependency in Habit Formation Apps

Ian Renfree, Daniel Harrison, Paul Marshall, Katarzyna Stawarz, Anna Cox

Exploring Motivations for Bitcoin Technology Usage

Irni Eliana Khairuddin, Corina Sas, Sarah Clinch, Nigel Davies

Privacy-Enhancing of User's Behaviour Toward Privacy Settings in Social Networking Sites

Abdulhadi Alqarni, Srinivas Sampalli

Thinking in Stories: Narrative-based Design for Higher-Level Thinking

Sourabh Bhangaonkar, Sharon Chu, Francis Quek

Crowdsourced Facial Expression Mapping Using a 3D Avatar

Crystal Butler, Lakshmi Subramanian, Stephanie Michalowicz

Three Personas of Potential High-Resolution Music Users

Hyejin Im, Nam Wook Kim

LATE-BREAKING WORK: WEDNESDAY / THURSDAY

ENGINEERING OF INTERACTIVE SYSTEMS

The Brain Matters: A 3D Real-Time Visualization to Examine Brain Source Activation Leveraging Neurofeedback

Thomas Kosch, Mariam Hassib, Albrecht Schmidt

High-Volume Hypothesis Testing for Large-Scale Web Log Analysis

Sana Malik, Eunye Koh

InstructableCrowd: Creating IF-THEN Rules via Conversations with the Crowd

Ting-Hao Kenneth Huang, Amos Azaria, Jeffrey P. Bigham

Immersive Terrestrial Scuba Diving Using Virtual Reality

Dhruv Jain, Misha Sra, Jingru Guo, Rodrigo Marques, Raymond Wu, Justin Chiu, Chris Schmandt

Towards Augmented Fabrication: Combining Fabricated and Existing Objects

Daniel Ashbrook, Shitao Stan Guo, Alan Lambie

SPLASH: Smart-Phone Logging App for Sustaining Hydration Enabled by NFC

Xu Luo, Przemyslaw Woznowski, Alison Burrows, Mo Haghighi, Ian Craddock

Minerva II: A Novel Entity Discovery Tool

Andrew Jie Zhou, Hui Yang, Hongkai Wu

Recommending Movies Based on Mise-en-Scene Design

Yashar Deldjoo, Mehdi Elahi, Paolo Cremonesi, Franca Garzotto, Pietro Piazzolla

ThermoTouch: Design of a High Dynamic Temperature Range Thermal Haptic Display

Sven Kratz, Anthony Dunnigan

USABLE, USEFUL, AND DESIRABLE

Assisting Food Journaling with Automatic Eating Detection

Xu Ye, Guanling Chen, Yang Gao, Honghao Wang, Yu Cao

Feminizing Robots: User Responses to Gender Cues on Robot Body and Screen

Eun Hwa Jung, T. Franklin Waddell, S Shyam Sundar

Designing Smartphone Feedback Based on Vibration Impression

Shota Shiraga, Yuichiro Kinoshita, Kentaro Go

Misplaced Trust: A Bias in Human-Machine Trust Attribution - In Contradiction to Learning Theory

Dan E Conway, Fang Chen, Kun Yu, Jianlong Zhou, Richard Morris

Daily & Hourly Adherence: Towards Understanding Activity Tracker Accuracy

Lie Ming Tang, Margot Day, Lina Engelen, Philip Poronnik, Adrian Bauman, Judy Kay

Evaluating Severity Rating Scales for Heuristic Evaluation

Sascha Herr, Nina Baumgartner, Tom Gross

What Makes a Brand Look Expensive?

Jingxian Zhang, Neel Kothari, Asad Imtiaz Butt, Ranjitha Kumar

Understanding Nurses' Perception Regarding the Use of NFC Application During Medication Administration

Maali Alabdulhafith, Abdulhadi Alqarni, Srinivas Sampalli

Attitudes Towards Vertical Farming at Home: A User Study

Guido Jansen, Nazli Cila, Marije Kanis, Yanti Slaats

Parenting Digital Youth: How Now?

