



Association for
Computing Machinery

May 4–9, 2019
Glasgow, Scotland UK

Advancing Computing as a Science & Profession



CHI 2019

Proceedings of the 2019 CHI Conference on
Human Factors in Computing Systems

Sponsored by:

ACM SIGCHI

General Chairs:

Stephen Brewster, University of Glasgow, UK
Geraldine Fitzpatrick, TU Wien, Austria

Technical Program Chairs:

Anna Cox, University College London, UK
Vassilis Kostakos, University of Melbourne, Australia



Association for
Computing Machinery

Advancing Computing as a Science & Profession

The Association for Computing
Machinery
2 Penn Plaza, Suite 701
New York, New York 10121-0701

Copyright © 2019 by the Association for Computing Machinery, Inc. (ACM). Permission to make digital or hard copies of portions of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyright for components of this work owned by others than ACM must be honored. Abstracting with credit is permitted. To copy otherwise, to republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee. Request permission to republish from: permissions@acm.org or Fax +1 (212) 869-0481.

For other copying of articles that carry a code at the bottom of the first or last page, copying is permitted provided that the per-copy fee indicated in the code is paid through www.copyright.com.

Proceedings

ISBN: 978-1-4503-5970-2

Additional copies may be ordered prepaid from:

ACM Order Department
PO Box 30777
New York, NY 10087-0777, USA

Extended Abstracts

ISBN: 978-1-4503-5971-9

Phone: 1-800-342-6626 (USA and Canada)
+1-212-626-0500 (Global)
Fax: +1-212-944-1318
E-mail: acmhelp@acm.org
Hours of Operation: 8:30 am – 4:30 pm ET

Created in the USA



General Chairs' Welcome

We are excited to welcome you to CHI 2019 in Glasgow! This is the first time CHI has been in the UK and we very happy to host it in Scotland. Our theme is ‘Weaving the Threads of CHI’, reflected in our celtic knot symbol of strength and friendship. The threads of CHI are people from different disciplines, cultures, communities, backgrounds – designers, researchers, practitioners – weaving together around the common purpose of technology that works for people and society.

The theme of weaving informed all our planning and we are excited to present a vibrant programme for you to experience. Apart from an outstanding technical programme, we have created many other opportunities for ‘weaving’ to happen: Lunch@CHI on Monday-Wednesday; CHI Stories on Tuesday evening; and an evening UX Industry event with a special invited speaker. We have also organised open social events every evening, including a Newcomers reception on Sunday and a sponsors reception on Wednesday in the Science Centre.

A particular highlight is the Interactivity and Demonstrations programme, launched at the Reception on Monday evening, giving a live glimpse into the future with 50 hands-on prototypes, artworks, design experiences as well as inspirational technologies, and including a special 20 year anniversary exhibition from Nottingham University’s Mixed Reality Lab.

We are thrilled with our dynamic keynote speakers. Aleks Krotoski is a broadcaster, journalist and academic who presents the BBC Digital Human series and The Guardian newspaper’s Tech Weekly podcast. Ivan Poupyrev (Google) is an award-winning technology leader, scientist and designer working at the cutting edge of interactive technologies and textiles.

We are also excited to continue the commitment to making CHI, and CHI content, more widely accessible. We will be live-streaming most paper sessions. We will support remote attendance to social sessions through a new form of telepresence being trialed this year. We also support diversity and inclusion by providing a nursing room, all-gender bathrooms, badge pronouns, a desensitization room and a prayer room. We have appointed Equity chairs for the first time to take a broader overview of equity concerns. Our new Sustainability chairs are also helping us take steps towards making the CHI event more sustainable.

We have also had many organisational changes to CHI this year: a virtual programme committee meeting, a new submission system, new paper templates, a new logistics company and a new registration system, to name a few. Some of these have caused you and us headaches but all of them will make CHI stronger for future years.

We welcome you to Glasgow and our hope is that, over the next six days, you weave yourself ever more as a part of the CHI community, exploring technology and world-class research, engaging in discussions with your community of designers, researchers, students, and practitioners and all attendees!

Stephen Brewster

CHI’19 General Chair

University of Glasgow, Scotland, UK

Geraldine Fitzpatrick

CHI’19 General Chair

TU Wien, Austria

TPC Chairs' welcome

The CHI 2019 conference will kick off with a weekend packed with 35 workshops, 6 symposia, and the doctoral colloquium. This year we have introduced part-day workshops, to enable increased participation across the whole range of topics that are of relevance to CHI.

The main conference will run from Monday to Thursday across 23 parallel sessions that will include papers, panels, case studies, Special Interest Groups, courses, video showcase, alt.chi, and the popular student research and student design competitions. This year interactivity will consist of both demos and installations, with the latter being larger and more substantial exhibits that will be on display at the conference.

This great programme is included in the Proceedings and Extended Abstracts of the conference. As with previous years, there are two fundamental categories of contributions that become archived in the ACM Digital Library. Papers are the most rigorously peer reviewed and are considered the most prestigious material presented at the conference, all of which are collected in the Conference Proceedings. The remaining categories of work are collected in the Extended Abstracts of the Conference. These include peer-reviewed, juried, or curated contributions, and reflect the breadth of research, design, education, artistic, scientific exploration and engineering activity within the HCI community.

Making this programme possible was a challenging and rewarding experience. This year our community used a new template for the submissions, and a new platform for receiving submissions and managing the review process. In addition, this year the program committee meeting was largely carried out using online video conferencing.

We are truly excited that this year CHI received 4652 submissions and accepted 1298. For papers, we received 2958 submissions (the 2018 conference received 2592) which were rigorously reviewed, resulting in 703 accepted papers (acceptance rate 23.8%). In addition 21 journal papers will be presented at the conference.

As always, we give a huge thanks to the 116 members of the organising committee who made sure the conference is organised successfully, the 541 members of the programme committees who wrote 7996 reviews, and the 3950 external reviewers who wrote 7176 reviews.

We also wish to thank the staff at Sheridan Communications (particularly Lisa Tolles) who worked extremely hard to ensure that all submissions were processed, and who managed to do so at a time of transition in our community's templates and submission system.

We hope you enjoy the technical program and it inspires you!

Anna Cox & Vassilis Kostakos

Technical Program Chairs

CHI 2019

CHI 2019 Proceedings Table of Contents

Paper 1: A Translational Science Model for HCI

Lucas Colusso, Ridley Jones, Sean A. Munson, Gary Hsieh (*University of Washington*)

Paper 2: “They Don’t Leave Us Alone Anywhere We Go”: Gender and Digital Abuse in South Asia

Nithya Sambasivan (*Google*), Amna Batool (*Information Technology University*),
Nova Ahmed (*North South University*), Tara Matthews (*Independent Researcher*), Kurt Thomas (*Google*),
Laura Sanely Gaytán-Lugo (*Universidad de Colima*), David Nemer (*University of Kentucky*),
Elie Bursztein, Elizabeth Churchill, Sunny Consolvo (*Google*)

Paper 3: Guidelines for Human-AI Interaction

Saleema Amershi (*Microsoft*), Dan Weld (*University of Washington & Microsoft Research*),
Mihaela Vorvoreanu, Adam Fourney, Besmira Nushi, Penny Collisson, Jina Suh, Shamsi Iqbal,
Paul N. Bennett, Kori Inkpen, Jaime Teevan, Ruth Kikin-Gil, Eric Horvitz (*Microsoft*)

Paper 4: Human-Centered Tools for Coping with Imperfect Algorithms During Medical Decision-Making

Carrie J. Cai, Emily Reif, Narayan Hegde, Jason Hipp, Been Kim, Daniel Smilkov, Martin Wattenberg,
Fernanda Viegas, Greg S. Corrado, Martin C. Stumpe, Michael Terry (*Google Brain*)

Paper 5: Seeing with New Eyes: Designing for In-the-Wild Museum Gifting

Jocelyn Spence, Benjamin Bedwell, Michelle Coleman, Steve Benford, Boriana N. Koleva
(*University of Nottingham*), Matt Adams, Ju Row Farr, Nick Tandavanitj (*Blast Theory*),
Anders Sundnes Løvlie (*IT University of Copenhagen*)

Paper 6: Design and Plural Heritages: Composing Critical Futures

Tom Schofield, Daniel Foster Smith, Gönül Bozoğlu, Christopher Whitehead (*Newcastle University*)

Paper 7: Connect-to-Connected Worlds: Piloting a Mobile, Data-Driven Reflection Tool for an Open-Ended Simulation at a Museum

Aditi Mallavarapu (*University of Illinois at Chicago*), Leilah Lyons (*University of Illinois at Chicago & New York Hall of Science*), Stephen Uzzo (*New York Hall of Science*), Wren Thompson (*New York Hall of Science*),
Rinat Levy-Cohen (*Fordham University*), Brian Slattery (*University of Illinois at Chicago*)

Paper 8: Anchored Audio Sampling: A Seamless Method for Exploring Children’s Thoughts During Deployment Studies

Alexis Hiniker, Jon E. Froehlich, Mingrui Zhang, Erin Beneteau (*University of Washington*)

Paper 9: To Asymmetry and Beyond!: Improving Social Connectedness by Increasing Designed Interdependence in Cooperative Play

John Harris, Mark Hancock (*University of Waterloo*)

Paper 10: DesignABILITY: Framework for the Design of Accessible Interactive Tools to Support Teaching to Children with Disabilities

Leandro Flórez-Aristizábal (*Inst. Universitaria Antonio José Camacho*),
Sandra Cano (*Universidad de San Buenaventura*), César A. Collazos (*Universidad del Cauca*),
Andrés F. Solano (*Universidad Autónoma de Occidente*), Stephen Brewster (*University of Glasgow*)

Paper 11: Transcalibur: A Weight Shifting Virtual Reality Controller for 2D Shape Rendering based on Computational Perception Model

Jotaro Shigeyama, Takeru Hashimoto, Shigeo Yoshida, Takuji Narumi, Tomohiro Tanikawa, Michitaka Hirose
(*The University of Tokyo*)

Paper 12: LightBee: A Self-Levitating Light Field Display for Hologrammatic Telepresence

Xujing Zhang, Sean Braley, Calvin Rubens (*Queen’s University*), Timothy Merritt (*Aalborg University*),
Roel Vertegaal (*Queen’s University*)

Paper 13: TabletInVR: Exploring the Design Space for Using a Multi-Touch Tablet in Virtual Reality

Hemant Bhaskar Surale, Aakar Gupta, Mark Hancock, Daniel Vogel (*University of Waterloo*)

Paper 14: RotoSwype: Word-Gesture Typing using a Ring

Aakar Gupta, Cheng Ji (*University of Waterloo*), Hui-Shyong Yeo, Aaron Quigley (*University of St Andrews*),