Diane J Schiano, Christine Burg, Anthony Nalan Smith, Florencia Moore

Perceived User Experience of Animated Transitions in Mobile User Interfaces

Benedikt Merz, Alexandre N Tuch, Klaus Opwis

Hedonic Enjoyment And Personal Expressiveness In Positive User Experiences

Livia J Müller, Elisa D Mekler, Klaus Opwis

A System Modeling Based Anti-Shake Technique for Mobile Display

Jyh-Da Wei, Hsu-Fu Hsiao, Pei-Yu Jiang

An Effective User Centered Approach: Using Web Design Framework to Support User Experience Design of Interactive Multi-functional Product

Jiaxin Lin, Jie Li

Correcting Exercise Form Using Body Tracking

Caleb Conner, Gene Michael Poor

You are Being Watched: Bystanders' Perspective on the Use of Camera Devices in Public Spaces

Samarth Singhal, Carman Neustaedter, Thecla Schiphorst, Anthony Tang, Abhisekh Patra, Rui Pan

Information Seeking and Evaluation of Online Sexual Health Resources among Late Adolescents

Summer Starling, Coye Cheshire

Presentation Strategies for Micro-Navigation in the Physical World

Nur Al-huda Hamdan, Marcel Lahaye, Christian Corsten, Jan Borchers

Identifying Experience Categories to Design for Positive Experiences with Technology at Work.

Katharina M Zeiner, Magdalena Laib, Katharina Schippert, Michael Burmester

Co-designing Scientific Software: Hackathons for Participatory Interface Design

Andrea K Thomer, Michael B Twidale, Jinlong Guo, Matthew J Yoder

cTed: Advancing Selection Mechanisms in Web Browsers

Philipp Eichmann, Hyunchang Song, Emanuel Zraggen

Confirmation Responses: In-context, Visible, & Predictable Design versus Popup Windows

Evgeniy R Abdulin, Dorrit Billman

SIG MEETINGS

SIG MEETINGS

MONDAY

Room 112

Multiple Views on Safety-Critical Automation: Aircrafts, Autonomous Vehicles, Air Traffic Management and Satellite Ground Segments Perspectives

Michael Feary, Célia Martinie, Philippe Palanque, Manfred Tscheligi

Refugees and HCI SIG: The Role of HCI in Responding To the Refugee Crisis

Reem Talhouk, Syed Ishtiaque Ahmed, Volker Wulf, Clara Crivellaro, Vasilis Vlachokyriakos, Patrick Olivier

Diversity In High Tech: Retaining Employees Once They're In the Door

Karen Holtzblatt, Carol Farnsworth

TUESDAY

Room 112

Special Interest Group on Transparent Statistics in HCI

Matthew Kay, Steve Haroz, Shion Guha, Pierre Dragicevic

SIGCHI Games: The Scope of Games Research at CHI

Lennart E. Nacke, Anna L. Cox, Regan L. Mandryk, Paul Cairns

Mind the Gap: A SIG on Bridging the Gap in Research on Body Sensing, Body Perception and Multisensory Feedback

Aneesha Singh, Ana Tajadura-Jimez, Nadia Bianchi-Berthouze, Nicolai Marquardt, Monica Tentori, Roberto Bresin, Dana Kulic

Usability of Programming Languages

Brad A. Myers, Andreas Steffik, Stefan Hanenberg, Antti-Juhani Kaijanaho, Margaret M. Burnett, Franklyn Turbak, Philip Wadler

TUESDAY

Room 230C

Technology for Disabled and Older People: What Have We Achieved, Where are We Going?

Helen Petrie, Gerhard Weber

Become a Volunteer at ACM SIGCHI

Loren G. Terveen, Helena M. Mentis, Susan R. Fussell, Regina Bernhaupt

Digital Civics: Citizen Empowerment With and Through Technology

Vasillis Vlachokyriakos, Clara Crivellaro, Christopher A. Le Dantec, Eric Gordon, Pete Wright, Patrick Olivier

SIG on the State of Accessibility at CHI

Jennifer A. Rode, Erin L. Brady, Erin Buehler, Shaun K. Kane, Richard Ladner, Kathryn E. Ringland, Jennifer Mankoff

WEDNESDAY

Room 112

Leading Design Teams and Organizations

Carola F. Thompson, Janice Rohn

The Master's Degree in HCI at 20: Issues and Trends

Richard L. Henneman, Laura Ballay, Linda Wagner

Design Thinking Beyond Post-Its Notes

Carol Farnsworth, Sally Lawler Kennedy, Janaki Mythily Kumar

Jogging at CHI

Florian Mueller, Joe Marshall, Rohit Ashok Khot, Stina Nylander, Jakob Tholander

THURSDAY

Room 112

Child-Computer Interaction SIG: New Challenges and Opportunities

Juan Pablo Hourcade, Glenda Revelle, Anja Zeising, Ole Sejer Iversen, Narcis Pares, Tilde Bekker, Janet C. Read

Conflict & HCI: Preventing, De-Escalating and Recovering

Juan Pablo Hourcade, Lisa P. Nathan, Panayiotis Zaphiris, Yoram I. Chisik, Cuauhtémoc Rivera-Loaiza, Jason C. Yip

Rethinking Mobile Interfaces for Older Adults

Neil Charness, Mark Dunlop, Cosmin Munteanu, Emma Nicol, Antti Oulasvirta, Xiangshi Ren, Sayan Sarcar, Chaklam Silpasuwanchai

LAST-MINUTE SIGS

Want to organize a last-minute meeting? Reserve a timeslot at the Conference Office (Room 211A) and publicize using the hashtag #chi2016.

A large grid of small dots, arranged in approximately 30 rows and 40 columns, covering the majority of the page. This grid is intended for users to write their notes on.

EXHIBITORS

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601/602

Infosys is a global leader in consulting, technology and next-generation services. We enable clients, in more than 50 countries, to stay a step ahead of emerging business trends and be at zero distance to their end consumers. We help them transform and thrive in a changing world by co-creating breakthrough solutions that combine strategic insights and execution excellence.

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104/105

Giving people the power to share and connect requires constant innovation. At Facebook, research permeates everything we do. We believe the most interesting research questions are derived from real world problems. Working on cutting edge research with a practical focus, we push product boundaries every day. At the same time, we are publishing papers, giving talks, attending and hosting conferences, and collaborating with the academic community.

Google

504/505

Google's mission is to organize the world's information, making it universally accessible and useful. Every day, we bring our spirit of innovation and entrepreneurship to work. Come by our booth, meet our engineers and researchers, demo some new products and learn about some of the great opportunities we have at Google.

HP

200

Sprout by HP is a first-of-its-kind Immersive Computing platform that redefines the user experience and creates a foundation for future immersive technologies. HP Inc. creates technology that makes life better for everyone, everywhere. Through our range of printers, PCs, mobile devices, solutions, and services, we engineer experiences that amaze. More information is available at <http://www.hp.com>

IBM Research

400

We live in a moment of remarkable change and opportunity. Data and technology are transforming industries and societies, ushering in a new era of Cognitive Computing. IBM Research is a leader in this worldwide transformation, building on a long history of innovation. At IBM, you can achieve what others think is impossible. And in doing so, you'll play a significant role in shaping the future. Join us and discover what you can make of this moment.

Microsoft

100/101

At Microsoft, we aim to empower every person and every organization on the planet to achieve more. We care deeply about having a global perspective and making a difference in all corners of the planet. This involves playing a small part in the most fundamental of human activities: Creating tools that enable each of us along our journey to become something more. Today, we live in a mobile-first, cloud-first world, and we aim to enable our customers to thrive in this world.

Yahoo

405

Yahoo is a guide focused on informing, connecting, and entertaining our users. The UXRA team helps our product teams create products that offer indispensable user experiences which are key to customer usage, retention and product success. We partner with teams to provide timely, believable and actionable insights into how users are using our products and services. Visit our booth to meet our researchers, discuss our current opportunities, and take home some fun swag!

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503

IUEditor is the world's most advanced web editor, which realized the concept of visual language in life. It embodies HTML, CSS and JavaScript without any coding. It supports back-end frameworks including Django, AngularJS and WordPress as well as synchronization with cloud servers like Heroku. IUEditor allows you to create a responsive website or web application for any device, browser or platform using a gorgeous GUI.