Daniel Vogel (*University of Waterloo*)

- Paper 15: BeamBand: Hand Gesture Sensing with Ultrasonic Beamforming**
Yasha Iravantchi, Mayank Goel, Chris Harrison (*Carnegie Mellon University*)
- Paper 16: Airport Accessibility and Navigation Assistance for People with Visual Impairments**
João Guerreiro (*Carnegie Mellon University*),
Dragan Ahmetovic (*University of Turin & Carnegie Mellon University*),
Daisuke Sato (*IBM Research - Tokyo & Carnegie Mellon University*),
Kris Kitani (*Robotics Institute*), Chieko Asakawa (*Carnegie Mellon University*)
- Paper 17: Effects of Moderation and Opinion Heterogeneity on Attitude towards the Online Deliberation Experience**
Simon T. Perrault (*Yale-NUS College & Korea Advanced Institute of Science and Technology*),
Weiyu Zhang (*National University of Singapore*)
- Paper 18: MilliSonic: Pushing the Limits of Acoustic Motion Tracking**
Anran Wang, Shyamnath Gollakota (*University of Washington*)
- Paper 19: Casual Microtasking: Embedding Microtasks in Facebook**
Nathan Hahn (*Carnegie Mellon University*), Shamsi T. Iqbal, Jaime Teevan (*Microsoft Research*)
- Paper 20: Making Sense of Art: Access for Gallery Visitors with Vision Impairments**
Leona Holloway, Kim Marriott, Matthew Butler (*Monash University*), Alan Borning (*University of Washington*)
- Paper 21: Co-Design Beyond Words: “Moments of Interaction” with Minimally-Verbal Children on the Autism Spectrum**
Cara Wilson, Margot Brereton, Bernd Ploderer, Laurianne Sitbon (*Queensland University of Technology*)
- Paper 22: Emotional Utility and Recall of the Facebook News Feed**
Pawarat Nontasil, Stephen J. Payne (*University of Bath*)
- Paper 23: The Breaking Hand: Skills, Care, and Sufferings of the Hands of an Electronic Waste Worker in Bangladesh**
Mohammad Rashidujjaman Rifat (*University of Toronto*),
Hasan Mahmud Protttoy (*Bangladesh University of Engineering and Technology*),
Syed Ishtiaque Ahmed (*University of Toronto*)
- Paper 24: EarTouch: Facilitating Smartphone Use for Visually Impaired People in Mobile and Public Scenarios**
Ruolin Wang, Chun Yu (*Tsinghua University & Ministry of Education*), Xing-Dong Yang (*Dartmouth College*),
Weijie He (*Tsinghua University*), Yuanchun Shi (*Tsinghua University & Ministry of Education*)
- Paper 25: Diagnosing and Coping with Mode Errors in Korean-English Dual-language Keyboard**
Sangyoon Lee, Jaeyeon Lee, Geehyuk Lee (*Korea Advanced Institute of Science and Technology*)
- Paper 26: Impact of Contextual Factors on Snapchat Public Sharing**
Hana Habib (*Carnegie Mellon University*), Neil Shah, Rajan Vaish (*Snap Inc.*)
- Paper 27: Cluster Touch: Improving Touch Accuracy on Smartphones for People with Motor and Situational Impairments**
Martez E. Mott, Jacob O. Wobbrock (*University of Washington*)
- Paper 28: MindDot: Supporting Effective Cognitive Behaviors in Concept Map-Based Learning Environments**
Shang Wang (*Arizona State University*), Deniz Sonmez Unal, Erin Walker (*University of Pittsburgh*)
- Paper 29: Changing Perspective: A Co-Design Approach to Explore Future Possibilities of Divergent Hearing**
Judith Dörrenbächer, Marc Hassenzahl (*University of Siegen*)
- Paper 30: Failing with Style: Designing for Aesthetic Failure in Interactive Performance**
Adrian Hazzard, Chris Greenhalgh, Maria Kallionpää, Steve Benford (*University of Nottingham*),
Anne Veinberg (*Leiden University*), Zubin Kanga (*Royal Holloway, University of London*),
Andrew McPherson (*Queen Mary University of London*)
- Paper 31: The Channel Matters: Self-disclosure, Reciprocity and Social Support in Online Cancer Support Groups**
Diyi Yang, Zheng Yao, Joseph Seering, Robert Kraut (*Carnegie Mellon University*)

- Paper 32: Design Goals for Playful Technology to Support Physical Activity Among Wheelchair Users**
Liam Mason (*University of Lincoln*), Kathrin Gerling (*KU Leuven*), Patrick Dickinson (*University of Lincoln*), Antonella De Angeli (*University of Lincoln & University of Trento*)
- Paper 33: Designing ‘True Colors’: A Social Wearable that Affords Vulnerability**
Ella Dagan (*University of California, Santa Cruz*), Elena Márquez Segura (*Uppsala University*), Ferran Altarriba Bertran, Miguel Flores, Katherine Isbister (*University of California, Santa Cruz*)
- Paper 34: Investigating Slowness as a Frame to Design Longer-Term Experiences with Personal Data: A Field Study of Olly**
William Odom (*Simon Fraser University*), Ron Wakkary (*Eindhoven University of Technology & Simon Fraser University*), Jeroen Hol, Bram Naus, Pepijn Verburg (*Eindhoven University of Technology*), Tal Amram, Amy Yo Sue Chen (*Simon Fraser University*)
- Paper 35: From HCI to HCI-Amusement: Strategies for Engaging what New Technology Makes Old**
Laura Devendorf (*University of Colorado Boulder*), Kristina Andersen (*Eindhoven University of Technology*), Daniela K. Rosner (*University of Washington*), Ron Wakkary (*Simon Fraser University & Eindhoven University of Technology*), James Pierce (*California College of the Arts & University of California, Berkeley*)
- Paper 36: Evaluating the Impact of a Mobile Neurofeedback App for Young Children at School and Home**
Alissa N. Antle, Elgin-Skye McLaren (*Simon Fraser University*), Holly Fiedler (*Langara College*), Naomi Johnson (*Social Work Independent Consultant*)
- Paper 37: Geodesy: Self-rising 2.5D Tiles by Printing along 2D Geodesic Closed Path**
Jianzhe Gu (*Carnegie Mellon University*), David E. Breen (*Carnegie Mellon University & Drexel University*), Jenny Hu (*Carnegie Mellon University*), Lifeng Zhu (*Southeast University & Carnegie Mellon University*), Ye Tao (*Zhejiang University & Carnegie Mellon University*), Tyson Van de Zande, Guanyun Wang, Yongjie Jessica Zhang, Lining Yao (*Carnegie Mellon University*)
- Paper 38: In a Silent Way: Communication Between AI and Improvising Musicians Beyond Sound**
Jon McCormack, Toby Gifford, Patrick Hutchings (*Monash University*), Maria Teresa Llano Rodriguez, Matthew Yee-King, Mark d'Inverno (*Goldsmiths, University of London*)
- Paper 39: Towards Collaboration Translucence: Giving Meaning to Multimodal Group Data**
Vanessa Echeverria (*University of Technology Sydney & Escuela Superior Politécnica del Litoral*), Roberto Martinez-Maldonado, Simon Buckingham Shum (*University of Technology Sydney*)
- Paper 40: At Your Service: Designing Voice Assistant Personalities to Improve Automotive User Interfaces: A Real World Driving Study**
Michael Braun (*BMW Group Research, New Technologies, Innovations & Ludwig Maximilian University of Munich*), Anja Mainz (*Ludwig Maximilian University of Munich*), Ronee Chadowitz (*BMW Group Research, New Technologies, Innovations*), Bastian Pfleging (*Ludwig Maximilian University of Munich*), Florian Alt (*Bundeswehr University Munich & Ludwig Maximilian University of Munich*)
- Paper 41: Toward Algorithmic Accountability in Public Services: A Qualitative Study of Affected Community Perspectives on Algorithmic Decision-making in Child Welfare Services**
Anna Brown (*College of Creative Arts, Massey University*), Alexandra Chouldechova (*Carnegie Mellon University & Microsoft Research*), Emily Putnam-Hornstein (*University of Southern California*), Andrew Tobin (*College of Creative Arts, Massey University*), Rhema Vaithianathan (*Auckland University of Technology*)
- Paper 42: ActiveInk: (Th)Inking with Data**
Hugo Romat, Nathalie Henry Riche, Ken Hinckley, Bongshin Lee (*Microsoft Research*), Caroline Appert (*Université Paris-Sud, CNRS, Université Paris-Saclay*), Emmanuel Pietriga (*INRIA, Université Paris-Saclay*), Christopher Collins (*Microsoft Research*)
- Paper 43: Evaluating the Effect of Feedback from Different Computer Vision Processing Stages: A Comparative Lab Study**
Jacob Kittley-Davies (*University of Southampton*), Ahmed Alqaraawi, Rayoung Yang, Enrico Costanza (*University College London*), Alex Rogers (*University of Oxford*), Sebastian Stein (*University of Southampton*)