Additional Exhibitors

ACM

603

The Association for Computing Machinery (ACM) is the world's oldest scientific computing society, and publisher of computing's most respected research publications. The ACM Digital Library contains more than 430,000 articles in all areas of computing, a comprehensive bibliometric index for the entire field of computing research, and unique and powerful tools for personalization and collaboration.

Alibaba Group

309

Alibaba Group's mission is to make it easy to do business anywhere. The company is the largest online and mobile commerce company in the world. Alibaba UED (User Experience Design) committee is an internal organization to empower design and research teams on training, recruiting, and development to fulfill business needs. Come by our booth, meet our designers and researchers.

Apple, Inc.

305a

The people here at Apple don't just create products, they create wonder that's revolutionized entire industries. It's the diversity of those people and their ideas that inspires the innovation that runs through everything we do, from amazing technology to industry leading environmental efforts. Join Apple and help us leave the world better than we found it. Where do you see yourself at Apple?

Cambridge University Press

306

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 digital products. Visit our stand for 20% off all titles on display.

CHI 2016 Info Booth

603

The CHI Information booth is staffed by Student Volunteers who can answer most questions about the conference. The Information booth is open during the same hours as the Exhibit Hall.

EXHIBITORS

Elsevier 301

Elsevier is committed to making genuine contributions to science and health communities. We are proud to be part of these communities and to participate in the advancement of these fields. By delivering world-class information and innovative tools to researchers, students, educators and practitioners worldwide, we help them become increasingly more productive in their work.

EyeTracking, Inc. 303

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.

Fitbit 302

At Fitbit, we're transforming the way the world sees health & fitness. Our mission is to help people lead healthier, more active lives by empowering them with data, inspiration and guidance to reach their goals. Come by our booth to meet the researchers and designers helping to create tomorrow's devices and to chat with us about the exciting opportunities available at Fitbit.

Globalme 300

At Globalme, we test the newest speech and motion-enabled technologies and assist tech trendsetters in perfecting their users' experience, both at home and across borders. Our NLP team collects and analyses speech data in more than twenty countries, including the diversified and culturally-rich city of Vancouver, BC (which we feel lucky to call home). Stop by our booth to see how we facilitate the tech leaders of today and experience the fastest evolving language around the world.

Human Factors International 304

Human Factors International is the world's largest company specializing in UX design, since 1981. Our unique focus is helping clients develop mature and effective UX practices. We provide a complete and seamless suite of advisory, training, certification, methods, standards, and tools. HFI also applies persuasion methods to influence your customers to use digital channels, engage, and convert.

Iowa State University – HCI 305

The interdepartmental graduate major in Human Computer Interaction at Iowa State University provides advanced education and training while fostering research excellence. Students benefit from interaction with faculty from departments representing every college in the University as well as researchers at the Virtual Reality Applications Center.

Morgan & Claypool Publishers 201

Morgan & Claypool Publishes the Synthesis Digital Library, including our HCI series and Assistive Technologies series. 30 day guest access to the site is provided to any attendee that signs up!

now publishers 502

now publishers is the proud publisher of Foundations and Trends in Human Computer Interaction under the editorship-in-chief of Desney Tan. Foundations and Trends journals publish state-of-the-art review articles written by leading researchers in the field. Visit our booth to browse the available titles and to meet the publisher, James Finlay.

Oxford University Press 404

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PLUX – Wireless Biosignals 403

Affordable wireless toolkits designed to enable students and researchers to collect and analyse reliable, high definition, biosignal data.

Samsung Electronics 204/205

MediaSquare is Samsung's vision for how multiple people can share and experience media content in a connected environment, where smart phones and wearables can easily connect with TV. Family and friends can navigate a music playlist and enjoy DJ-ing together; share photos, videos, or even their favourite restaurant lists through a playful and interactive game-like user interface.