- Paper 44: Smart and Fermented Cities: An Approach to Placemaking in Urban Informatics**
Guo Freeman (*Clemson University*),
Jeffrey Bardzell, Shaowen Bardzell, Szu-Yu (Cyn) Liu, Xi Lu, Diandian Cao (*Indiana University*)
- Paper 45: Smart Home Security Cameras and Shifting Lines of Creepiness: A Design-Led Inquiry**
James Pierce (*California College of the Arts & University of California, Berkeley*)
- Paper 46: Deaf and Hard-of-hearing Individuals' Preferences for Wearable and Mobile Sound Awareness Technologies**
Leah Findlater, Bonnie Chinh, Dhruv Jain, Jon Froehlich (*University of Washington*),
Raja Kushalnagar (*Gallaudet University*), Angela Carey Lin (*University of Washington*)
- Paper 47: The Impact of User Characteristics and Preferences on Performance with an Unfamiliar Voice User Interface**
Chelsea M. Myers, Anushay Furqan, Jichen Zhu (*Drexel University*)
- Paper 48: Pinpoint: A PCB Debugging Pipeline Using Interruptible Routing and Instrumentation**
Evan Strasnick, Sean Follmer, Maneesh Agrawala (*Stanford University*)
- Paper 49: A Practice-Led Account of the Conceptual Evolution of UX Knowledge**
Yubo Kou (*Florida State University*), Colin M. Gray (*Purdue University*)
- Paper 50: Understanding Visual Cues in Visualizations Accompanied by Audio Narrations**
Ha-Kyung Kong, Wenjie Zhu (*University of Illinois at Urbana-Champaign*), Zhicheng Liu (*Adobe Research*),
Karrie Karahalios (*Adobe Research & University of Illinois at Urbana-Champaign*)
- Paper 51: Context-Informed Scheduling and Analysis: Improving Accuracy of Mobile Self-Reports**
Niels van Berkel, Jorge Goncalves, Peter Koval (*The University of Melbourne*), Simo Hosio (*University of Oulu*),
Tilman Dingler (*University of Melbourne*), Denzil Ferreira (*University of Oulu*),
Vassilis Kostakos (*University of Melbourne*)
- Paper 52: BBeep: A Sonic Collision Avoidance System for Blind Travellers and Nearby Pedestrians**
Seita Kayukawa (*Carnegie Mellon University & Waseda University*), Keita Higuchi (*University of Tokyo*),
João Guerreiro (*Carnegie Mellon University*),
Shigeo Morishima (*Waseda Research Institute for Science and Engineering*),
Yoichi Sato (*University of Tokyo*), Kris Kitani (*Carnegie Mellon University*),
Chieko Asakawa (*Carnegie Mellon University & IBM Research*)
- Paper 53: From Gender Biases to Gender-Inclusive Design: An Empirical Investigation**
Mihaela Vorvoreanu (*Microsoft Research & Purdue University*),
Lingyi Zhang, Yun-Han Huang (*Purdue University*),
Claudia Hilderbrand, Zoe Steine-Hanson, Margaret Burnett (*Oregon State University*)
- Paper 54: How to Work in the Car of the Future? A Neuroergonomical Study Assessing Concentration, Performance and Workload Based on Subjective, Behavioral and Neurophysiological Insights**
Kathrin Pollmann (*University of Stuttgart & Fraunhofer Institute for Industrial Engineering IAO*),
Oliver Stefani (*Psychiatric University Clinics*),
Amelie Bengsch, Matthias Peissner (*Fraunhofer Institute for Industrial Engineering IAO*),
Mathias Vukelic (*Fraunhofer Institute for Industrial Engineering IAO & University of Stuttgart*)
- Paper 55: Sensing Posture-Aware Pen+Touch Interaction on Tablets**
Yang Zhang (*Microsoft Research & Carnegie Mellon University*),
Michel Pahud, Christian Holz (*Microsoft Research*), Haijun Xia (*Microsoft Research & University of Toronto*),
Gierad Laput (*Microsoft Research & Carnegie Mellon University*),
Michael McGuffin (*Microsoft Research & École de Technologie Supérieure*),
Xiao Tu, Andrew Mittereder, Fei Su, William Buxton, Ken Hinckley (*Microsoft Research*)
- Paper 56: VirtualBricks: Exploring a Scalable, Modular Toolkit for Enabling Physical Manipulation in VR**
Jatin Arora, Aryan Saini, Nirmita Mehra, Varnit Jain, Shwetank Shrey, Aman Parmami (*Indraprastha Institute of Information Technology*)
- Paper 57: Painting with CATS: Camera-Aided Texture Synthesis**
Ticha Sethapakdi, James McCann (*Carnegie Mellon University*)

- Paper 58: A Comparison of Guiding Techniques for Out-of-View Objects in Full-Coverage Displays**
Julian Petford, Iain Carson, Miguel A. Nacenta (*University of St Andrews*),
Carl Gutwin (*University of Saskatchewan*)
- Paper 59: An Evaluation of Radar Metaphors for Providing Directional Stimuli Using Non-Verbal Sound**
Brendan Cassidy, Janet C. Read (*University of Central Lancashire*), I. Scott MacKenzie (*York University*)
- Paper 60: Integrated Workflows: Generating Feedback Between Digital and Physical Realms**
Emrecan Gulay, Andrés Lucero (*Aalto University*)
- Paper 61: Hackathons as Participatory Design: Iterating Feminist Utopias**
Alexis Hope (*Massachusetts Institute of Technology*), Catherine D'Ignazio (*Emerson College*),
Josephine Hoy (*University of Washington*), Rebecca Michelson (*Independent Researcher*),
Jennifer Roberts (*Versed Education Group*), Kate Krontiris (*Independent Researcher*),
Ethan Zuckerman (*Massachusetts Institute of Technology*)
- Paper 62: Project Sidewalk: A Web-based Crowdsourcing Tool for Collecting Sidewalk Accessibility Data At Scale**
Manaswi Saha, Michael Saugstad (*University of Washington*), Hanuma Teja Maddali (*University of Maryland*),
Aileen Zeng (*University of Washington*), Ryan Holland (*Montgomery Blair High School*),
Steven Bower, Aditya Dash (*University of Maryland*), Sage Chen (*University of Michigan*),
Anthony Li (*University of Maryland*), Kotaro Hara (*Singapore Management University*),
Jon Froehlich (*University of Washington*)
- Paper 63: HistoryTracker: Minimizing Human Interactions in Baseball Game Annotation**
Jorge Piazzentin Ono, Arvi Gjoka, Justin Salamon, Carlos Dietrich, Claudio T. Silva (*New York University*)
- Paper 64: Moments of Change: Analyzing Peer-Based Cognitive Support in Online Mental Health Forums**
Yada Pruksachatkun (*New York University*), Sachin R. Pendse, Amit Sharma (*Microsoft Research India*)
- Paper 65: Increasing the Transparency of Research Papers with Explorable Multiverse Analyses**
Pierre Dragicevic (*Inria*), Yvonne Jansen (*CNRS – Sorbonne Université*),
Abhraneel Sarma, Matthew Kay (*University of Michigan*), Fanny Chevalier (*University of Toronto*)
- Paper 66: A Player-Centric Approach to Designing Spatial Skill Training Games**
Helen Wauck (*University of Illinois at Urbana-Champaign*), Elisa D. Mekler (*University of Basel*),
Wai-Tat Fu (*University of Illinois at Urbana-Champaign*)
- Paper 67: When Do People Trust Their Social Groups?**
Xiao Ma (*Jacobs Institute, Cornell Tech & Facebook*), Justin Cheng, Shankar Iyer (*Facebook*),
Mor Naaman (*Jacobs Institute, Cornell Tech*)
- Paper 68: Concept-Driven Visual Analytics: an Exploratory Study of Model- and Hypothesis-Based Reasoning with Visualizations**
In Kwon Choi, Taylor Childers, Nirmal Kumar Raveendranath (*Indiana University-Purdue University Indianapolis*),
Swati Mishra (*Cornell University*), Kyle Harris, Khairi Reda (*Indiana University-Purdue University Indianapolis*)
- Paper 69: Pictorial System Usability Scale (P-SUS): Developing an Instrument for Measuring Perceived Usability**
Juergen Baumgartner (*University of Fribourg & Puzzle ITC*),
Naomi Frei, Mascha Kleinke, Juergen Sauer (*University of Fribourg*),
Andreas Sonderegger (*École Polytechnique Fédérale de Lausanne*)
- Paper 70: Designing Second-Screening Experiences for Social Co-Selection and Critical Co-Viewing of Reality TV**
Tom Feltwell, Gavin Wood, Scarlett Rowland, Kiel S. Long, Chris Elsden (*Northumbria University*),
Phillip Brooker (*University of Liverpool*), John Vines, Pamela Briggs (*Northumbria University*),
Julie Barnett (*University of Bath*), Shaun Lawson (*Northumbria University*)
- Paper 71: TORC: A Virtual Reality Controller for In-Hand High-Dexterity Finger Interaction**
Jaeyeon Lee (*Microsoft Research & Korea Advanced Institute of Science and Technology*),
Mike Sinclair (*Microsoft*), Mar Gonzalez-Franco, Eyal Ofek, Christian Holz (*Microsoft Research*)
- Paper 72: Threats, Abuses, Flirting, and Blackmail: Gender Inequity in Social Media Voice Forums**
Aditya Vashistha, Abhinav Garg, Richard Anderson (*University of Washington*),
Agha Ali Raza (*Information Technology University*)

- Paper 73: Laughing is Scary, but Farting is Cute: A Conceptual Model of Children's Perspectives of Creepy Technologies**
Jason C. Yip, Kiley Sobel, Xin Gao, Allison Marie Hishikawa, Alexis Lim, Laura Meng, Romaine Flor Ofiana, Justin Park, Alexis Hiniker (*University of Washington*)
- Paper 74: Causeway: Scaling Situated Learning with Micro-Role Hierarchies**
David T. Lee, Emily S. Hamedian, Greg Wolff (*University of California, Santa Cruz*), Amy Liu (*LinkedIn*)
- Paper 75: Modeling Mobile Interface Tappability Using Crowdsourcing and Deep Learning**
Amanda Swearngin (*University of Washington & Google Research*), Yang Li (*Google Research*)
- Paper 76: CodeGazer: Making Code Navigation Easy and Natural With Gaze Input**
Asma Shakil (*Media Design School & University of Auckland*), Christof Lutteroth (*University of Bath & University of Auckland*), Gerald Weber (*University of Auckland*)
- Paper 77: Analyzing Value Discovery in Design Decisions Through Ethicography**
Shruthi Sai Chivukula, Colin M. Gray, Jason A. Brier (*Purdue University*)
- Paper 78: A Field Study of Computer-Security Perceptions Using Anti-Virus Customer-Support Chats**
Mahmood Sharif, Kevin A. Roundy, Matteo Dell'Amico, Christopher Gates, Daniel Kats (*Symantec Research Labs*), Lujo Bauer, Nicolas Christin (*Carnegie Mellon University*)
- Paper 79: DataSelfie: Empowering People to Design Personalized Visuals to Represent Their Data**
Nam Wook Kim (*Harvard University*), Hyejin Im (*Tufts University*), Nathalie Henry Riche (*Microsoft Research*), Alicia Wang (*Troy High School*), Krzysztof Gajos, Hanspeter Pfister (*Harvard University*)
- Paper 80: PlaneVR: Social Acceptability of Virtual Reality for Aeroplane Passengers**
Julie R. Williamson, Mark McGill, Khari Outram (*University of Glasgow*)
- Paper 81: B-Script: Transcript-based B-roll Video Editing with Recommendations**
Bernd Huber (*Harvard University*), Hijung Valentina Shin, Bryan Russell, Oliver Wang, Gautham J. Mysore (*Adobe Research*)
- Paper 82: A Rough Sketch of the Freehand Drawing Process: Blending the Line between Action and Artifact**
Piyum Fernando, Jennifer Weiler, Stacey Kuznetsov (*Arizona State University*)
- Paper 83: What Can Gestures Tell? Detecting Motor Impairment in Early Parkinson's from Common Touch Gestural Interactions**
Feng Tian, Xiangmin Fan, Junjun Fan (*Chinese Academy of Sciences & University of Chinese Academy of Sciences*), Yicheng Zhu (*Peking Union Medical College Hospital*), Jing Gao (*Chinese Academy of Sciences & University of Chinese Academy of Sciences*), Dakuo Wang (*IBM T.J. Watson Research Center*), Xiaojun Bi (*Stony Brook University*), Hongan Wang (*Chinese Academy of Sciences & University of Chinese Academy of Sciences*)
- Paper 84: Understanding the Boundaries between Policymaking and HCI**
Anne Spaa, Abigail Durrant, Chris Elsden, John Vines (*Northumbria University*)
- Paper 85: Towards an Effective Digital Literacy Intervention to Assist Returning Citizens with Job Search**
Ihudiya Finda Ogbonnaya-Ogburu, Kentaro Toyama, Tawanna R. Dillahunt (*University of Michigan*)
- Paper 86: Comparing Data from Chatbot and Web Surveys: Effects of Platform and Conversational Style on Survey Response Quality**
Soomin Kim, Joonhwan Lee, Gahgene Gweon (*Seoul National University*)
- Paper 87: Direct Finger Manipulation of 3D Object Image with Ultrasound Haptic Feedback**
Atsushi Matsubayashi, Yasutoshi Makino, Hiroyuki Shinoda (*University of Tokyo*)
- Paper 88: ExerCube vs. Personal Trainer: Evaluating a Holistic, Immersive, and Adaptive Fitness Game Setup**
Anna Lisa Martin-Niedecken (*Zurich University of the Arts*), Katja Rogers (*Ulm University*), Laia Turmo Vidal (*Uppsala University*), Elisa D. Mekler (*University of Basel*), Elena Márquez Segura (*Uppsala University*)

- Paper 89: Tough Times at Transitional Homeless Shelters: Considering the Impact of Financial Insecurity on Digital Security and Privacy**
Manya Sleeper (*Google*), Tara Matthews (*Independent*), Kathleen O'Leary, Anna Turner, Jill Palzkill Woelfer, Martin Shelton, Andrew Oplinger, Andreas Schou, Sunny Consolvo (*Google*)
- Paper 90: The Effect of Co-located Audiences on User Experience with Conversational Interfaces in Physical Spaces**
Heloisa Candello, Claudio Pinhanez, Mauro Pichiliani (*IBM Research Brazil*), Paulo Cavalin (*IBM Research*), Flavio Figueiredo (*Universidade Federal de Minas Gerais*), Marisa Vasconcelos, Haylla Do Carmo (*IBM Research Brazil*)
- Paper 91: Unobtrusively Enhancing Reflection-in-Action of Teachers through Spatially Distributed Ambient Information**
Pengcheng An, Saskia Bakker (*Eindhoven University of Technology*), Sara Ordanovski (*Utrecht University*), Ruurd Taconis (*Eindhoven University of Technology*), Chris L.E. Paffen (*Utrecht University*), Berry Eggen (*Eindhoven University of Technology*)
- Paper 92: Towards Effective Foraging by Data Scientists to Find Past Analysis Choices**
Mary Beth Kery (*Carnegie Mellon University*), Bonnie E. John, Patrick O'Flaherty (*Bloomberg L.P.*), Amber Horvath, Brad A. Myers (*Carnegie Mellon University*)
- Paper 93: I Don't Even Have to Bother Them! Using Social Media to Automate the Authentication Ceremony in Secure Messaging**
Elham Vaziripour, Devon Howard, Jake Tyler, Mark O'Neill, Justin Wu, Kent Seamons, Daniel Zappala (*Brigham Young University*)
- Paper 94: Exploring Sound Awareness in the Home for People who are Deaf or Hard of Hearing**
Dhruv Jain, Angela Lin, Rose Guttmann, Marcus Amalachandran, Aileen Zeng, Leah Findlater, Jon Froehlich (*University of Washington*)
- Paper 95: Implicit Communication of Actionable Information in Human-AI teams**
Claire Liang, Julia Proft, Erik Andersen, Ross A. Knepper (*Cornell University*)
- Paper 96: StreetWise: Smart Speakers vs Human Help in Public Slum Settings**
Jennifer Pearson, Simon Robinson, Thomas Reitmaier, Matt Jones (*Swansea University*), Shashank Ahire, Anirudha Joshi (*IIT Bombay*), Deepak Sahoo (*Swansea University*), Nimish Maravi, Bhakti Bhikne (*IIT Bombay*)
- Paper 97: Ways of Knowing When Research Subjects Care**
Dorothy Howard, Lilly Irani (*University of California, San Diego*)
- Paper 98: Design and Evaluation of Service Robot's Proactivity in Decision-Making Support Process**
Zhenhui Peng (*Hong Kong University of Science and Technology*), Yunhwan Kwon (*Dongguk University*), Jiaan Lu (*University of Michigan-Shanghai Jiao Tong University Joint Institute*), Ziming Wu, Xiaojuan Ma (*Hong Kong University of Science and Technology*)
- Paper 99: Empowerment on the Margins: The Online Experiences of Community Health Workers**
Azra Ismail, Neha Kumar (*Georgia Institute of Technology*)
- Paper 100: Collaborative Practices with Structured Data: Do Tools Support What Users Need?**
Laura Koesten, Emilia Kacprzak (*University of Southampton*), Jeni Tennison (*The Open Data Institute*), Elena Simperl (*University of Southampton*)
- Paper 101: RayCursor: A 3D Pointing Facilitation Technique based on Raycasting**
Marc Baloup (*Université de Lille & Inria*), Thomas Pietrzak, Géry Casiez (*Université de Lille & UMR 9189 - CRISTAL*)
- Paper 102: Finding Information on Non-Rectangular Interfaces**
Florine Simon (*University of Toulouse*), Anne Roudaut (*University of Bristol*), Pourang Irani (*University of Manitoba*), Marcos Serrano (*University of Toulouse*)
- Paper 103: Augmentation not Duplication: Considerations for the Design of Digitally-Augmented Comic Books**
Matjaž Kljun, Klen Čopić Pucihaar (*University of Primorska*), Jason Alexander (*Lancaster University*), Maheshya Weerasringhe, Cuauhtli Campos (*University of Primorska*), Julie Ducasse, Barbara Kopačin (*University of Primorska*), Jens Grubert (*Coburg University*), Paul Coulton (*Lancaster University*), Miha Čelar (*Astral Film*)

Paper 104: Swire: Sketch-based User Interface Retrieval

Forrest Huang, John F. Canny (*University of California, Berkeley*), Jeffrey Nichols (*Google LLC*)

Paper 105: DataToon: Drawing Dynamic Network Comics With Pen + Touch Interaction

Nam Wook Kim (*Microsoft Research & Harvard University*), Nathalie Henry Riche (*Microsoft Research*), Benjamin Bach (*Edinburgh University*), Guanpeng Xu (*Philips Academy*), Matthew Brehmer, Ken Hinckley, Michel Pahud (*Microsoft Research*), Haijun Xia (*University of Toronto*), Michael J. McGuffin (*École de Technologie Supérieure*), Hanspeter Pfister (*Harvard University*)

Paper 106: ‘I make up a silly name’: Understanding Children’s Perception of Privacy Risks Online

Jun Zhao (*University of Oxford*), Ge Wang (*University College London*), Carys Dally (*University of Oxford*), Petr Slovak (*King’s College London*), Julian Edbrooke-Childs (*University College London*), Max Van Kleek, Nigel Shadbolt (*University of Oxford*)

Paper 107: Supporting Coping with Parkinson’s Disease Through Self Tracking

Sonali R. Mishra (*University of Washington*), Predrag Klasnja (*University of Michigan*), John MacDuffie Woodburn (*Sage Bionetworks*), Eric B. Hekler (*University of California, San Diego*), Larsson Omberg, Michael Kellen, Lara Mangravite (*Sage Bionetworks*)

Paper 108: What.Hack: Engaging Anti-Phishing Training Through a Role-playing Phishing Simulation Game

Zikai Alex Wen, Zhiqiu Lin, Rowena Chen, Erik Andersen (*Cornell University*)

Paper 109: Position Exchange Workshops: A Method to Design for Each Other in Families

Diego Muñoz, Bernd Ploderer, Margot Brereton (*Queensland University of Technology*)

Paper 110: Behavioural Biometrics in VR: Identifying People from Body Motion and Relations in Virtual Reality

Ken Pfeuffer (*Bundeswehr University Munich*), Matthias J. Geiger (*Ludwig Maximilian University of Munich*), Sarah Prange, Lukas Mecke (*University of Applied Sciences Munich & Ludwig Maximilian University of Munich*), Daniel Buschek (*Ludwig Maximilian University of Munich*), Florian Alt (*Bundeswehr University Munich*)

Paper 111: SeeingVR: A Set of Tools to Make Virtual Reality More Accessible to People with Low Vision

Yuhang Zhao (*Cornell University & Microsoft Research*), Edward Cutrell, Christian Holz, Meredith Ringel Morris, Eyal Ofek, Andrew D. Wilson (*Microsoft Research*)

Paper 112: The Magic Machine Workshops: Making Personal Design Knowledge

Kristina Andersen (*Eindhoven University of Technology*), Ron Wakkary (*Eindhoven University of Technology & Simon Fraser University*),

Paper 113: Thermporal: An Easy-To-Deploy Temporal Thermographic Sensor System to Support Residential Energy Audits

Matthew Louis Mauriello, Brenna McNally (*University of Maryland, College Park*), Jon E. Froehlich (*University of Washington*)

Paper 114: Our Friends Electric: Reflections on Advocacy and Design Research for the Voice Enabled Internet

Jon Rogers, Loraine Clarke, Martin Skelly, Nick Taylor, Pete Thomas (*University of Dundee*), Michelle Thorne, Solana Larsen, Katarzyna Odrozek, Julia Kloiber, Peter Bähr (*Mozilla Foundation*), Anab Jain, Jon Arden (*Superflux*), Max von Grafenstein (*Berlin University of the Arts*)

Paper 115: (Re-)Framing Menopause Experiences for HCI and Design

Jeffrey Bardzell, Shaowen Bardzell (*Indiana University*), Amanda Lazar (*University of Maryland, College Park*), Norman Makoto Su (*Indiana University*)

Paper 116: Playing Blind: Revealing the World of Gamers with Visual Impairment

Ronny Andrade, Melissa J. Rogerson, Jenny Waycott, Steven Baker, Frank Vetere (*The University of Melbourne*)

Paper 117: On the Internet, Nobody Knows You’re a Dog... Unless You’re Another Dog

Ilyena Hirskyj-Douglas, Andrés Lucero (*Aalto University*)

Paper 118: More than the Sum of Makers: The Complex Dynamics of Diverse Practices at Maker Faire