SensoMotoric Instruments, Inc. 500

SMI is a leading provider of eye and gaze tracking systems to a global market. Our advanced analysis software provides visualizations that simplify the interpretation of eye tracking data. Let us show you how to add an eye tracker to your existing set of tools: www.smivision.com/egts.

Smart Eye AB 307

SMART EYE provides robust 3D Binocular Eye Tracking systems for research in applications such as multiple screens, long range or measurements on tablets or single screens. The systems provide a person's 3D information on gaze direction, head position and angles, eyelid opening, pupil size and many more – in real time! Welcome to our booth to find out more about our solutions!

Springer 401/402

Looking to publish your research? Discover Springer's print and electronic publication services, including open access! Get high-quality review, maximum readership and rapid distribution. Visit our booth or springer.com/authors. You can also browse key titles in your field and buy (e)books at discount prices. With Springer you are in good company.

SR Research Ltd. 202

SR Research is known for outstanding technical specs, versatility, and rigor in eye tracking. The EyeLink 1000 Plus offers the highest spatial precision and accuracy of any eye tracker, and its ease of use and flexibility allow you to collect reliable data quickly and easily. New software tools enable study of user interfaces with several types of dynamic visualization and multiple analysis paths.

The MIT Press 203

The MIT Press publishes extensively in computer-human interaction and related disciplines. Please visit our booth to browse our newest and classic titles and receive a 30% discount.

Tobii Pro 102/103

Tobii Pro, being a world leader in eye tracking products and services, helps business and science professionals gain valuable insights into human behavior. Our innovative and high-quality eye tracking solutions capture human behavior in a natural way, ultimately affording users access to valuable, objective data about real responses to stimuli.

UEGroup 501

UEGroup is a full-service UX firm specializing in outsourced research and design as well as innovative research tools.

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PAPERS and NOTES

14 SEPTEMBER 2016

Title, abstract, authors,
subcommittee choice

21 SEPTEMBER 2016

All materials

7 OCTOBER 2016

Workshops
Interactivity
Doctoral Consortium

9 OCTOBER 2016

Case Studies

12 OCTOBER 2016

Courses

11 JANUARY 2017

Late-Breaking Work
alt.chi
Panels
SIG Meetings
Video Showcase

13 JANUARY 2017

Student Research Competition
Student Design Competition
Student Game Competition

CHI STORIES

A new venue designed to make visible the deeper lives of people in our field through their personal stories of inspirations, challenges, breakthroughs, setbacks, twists and turns. CHI Stories are what come after "Really? I'd love to hear more about that."

CHI ART PROGRAM

"Out of the Box; Into the Streets and Into the Clouds" will feature interactive artworks that construct future visions of our lived world into the streets and into the clouds.

Grid of dots for notes.