Janis Lena Meissner (*Newcastle University*), Pradethana Jarusriboonchai (*University of Lapland*), Janice McLaughlin, Peter Wright (*Newcastle University*)

- Paper 119: "My blood sugar is higher on the weekends": Finding a Role for Context and Context-Awareness in the Design of Health Self-Management Technology**
Shriti Raj, Kelsey Toporski, Ashley Garrity, Joyce M. Lee, Mark W. Newman (*University of Michigan*)
- Paper 120: Modeling Fully and Partially Constrained Lasso Movements in a Grid of Icons**
Shota Yamanaka (*Yahoo Japan Corporation*), Wolfgang Stuerzlinger (*Simon Fraser University*)
- Paper 121: Sampling Strategy for Ultrasonic Mid-Air Haptics**
William Frier, Dario Pittlera, Damien Ablart, Marianna Obris, Sriram Subramanian (*University of Sussex*)
- Paper 122: Mapping the Margins: Navigating the Ecologies of Domestic Violence Service Provision**
Rosanna Bellini, Angelika Strohmayer (*Newcastle University*), Patrick Olivier (*Monash University*), Clara Crivellaro (*Newcastle University*)
- Paper 123: Evaluating the Impact of Pseudo-Colour and Coordinate System on the Detection of Medication-induced ECG Changes**
Alaa Alahmadi, Alan Davies (*University of Manchester*), Jennifer Royle (*CRUK Manchester Institute & The Christie NHS Foundation*), Markel Vigo, Caroline Jay (*University of Manchester*)
- Paper 124: Discovering Alternative Treatments for Opioid Use Recovery Using Social Media**
Stevie Chancellor (*Georgia Institute of Technology*), George Nitzburg (*Teachers' College, Columbia University*), Andrea Hu, Francisco Zampieri, Munmun De Choudhury (*Georgia Institute of Technology*)
- Paper 125: Shape Changing Surfaces and Structures: Design Tools and Methods for Electroactive Polymers**
Karmen Franinović, Luke Franzke (*Zurich University of the Arts*)
- Paper 126: How Data Science Workers Work with Data: Discovery, Capture, Curation, Design, Creation**
Michael Muller, Ingrid Lange, Dakuo Wang, David Piorkowski, Jason Tsay, Q. Vera Liao, Casey Dugan (*IBM Research*), Thomas Erickson (*Unaffiliated*)
- Paper 127: An Autonomy-Perspective on the Design of Assistive Technology Experiences of People with Multiple Sclerosis**
Florian Güldenpfennig, Peter Mayer, Paul Panek, Geraldine Fitzpatrick (*Technische Universität Wien*)
- Paper 128: VizML: A Machine Learning Approach to Visualization Recommendation**
Kevin Hu, Michiel A. Bakker, Stephen Li, Tim Kraska, César Hidalgo (*Massachusetts Institute of Technology*)
- Paper 129: "This Girl is on Fire": Sensemaking in an Online Health Community for Vulvodynia**
Alyson L. Young, Andrew D. Miller (*Indiana University-Purdue University Indianapolis*)
- Paper 130: Dynamic Network Plaid: A Tool for the Analysis of Dynamic Networks**
Alexandra Lee, Daniel Archambault (*Swansea University*), Miguel Nacenta (*University of St. Andrews*)
- Paper 131: Self-Control in Cyberspace: Applying Dual Systems Theory to a Review of Digital Self-Control Tools**
Ulrik Lyngs (*University of Oxford*), Kai Lukoff (*University of Washington*), Petr Slovak (*University College London & King's College London*), Reuben Binns, Adam Slack (*University of Oxford*), Michael Inzlicht (*University of Toronto*), Max Van Kleek, Nigel Shadbolt (*University of Oxford*)
- Paper 132: I'm Sensing in the Rain: Spatial Incongruity in Visual-Tactile Mid-Air Stimulation Can Elicit Ownership in VR Users**
Dario Pittlera, Elia Gatti, Marianna Obrist (*University of Sussex*)
- Paper 133: Visually Encoding the Lived Experience of Bipolar Disorder**
Jaime Snyder (*University of Washington*), Elizabeth Murnane (*Stanford University*), Caitie Lustig (*University of California, Irvine*), Stephen Volda (*University of Colorado*)
- Paper 134: Methodological Gaps in Predicting Mental Health States from Social Media: Triangulating Diagnostic Signals**
Sindhu Kiranmai Ernala (*Georgia Institute of Technology*), Michael L. Birnbaum, Kristin A. Candan, Asra F. Rizvi, William A. Sterling, John M. Kane (*Zucker Hillside Hospital*), Munmun De Choudhury (*Georgia Institute of Technology*)

Paper 135: Putting the Value in VR: How to Systematically and Iteratively Develop a Value-Based VR Application with a Complex Target Group

Hanneke Kip (*University of Twente & Stichting Transfore*),
Saskia M. Kelders (*University of Twente & North-West University*),
Lisette J.E.W.C Van Gemert-Pijnen (*University of Twente*)

Paper 136: Navigating Ride-Sharing Regulations: How Regulations Changed the ‘Gig’ of Ride-Sharing for Drivers in Taiwan

Anita Chen (*Pennsylvania State University*), Chien-Wen Yuan (*Fu-Jen University*),
Ning F. Ma, Chi-Yang Hsu, Benjamin V. Hanrahan (*Pennsylvania State University*)

Paper 137: What Happens After Disclosing Stigmatized Experiences on Identified Social Media: Individual, Dyadic, and Social/Network Outcomes

Nazanin Andalibi (*University of Michigan*)

Paper 138: How Guiding Questions Facilitate Feedback Exchange in Project-Based Learning

Amy Cook (*Carnegie Mellon University*), Jessica Hammer (*Carnegie Mellon University*),
Salma Elsayed-Ali (*William & Mary*), Steven Dow (*University of California, San Diego*)

Paper 139: Exploring the Plurality of Black Women’s Gameplay Experiences

Yolanda A. Rankin, Na-eun Han (*Florida State University*)

Paper 140: “If you want, I can store the encrypted password”: A Password-Storage Field Study with Freelance Developers

Alena Naiakshina, Anastasia Danilova (*University of Bonn*), Eva Gerlitz (*University of Bonn*),
Emanuel von Zezschwitz, Matthew Smith (*University of Bonn & Fraunhofer FKIE*)

Paper 141: Virtual Showdown: An Accessible Virtual Reality Game with Scaffolds for Youth with Visual Impairments

Ryan Wedoff (*Microsoft*), Lindsay Ball (*The College at Brockport, State University of New York*),
Amelia Wang (*University of Washington*), Yi Xuan Khoo (*University of Iowa*),
Lauren Lieberman (*The College at Brockport, State University of New York*), Kyle Rector (*University of Iowa*)

Paper 142: Moderation Practices as Emotional Labor in Sustaining Online Communities: The Case of AAPI Identity Work on Reddit

Bryan Dosono, Bryan Semaan (*Syracuse University*)

Paper 143: Multilayer Haptic Feedback for Pen-Based Tablet Interaction

Ernst Kruijff (*Simon Fraser University & University of Applied Sciences Bonn-Rhein-Sieg*),
Saugata Biswas, Christina Trepkowski, Jens Maiero (*Bonn-Rhein-Sieg University of Applied Sciences*),
George Ghinea (*Brunel University London*), Wolfgang Stuerzlinger (*Simon Fraser University*)

Paper 144: In UX We Trust: Investigation of Aesthetics and Usability of Driver-Vehicle Interfaces and Their Impact on the Perception of Automated Driving

Anna-Katharina Frison, Philipp Wintersberger (*Technische Hochschule Ingolstadt & Johannes Kepler University*),
Andreas Riener (*Technische Hochschule Ingolstadt*), Clemens Schart Müller (*Technische Hochschule Ingolstadt & Johannes Kepler University*), Linda Ng Boyle (*University of Washington*), Erika Miller (*Colorado State University*),
Klemens Weigl (*Katholische Universität Eichstätt-Ingolstadt & Technische Hochschule Ingolstadt*)

Paper 145: Sharing Economy Design Cards

Anton Fedosov (*Università della Svizzera italiana*), Masako Kitazaki (*Fuji Xerox Co., Ltd.*),
William Odom (*Simon Fraser University*), Marc Langheinrich (*Università della Svizzera italiana*)

Paper 146: SottoVoce: An Ultrasound Imaging-Based Silent Speech Interaction Using Deep Neural Networks

Naoki Kimura, Michinari Kono (*The University of Tokyo*),
Jun Rekimoto (*The University of Tokyo & Sony Computer Science Laboratories, Inc.*)

Paper 147: Assessing the Accuracy of Point & Teleport Locomotion with Orientation Indication for Virtual Reality using Curved Trajectories

Markus Funk, Florian Müller, Marco Fendrich, Megan Shene, Moritz Kolvenbach, Niclas Dobbertin, Sebastian Günther, Max Mühlhäuser (*TU Darmstadt*)

Paper 148: From Director’s Cut to User’s Cut: to Watch a Brain-Controlled Film is to Edit it

Richard Ramchurn, Sarah Martindale, Max L. Wilson, Steve Benford (*University of Nottingham*)

Paper 149: The Invisible Potential of Facial Electromyography: A Comparison of EMG and Computer Vision when Distinguishing Posed from Spontaneous Smiles

Monica Perusquía-Hernández (*NTT Communication Science Laboratories*),
Saho Ayabe-Kanamura, Kenji Suzuki (*University of Tsukuba*),
Shiro Kumano (*NTT Communication Science Laboratories*)

Paper 150: “Enable or Disable Gamification?”: Analyzing the Impact of Choice in a Gamified Image Tagging Task

Pascal Lessel, Maximilian Altmeyer (*German Research Center for Artificial Intelligence (DFKI), Saarland Informatics Campus*), Lea Verena Schmeer (*Saarland University, Saarland Informatics Campus*), Antonio Krüger (*German Research Center for Artificial Intelligence (DFKI), Saarland Informatics Campus*)

Paper 151: “Pretty Close to a Must-Have:” Balancing Usability Desire and Security Concern in Biometric Adoption

Flynn Wolf, Ravi Kuber (*University of Maryland, Baltimore County*), Adam J. Aviv (*United States Naval Academy*)

Paper 153: r/science: Challenges and Opportunities in Online Science Communication

Ridley Jones, Lucas Colusso, Katharina Reinecke (*University of Washington*),
Gary Hsieh (*University of Washington*)

Paper 154: Multi-plié: A Linear Foldable and Flattenable Interactive Display to Support Efficiency, Safety and Collaboration

Sylvain Pauchet, Jean-Luc Vinot, Catherine Letondal (*University of Toulouse - ENAC*),
Alexandre Lemort (*Ingenuity i/o*), Claire Lavenir (*Intactile Design*), Timothée Lecomte (*University of Toulouse - ENAC*), Stéphanie Rey (*Berger-Levrault*), Valentin Becquet, Guillaume Crouzet (*University of Toulouse - ENAC*)

Paper 155: Apprise: Supporting the Critical-Agency of Victims of Human Trafficking in Thailand

Hannah Thinyane, Karthik S. Bhat (*United Nations University, Institute on Computing & Society*)

Paper 156: JigFab: Computational Fabrication of Constraints to Facilitate Woodworking with Power Tools

Danny Leen (*Katholieke Universiteit Leuven*), Tom Veuskens (*Hasselt University*),
Kris Luyten (*Hasselt University - tUL - Flanders Make*), Raf Ramakers (*Hasselt University*)

Paper 157: Teachers’ Expected and Perceived Gains of Participation in Classroom Based Design Activities

Peter Börjesson (*University of Gothenburg & Chalmers University of Technology*),
Wolmet Barendregt (*University of Gothenburg*),
Eva Eriksson (*Aarhus University & Chalmers University of Technology*),
Olof Torgersson (*University of Gothenburg & Chalmers University of Technology*),
Tilde Bekker (*Eindhoven University of Technology*)

Paper 158: Virtual Performance Augmentation in an Immersive Jump & Run Exergame

Christos Ioannou, Patrick Archard, Eamonn O’Neill (*University of Bath*),
Christof Lutteroth (*University of Auckland & University of Bath*)

Paper 159: WhatFutures: Designing Large-Scale Engagements on WhatsApp

Daniel Lambton-Howard, Robert Anderson, Kyle Montague, Andrew Garbett (*Newcastle University*),
Shaun Hazeldine, Carlos Alvarez (*International Federation of Red Cross and Red Crescent Societies*),
John A. Sweeney (*Narxoz University*), Patrick Olivier (*Monash University*),
Ahmed Kharrufa (*Newcastle University*)

Paper 160: Volunteer Moderators in Twitch Micro Communities: How They Get Involved, the Roles They Play, and the Emotional Labor They Experience

Donghee Yvette Wohm (*New Jersey Institute of Technology*)

Paper 161: Communicating Uncertainty in Fertility Prognosis

Hanna Schneider, Julia Wayrauther (*Ludwig Maximilian University of Munich*),
Mariam Hassib (*Bundeswehr University Munich*), Andreas Butz (*Ludwig Maximilian University of Munich*)

Paper 162: Paragraph-based Faded Text Facilitates Reading Comprehension

Jumpei Kobayashi (*Dai Nippon Printing Co., Ltd. & Future University Hakodate*),
Toshio Kawashima (*Future University Hakodate*)

Paper 163: Towards Understanding the Link Between Age and Smartphone Authentication

Lina Qiu (*University of British Columbia*), Alexander De Luca (*Google*),
Ildar Muslukhov, Konstantin Beznosov (*University of British Columbia*)

Paper 164: Coding for Outdoor Play: A Coding Platform for Children to Invent and Enhance Outdoor Play Experiences
Netta Ofer, Idan David, Hadas Erel, Oren Zuckerman (*Interdisciplinary Center (IDC) Herzliya*)

Paper 165: HotStrokes: Word-Gesture Shortcuts on a Trackpad
Wenzhe Cui (*Stony Brook University*), Jingjie Zheng (*Google*),
Blaine Lewis, Daniel Vogel (*University of Waterloo*), Xiaojun Bi (*Stony Brook University*)

Paper 167: How Do One's Peers on a Leaderboard Affect Oneself?
Weiwen Leung (*University of Toronto*)

Paper 168: App Usage Predicts Cognitive Ability in Older Adults
Mitchell L. Gordon (*Stanford University*),
Leon Gatys, Carlos Guestrin, Jeffrey P. Bigham, Andrew Trister, Kayur Patel (*Apple Inc.*)

Paper 169: ReCall: Crowdsourcing on Basic Phones to Financially Sustain Voice Forums
Aditya Vashistha, Abhinav Garg, Richard Anderson (*University of Washington*)

Paper 170: ThermalBracelet: Exploring Thermal Haptic Feedback Around the Wrist
Roshan Lalitha Peiris, Yuan-Ling Feng (*Keio University Graduate School of Media Design*),
Liwei Chan (*National Chiao Tung University*),
Kouta Minamizawa (*Keio University Graduate School of Media Design*)

Paper 171: HaptiVec: Presenting Haptic Feedback Vectors in Handheld Controllers using Embedded Tactile Pin Arrays
Daniel K.Y. Chen, Jean-Baptiste Chossat, Peter B. Shull (*Shanghai Jiao Tong University*)

Paper 172: VisiBlends: A Flexible Workflow for Visual Blends
Lydia B. Chilton, Savvas Petridis (*Columbia University*), Maneesh Agrawala (*Stanford University*)

Paper 173: Evaluating the Combination of Visual Communication Cues for HMD-based Mixed Reality Remote Collaboration
Seungwon Kim, Gun Lee (*University of South Australia*), Weidong Huang (*Swinburne University of Technology*),
Hayun Kim (*Korea Advanced Institute of Science and Technology*),
Woontack Woo (*Korea Advanced Institute of Science and Technology*),
Mark Billinghurst (*University of South Australia*)

Paper 174: GymSoles: Improving Squats and Dead-Lifts by Visualizing the User's Center of Pressure
Don Samitha Elvitigala, Denys J.C. Matthies, Löic David, Chamod Weerasinghe,
Suranga Nanayakkara (*The University of Auckland*)

Paper 175: Usability of Gamified Knowledge Learning in VR and Desktop-3D
Sebastian Oberdörfer, David Heidrich, Marc Erich Latoschik (*University of Würzburg*)

Paper 176: Mobi3DSketch: 3D Sketching in Mobile AR
Kin Chung Kwan, Hongbo Fu (*City University of Hong Kong*)

Paper 177: VirtualComponent: A Mixed-Reality Tool for Designing and Tuning Breadboarded Circuits
Yoonji Kim, Youngkyung Choi, Hyein Lee, Geehyuk Lee,
Andrea Bianchi (*Korea Advanced Institute of Science and Technology*)

Paper 178: Ethical Mediation in UX Practice
Colin M. Gray, Shruthi Sai Chivukula (*Purdue University*)

Paper 179: Comparing Apples and Oranges: Taxonomy and Design of Pairwise Comparisons within Tabular Data
Po-Ming Law, Subhajit Das, Rahul C. Basole (*Georgia Institute of Technology*)

Paper 180: Everyone Has Some Personal Stuff": Designing to Support Digital Privacy with Shared Mobile Phone Use in Bangladesh"
Syed Ishtiaque Ahmed (*University of Toronto*), Md. Romael Haque (*Marquette University*),
Irtaza Haider (*Georgia Institute of Technology*), Jay Chen (*New York University*), Nicola Dell (*Cornell Tech*)

Paper 181: Accessing a New Land: Designing for a Social Conceptualisation of Access
Lizzie Coles-Kemp, Rikke Bjerg Jensen (*Royal Holloway University of London*)

Paper 182: Gamified Ads: Bridging the Gap Between User Enjoyment and the Effectiveness of Online Ads

Maximilian Altmeyer, Kathrin Dernbecher, Vladislav Hnatovskiy, Marc Schubhan, Pascal Lessel, Antonio Krüger (*German Research Center for Artificial Intelligence (DFKI), Saarland Informatics Campus*)

Paper 183: The Role of Physical Props in VR Climbing Environments

Peter Schulz, Dmitry Alexandrovsky, Felix Putze, Rainer Malaka, Johannes Schöning (*University of Bremen*)

Paper 184: Digital Fabrication of Soft Actuated Objects by Machine Knitting

Lea Albaugh, Scott Hudson, Lining Yao (*Carnegie Mellon University*)

Paper 185: Sketching NLP: A Case Study of Exploring the Right Things To Design with Language Intelligence

Qian Yang (*Carnegie Mellon University*), Justin Cranshaw, Saleema Amershi, Shamsi T. Iqbal, Jaime Teevan (*Microsoft Research*)

Paper 186: Engagement with Mental Health Screening on Mobile Devices:

Results from an Antenatal Feasibility Study

Kevin Doherty (*Trinity College Dublin*),

José Marcano-Belisario, Martin Cohn, Nikolaos Mastellos (*Imperial College London*),

Cecily Morrison (*Microsoft Research Cambridge*), Josip Car (*Imperial College London*),

Gavin Doherty (*Trinity College Dublin*)

Paper 187: Automating the Intentional Encoding of Human-Designable Markers

Joshua D.A. Jung, Rahul N. Iyer, Daniel Vogel (*University of Waterloo*)

Paper 188: Ethical Dimensions of Visualization Research

Michael Correll (*Tableau Research*)

Paper 189: Investigating the Effect of Orientation and Visual Style on Touchscreen Slider Performance

Ashley Colley (*University of Lapland*), Sven Mayer (*University of Stuttgart*),

Niels Henze (*University of Regensburg*)

Paper 190: Detecting Perception of Smartphone Notifications Using Skin Conductance Responses

Pascal E. Fortin, Elisabeth Sulmont, Jeremy Cooperstock (*McGill University*)

Paper 191: Exploring the Opportunities for Technologies to Enhance Quality of Life with People who have Experienced Vision Loss

Rachel Bartlett, Yi Xuan Khoo, Juan Pablo Hourcade, Kyle K. Rector (*University of Iowa*)

Paper 192: Ranked-List Visualization: A Graphical Perception Study

Pranathi Mylavarampu (*University of Maryland, College Park*), Adil Yalcin (*Keshif, LLC.*),

Xan Gregg (*SAS Institute, Inc.*), Niklas Elmquist (*University of Maryland, College Park*)

Paper 193: A Lie Reveals the Truth: Quasimodes for Task-Aligned Data Presentation

Jacob Ritchie, Daniel Wigdor, Fanny Chevalier (*University of Toronto*)

Paper 194: You 'Might' Be Affected: An Empirical Analysis of Readability and Usability Issues in Data Breach Notifications

Yixin Zou, Shawn Danino, Kaiwen Sun, Florian Schaub (*University of Michigan*)

Paper 195: Understanding Trust, Transportation, and Accessibility through Ridesharing

Robin N. Brewer, Vaishnav Kameswaran (*University of Michigan*)

Paper 196: Experimental Analysis of Barehand Mid-air Mode-Switching Techniques in Virtual Reality

Hemant Bhaskar Surale (*University of Waterloo*), Fabrice Matulic (*Preferred Networks Inc.*),