CONFERENCE MAP

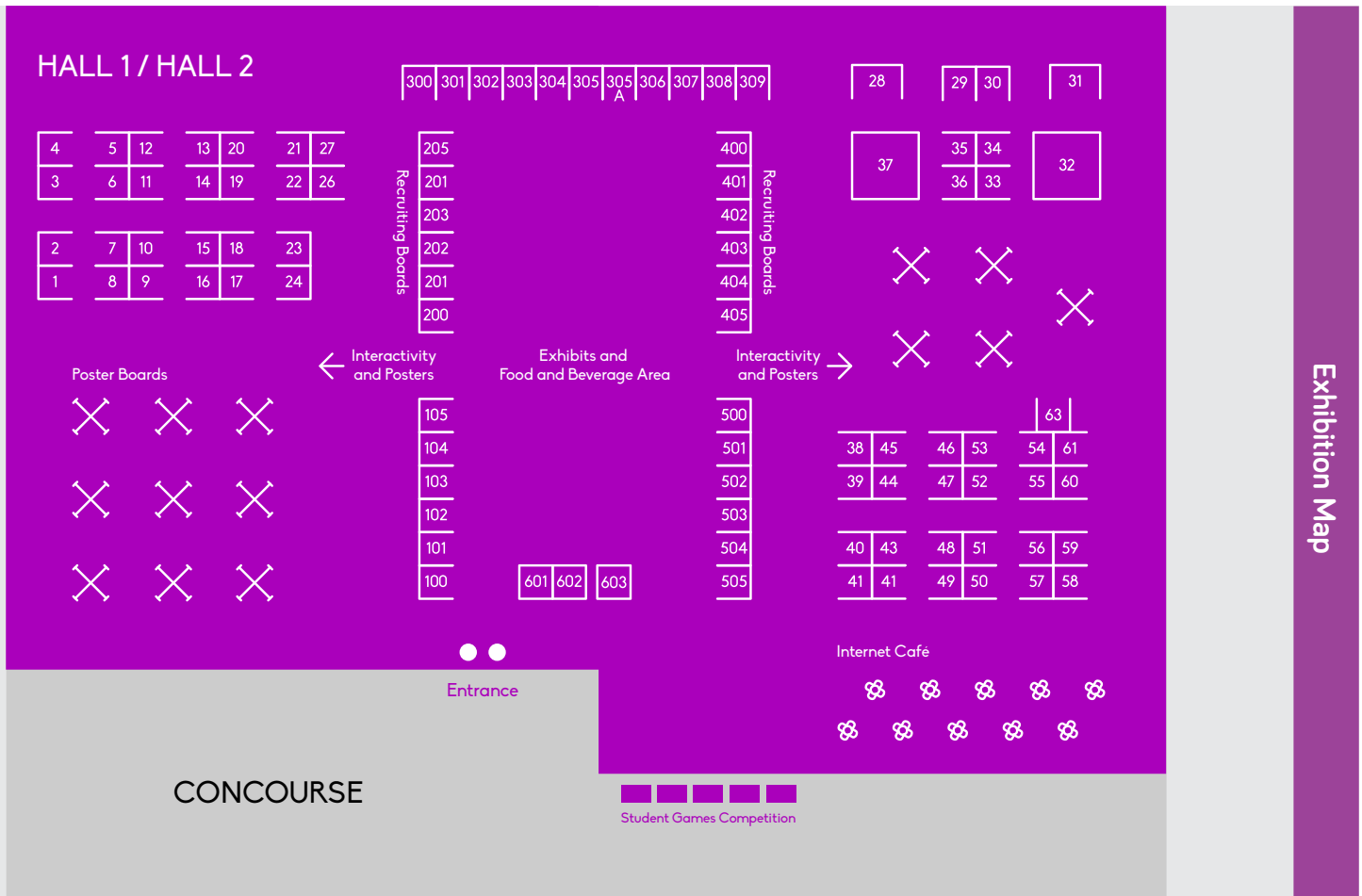


111: Dark Interactivity Space
 112: SIGs
 113: Telepresence Robot Room
 114: Case Studies
 LL Rooms: Papers
 210AE, 210BF: Papers
 210C-H: Courses
 230C: SIGs
 Grand Ballroom: Keynotes, Awards, Video Showcase, and Panels
 Exhibit Hall 1&2: Exhibits, Interactivity, and Posters

211A: Conference Office
 212: Student Volunteers Central Command
 213: Press Office
 211B: CHI 2016 Committee Lounge
 211C: CHI 2017 Chairs' Room
 230A: Child Care Room
 233: Nursing Mothers' Room
 (sign up at Conference Office 211A)
 231AB: Speaker Ready Rooms

	Escalator		Elevator
	Men's Restroom		Stairs
	Women's Restroom		First Aid Station
	Gender Neutral Restroom		Defibrillator

EXHIBIT HALL MAP



EXHIBITORS

100/101: Microsoft
102/103: Tobii Pro
104/105: Facebook

200: HP
201: Morgan & Claypool Publishers
202: SR Research
203: The MIT Press
204/205: Samsung Electronics

300: Globalme
301: Elsevier
302: Fitbit
303: EyeTracking Inc.
304: Human Factors International
305: Iowa State University - HCI
305a: Apple, Inc.
306: Cambridge University Press
307: Smart Eye AB
309: Alibaba Group

400: IBM Research
401/402: Springer
403: PLUX – Wireless Biosignals
404: Oxford University Press
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501: UEGroup
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603: ACM

For Interactivity Exhibits, see pg. 55

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