Daniel Vogel (*University of Waterloo*)

Paper 197: Designing Interactive 3D Printed Models with Teachers of the Visually Impaired

Lei Shi (*Cornell University*), Holly Lawson (*Portland State University*), Zhuohao Zhang (*Zhejiang University*),

Shiri Azenkot (*Cornell University & Cornell Tech*)

Paper 198: Defending My Castle: A Co-Design Study of Privacy Mechanisms for Smart Homes

Yaxing Yao, Justin Reed Basdeo, Smriti Kaushik, Yang Wang (*Syracuse University*)

Paper 199: Understanding Perceptions of Problematic Facebook Use: When People Experience Negative Life Impact and a Lack of Control
Justin Cheng, Moira Burke, Elena Goetz Davis (*Facebook*)

Paper 200: Typing on Split Keyboards with Peripheral Vision
Yiqin Lu, Chun Yu (*Tsinghua University & Ministry of Education*), Shuyi Fan (*Tsinghua University*),
Xiaojun Bi (*Stony Brook University*), Yuanchun Shi (*Tsinghua University & Ministry of Education*)

Paper 201: Mixed Reality Remote Collaboration Combining 360 Video and 3D Reconstruction
Theophilus Teo, Louise Lawrence, Gun A. Lee, Mark Billinghurst (*University of South Australia*),
Matt Adcock (*CSIRO*)

Paper 202: Decision-Making Under Uncertainty in Research Synthesis: Designing for the Garden of Forking Paths
Alex Kale (*University of Washington*), Matthew Kay (*University of Michigan*),
Jessica Hullman (*Northwestern University*)

Paper 203: ReType: Quick Text Editing with Keyboard and Gaze
Shyamli Sindhwanı (*University of Auckland*), Christof Lutteroth (*University of Bath*),
Gerald Weber (*University of Auckland*)

Paper 204: Desktop Electrospinning: A Single Extruder 3D Printer for Producing Rigid Plastic and Electrosprun Textiles
Michael L. Rivera, Scott E. Hudson (*Carnegie Mellon University*)

Paper 205: Reading Face, Reading Health: Exploring Face Reading Technologies for Everyday Health
Xianghua Ding, Yanqi Jiang, Xiankang Qin (*Fudan University*), Yunan Chen (*University of California, Irvine*),
Wenqiang Zhang, Lizhe Qi (*Fudan University*)

Paper 206: Editing Spatial Layouts through Tactile Templates for People with Visual Impairments
Jingyi Li (*Stanford University*), Son Kim (*Vista Center for the Blind and Visually Impaired*),
Joshua A. Miele (*The Smith-Kettlewell Eye Research Institute*),
Maneesh Agrawala, Sean Follmer (*Stanford University*)

Paper 207: The Effect of Stereo Display Deficiencies on Virtual Hand Pointing
Mayra Donaji Barrera Machuca, Wolfgang Stuerzlinger (*Simon Fraser University*)

Paper 208: Effects of Local Latency on Game Pointing Devices and Game Pointing Tasks
Michael Long, Carl Gutwin (*University of Saskatchewan*)

Paper 209: Chatbots, Humbots, and the Quest for Artificial General Intelligence
Jonathan Grudin, Richard Jacques (*Microsoft Corporation*)

Paper 210: Haptic Navigation Cues on the Steering Wheel
Patrizia Di Campli San Vito, Gözel Shakeri, Stephen Brewster, Frank Pollick (*University of Glasgow*),
Edward Brown, Lee Skrypchuk, Alexandros Mouzakitis (*Jaguar Land Rover Ltd.*)

Paper 211: Drag:on: A Virtual Reality Controller Providing Haptic Feedback Based on Drag and Weight Shift
André Zenner, Antonio Krüger (*German Research Center for Artificial Intelligence (DFKI), Saarland Informatics Campus*)

Paper 212: ForceRay: Extending Thumb Reach via Force Input Stabilizes Device Grip for Mobile Touch Input
Christian Corsten, Marcel Lahaye, Jan Borchers, Simon Voelker (*RWTH Aachen University*)

Paper 213: Understanding and Modeling User-Perceived Brand Personality from Mobile Application UIs
Ziming Wu, Taewook Kim, Quan Li, Xiaojuan Ma (*Hong Kong University of Science and Technology*)

Paper 214: Underneath the Skin: An Analysis of YouTube Videos to Understand Insertable Device Interaction
Aida Komkaite, Liga Lavrinovica, Maria Vraka, Mikael B. Skov (*Aalborg University*)

Paper 215: Stroke-Gesture Input for People with Motor Impairments: Empirical Results & Research Roadmap
Radu-Daniel Vatavu, Ovidiu-Ciprian Ungurean (*University Stefan cel Mare of Suceava*)

Paper 216: Developing Accessible Services: Understanding Current Knowledge and Areas for Future Support

Michael Crabb (*University of Dundee*), Michael Heron (*Robert Gordon University*),
Rhiannon Jones, Mike Armstrong (*BBC Research and Development*), Hayley Reid (*FinancialForce*),
Amy Wilson (*Robert Gordon University*)

Paper 217: Touchstone2: An Interactive Environment for Exploring Trade-offs in HCI Experiment Design

Alexander Eiselmayer, Chat Wacharamanottham (*University of Zurich*),
Michel Beaudouin-Lafon (*Université Paris-Sud, CNRS, Inria, Université Paris-Saclay*),
Wendy E. Mackay (*Université Paris-Sud, CNRS, Inria, Université Paris-Saclay*)

Paper 218: Socio-technical Dynamics: Cooperation of Emergent and Established Organisations in Crises and Disasters

Daniel Auferbauer (*AIT Austrian Institute of Technology*), Hilda Tellioglu (*TU Wien*)

Paper 219: Interpreting the Diversity in Subjective Judgments

Jean-Bernard Martens (*Eindhoven University of Technology*)

Paper 220: ElasticVR: Providing Multilevel Continuously-Changing Resistive Force and Instant Impact Using Elasticity for VR

Hsin-Ruey Tsai (*National Taiwan University & University of Tokyo*), Jun Rekimoto (*University of Tokyo*),
Bing-Yu Chen (*National Taiwan University*)

Paper 221: Detecting Personality Traits Using Eye-Tracking Data

Shlomo Berkovsky (*Data61 - CSIRO & Macquarie University*), Ronnie Taib (*Data61 - CSIRO*),
Irena Koprinska, Eileen Wang, Yucheng Zeng (*University of Sydney*),
Jingjie Li (*University of Wisconsin - Madison*), Sabina Kleitman (*University of Sydney*)

Paper 222: Patient Perspectives on Self-Management Technologies for Chronic Fatigue Syndrome

Tabby Davies, Simon L. Jones (*University of Bath*), Ryan M. Kelly (*The University of Melbourne*)

Paper 223: The Role of Gaming During Difficult Life Experiences

Ioanna Iacovides (*University of York*), Elisa D. Mekler (*University of Basel*)

Paper 224: The Dissimilarity-Consensus Approach to Agreement Analysis in Gesture Elicitation Studies

Radu-Daniel Vatavu (*University Ștefan cel Mare of Suceava*)

Paper 225: A Framework for the Experience of Meaning in Human-Computer Interaction

Elisa D. Mekler (*University of Basel*), Kasper Hornbæk (*University of Copenhagen*)

Paper 226: Sustainabot – Exploring the Use of Everyday Foodstuffs as Output and Input for and with Emergent Users

Simon Robinson, Jennifer Pearson, Mark D. Holton (*Swansea University*),
Shashank Ahire (*Indian Institute of Technology Bombay*), Matt Jones (*Swansea University*)

Paper 227: “Everything’s the Phone”: Understanding the Phone’s Supercharged Role in Parent-Teen Relationships

Katie Davis (*University of Washington*), Anja Dinhopl (*Laboratory for Intelligent Systems in Tourism*),
Alexis Hiniker (*University of Washington*)

Paper 228: On the Shoulder of the Giant: A Multi-Scale Mixed Reality Collaboration with 360 Video Sharing and Tangible Interaction

Thammathip Piumsomboon (*University of Canterbury & University of South Australia*),
Gun A. Lee, Andrew Irlitti (*University of South Australia*), Barrett Ens (*Monash University*),
Bruce H. Thomas, Mark Billinghurst (*University of South Australia*)

Paper 229: “I feel it is my responsibility to stream”: Streaming and Engaging with Intangible Cultural Heritage through Livestreaming

Zhicong Lu (*University of Toronto*), Michelle Annett (*MishMashMakers*),
Mingming Fan, Daniel Wigdor (*University of Toronto*)

Paper 230: AILA: Attentive Interactive Labeling Assistant for Document Classification through Attention-Based Deep Neural Networks

Minsuk Choi, Cheonbok Park, Soyoung Yang (*Korea University*), Yonggyu Kim (*Ajou University*),
Jaegul Choo (*Korea University*), Sungsoo Ray Hong (*University of Washington*)

Paper 231: Multi-Modal Approaches for Post-Editing Machine Translation

Nico Herbig (*German Research Center for Artificial Intelligence (DFKI), Saarland Informatics Campus*),
Santanu Pal, Josef van Genabith (*Saarland University*),
Antonio Krüger (*German Research Center for Artificial Intelligence (DFKI), Saarland Informatics Campus*)

Paper 232: Neighborhood Perception in Bar Charts

Mingqian Zhao (*Hong Kong University of Science and Technology*),
Huamin Qu (*Hong Kong University of Science and Technology*), Michael Sedlmair (*University of Stuttgart*)

Paper 233: Talking about Chat at Work in the Global South: An Ethnographic Study of Chat Use in India and Kenya

Moira McGregor (*Stockholm University*), Nicola J. Bidwell (*International University of Management*),
Vidya Sarangapani (*Newcastle University*), Jonathan Appavoo (*Boston University*),
Jacki O'Neill (*Microsoft Research India*)

Paper 234: "What's Happening at that Hip?": Evaluating an On-body Projection based Augmented Reality System for Physiotherapy Classroom

Hasan Shahid Ferdous (*University of Melbourne*), Thuong Hoang (*Deakin University*),
Zaher Joukhadar, Martin N. Reinoso, Frank Vetere, David Kelly, Louisa Remedios (*University of Melbourne*)

Paper 235: Optimising Encoding for Vibrotactile Skin Reading

Granit Luhznica (*Know Center*), Eduardo Veas (*Graz University of Technology & Know Center*)

Paper 236: Bring the Outside In: Providing Accessible Experiences Through VR for People with Dementia in Locked Psychiatric Hospitals

Luma Tabbaa, Chee Siang Ang (*University of Kent*), Vienna Rose (*St. Andrew's Healthcare*),
Panote Siriaraya (*Kyoto Sangyo University*), Inga Stewart, Keith G. Jenkins (*St Andrew's Healthcare*),
Maria Matsangidou (*University of Kent*)

Paper 237: Clairbuoyance: Improving Directional Perception for Swimmers

Francisco Kiss (*University of Stuttgart*), Paweł W. Woźniak (*Utrecht University*),
Felix Scheerer (*University of Stuttgart*), Julia Dominiak, Andrzej Romanowski (*Lodz University of Technology*),
Albrecht Schmidt (*Ludwig Maximilian University of Munich*)

Paper 238: Unremarkable AI: Fitting Intelligent Decision Support into Critical, Clinical Decision-Making Processes

Qian Yang, Aaron Steinfeld, John Zimmerman (*Carnegie Mellon University*)

Paper 239: AI-Mediated Communication: How the Perception that Profile Text was Written by AI Affects Trustworthiness

Maurice Jakesch (*Cornell University*), Megan French (*Stanford University*), Xiao Ma (*Cornell University*),
Jeffrey T. Hancock (*Stanford University*), Mor Naaman (*Cornell University*),

Paper 240: Magnetact: Magnetic-sheet-based Haptic Interfaces for Touch Devices

Kentaro Yasu (*Nippon Telegraph and Telephone Corporation*)

Paper 241: Virtual Hubs: Understanding Relational Aspects and Remediating Incubation

Jandy Luik (*University of York & Petra Christian University*), Jenna Ng, Jonathan Hook (*University of York*)

Paper 242: Impulse Buying: Design Practices and Consumer Needs

Carol Moser, Sarita Y. Schoenebeck, Paul Resnick (*University of Michigan*)

Paper 243: Communication Breakdowns Between Families and Alexa

Erin Beneteau (*University of Washington*), Olivia K. Richards (*Pennsylvania State University*),
Mingrui Zhang, Julie A. Kientz, Jason Yip, Alexis Hiniker (*University of Washington*)

Paper 244: Data is Personal: Attitudes and Perceptions of Data Visualization in Rural Pennsylvania

Evan M. Peck, Sofia E. Ayuso, Omar El-Etr (*Bucknell University*)

Paper 245: HCI and Affective Health: Taking stock of a decade of studies and charting future research directions

Pedro Sanches, Axel Janson, Pavel Karpashevich (*KTH Royal Institute of Technology in Stockholm*), Camille Nadal (*Trinity College Dublin*), Chengcheng Qu, Claudia Daudén Roquet, Muhammad Umair (*Lancaster University*), Charles Windlin (*KTH Royal Institute of Technology in Stockholm*), Gavin Doherty (*Trinity College Dublin*), Kristina Höök (*Royal Institute of Technology KTH*), Corina Sas (*Lancaster University*)

Paper 246: An Evaluation of Touch Input at the Edge of a Table

Nikhita Joshi, Daniel Vogel (*University of Waterloo*)

Paper 247: Examining and Enhancing the Illusory Touch Perception in Virtual Reality Using Non-Invasive Brain Stimulation
Filip Škola, Fotis Liarokapis (*Faculty of Informatics, Masaryk University*)

Paper 248: Pay Attention, Please: Formal Language Improves Attention in Volunteer and Paid Online Experiments
Tal August, Katharina Reinecke (*University of Washington*)

Paper 249: Enhancing Texture Perception in Virtual Reality Using 3D-Printed Hair Structures
Donald Degräen (*Intel Visual Computing Institute (IVCI), Saarland Informatics Campus*),
André Zenner, Antonio Krüger (*German Research Center for Artificial Intelligence (DFKI), Saarland Informatics Campus*)

Paper 250: The Design of Social Drones: A Review of Studies on Autonomous Flyers in Inhabited Environments
Mehmet Aydin Baytas (*Koç University & Qualisys AB*), Damla Çay (*Koç University*),
Yuchong Zhang (*Chalmers University of Technology*), Mohammad Obaid (*University of New South Wales*),
Asim Evren Yantaç (*Koç University*), Morten Fjeld (*Chalmers University of Technology*)

Paper 251: Recipes for Programmable Money
Chris Elsden, Tom Feltwell, Shaun Lawson, John Vines (*Northumbria University*)

Paper 252: Crowdsourcing Interface Feature Design with Bayesian Optimization
John J. Dudley, Jason T. Jacques, Per Ola Kristensson (*University of Cambridge*)

Paper 253: Comparing Effectiveness and Engagement of Data Comics and Infographics
Zezhong Wang (*University of Edinburgh*), Shunning Wang (*Peking University & University of Edinburgh*),
Matteo Farinella (*Columbia University*), Dave Murray-Rust (*University of Edinburgh*),
Nathalie Henry Riche (*Microsoft Research*), Benjamin Bach (*Edinburgh University*)

Paper 254: Resilient Chatbots: Repair Strategy Preferences for Conversational Breakdowns
Zahra Ashktorab, Mohit Jain, Q. Vera Liao, Justin D. Weisz (*IBM Research AI*)

Paper 255: Crowdlicit: A System for Conducting Distributed End-User Elicitation and Identification Studies
Abdullah X. Ali (*University of Washington*), Meredith Ringel Morris (*Microsoft Research*),
Jacob O. Wobbrock (*University of Washington*)

Paper 256: Thinking Too Classically: Research Topics in Human-Quantum Computer Interaction
Zahra Ashktorab, Justin D. Weisz, Maryam Ashoori (*IBM Research AI*)

Paper 257: Predicting Cognitive Load in Future Code Puzzles
Caitlin Kelleher, Wint Hnin (*Washington University in St. Louis*)

Paper 258: Hey Google, Can I Ask You Something in Private?: The Effects of Modality and Device in Sensitive Health Information Acquisition from Voice Assistants
Eugene Cho (*The Pennsylvania State University*)

Paper 259: Influencers in Multiplayer Online Shooters: Evidence of Social Contagion in Playtime and Social Play
Alessandro Canossa, Ahmad Azadvar (*Ubisoft Massive Entertainment*),
Casper Harteveld (*Northeastern University*), Anders Drachen, Sebastian Deterding (*University of York*)

Paper 260: Digital Financial Needs of Micro-entrepreneur Women in Pakistan: Is Mobile Money The Answer?
Maryam Mustafa, Noor Mazhar, Ayesha Asghar, Maryem Zafar Usmani,
Lubna Razaq (*Information Technology University*), Richard Anderson (*University of Washington*)

Paper 261: Understanding Mass-Market Mobile TV Behaviors in the Streaming Era
Frank Bentley, Danielle Lottridge (*Yahoo & Oath*)

Paper 262: Bringing Design to the Privacy Table: Broadening “Design” in “Privacy by Design” Through the Lens of HCI
Richmond Y. Wong, Deirdre K. Mulligan (*University of California, Berkeley*)

Paper 263: Practitioners Teaching Data Science in Industry and Academia: Expectations, Workflows, and Challenges
Sean Kross, Philip J. Guo (*University of California, San Diego*)

- Paper 264: An Exploration of Speech-Based Productivity Support in the Car**
Nikolas Martelaro (*Accenture Technology Labs*), Jaime Teevan, Shamsi T. Iqbal (*Microsoft Research*)
- Paper 265: Everyday Experiences: Small Stories and Mental Illness on Instagram**
Jessica L. Feuston, Anne Marie Piper (*Northwestern University*)
- Paper 266: Blockchain Assemblages: Whiteboxing Technology and Transforming Infrastructural Imaginaries**
Karim Jabbar, Pernille Bjørn (*University of Copenhagen*)
- Paper 267: Risk vs. Restriction: The Tension between Providing a Sense of Normalcy and Keeping Foster Teens Safe Online**
Karla Badillo-Urquiola (*University of Central Florida*), Xinru Page (*Bentley University*), Pamela J. Wisniewski (*University of Central Florida*)
- Paper 268: Who's In Control?: Interactions In Multi-User Smart Homes**
Christine Geeng, Franziska Roesner (*University of Washington*)
- Paper 269: GameViews: Understanding and Supporting Data-driven Sports Storytelling**
Qiyu Zhi, Suwen Lin, Poorna Talkad Sukumar, Ronald Metoyer (*University of Notre Dame*)
- Paper 270: Managing Messes in Computational Notebooks**
Andrew Head (*University of California, Berkeley*), Fred Hohman (*Georgia Institute of Technology*), Titus Barik (*Microsoft*), Steven M. Drucker, Robert DeLine (*Microsoft Research*)
- Paper 271: Nurturing Constructive Disagreement - Agonistic Design with Neurodiverse Children**
Christopher Frauenberger, Katta Spiel, Laura Scheepmaker, Irene Posch (*TU Wien*)
- Paper 272: An Exploratory Study of the Use of Drones for Assisting Firefighters During Emergency Situations**
Md. Nafiz Hasan Khan, Carman Neustaedter (*Simon Fraser University*)
- Paper 273: PickCells: A Physically Reconfigurable Cell-composed Touchscreen**
Alix Gogney, Cameron Steer (*Swansea University*), Andrés Lucero (*Aalto University*), Laurence Nigay (*Université Grenoble Alpes*), Deepak Ranjan Sahoo (*Swansea University*), Céline Coutrix (*CNRS*), Anne Roudaut (*University of Bristol*), Sriram Subramanian, Yutaka Tokuda (*University of Sussex*), Timothy Neate (*City University of London*), Jennifer Pearson, Simon Robinson, Matt Jones (*Swansea University*)
- Paper 274: Active Edge: Designing Squeeze Gestures for the Google Pixel 2**
Philip Quinn, Seungyon Claire Lee, Melissa Barnhart, Shumin Zhai (*Google*)
- Paper 275: Clench Interface: Novel Biting Input Techniques**
Xuhai Xu (*University of Washington & Tsinghua University*), Chun Yu (*Tsinghua University*), Anind K. Dey, Jennifer Mankoff (*University of Washington*)
- Paper 276: Interferi: Gesture Sensing using On-Body Acoustic Interferometry**
Yasha Iravantchi, Yang Zhang, Evi Bernitsas, Mayank Goel, Chris Harrison (*Carnegie Mellon University*),
- Paper 277: Cultivating Care through Ambiguity: Lessons from a Service Learning Course**
Samar Sabie, Tapan Parikh (*Cornell University*)
- Paper 278: "Beautiful Seams": Strategic Revelations and Concealments**
Sarah Inman, David Ribes (*University of Washington*)
- Paper 279: Understanding the Effect of Accuracy on Trust in Machine Learning Models**
Ming Yin (*Purdue University*), Jennifer Wortman Vaughan, Hanna Wallach (*Microsoft Research*)
- Paper 280: Engaging Gentrification as a Social Justice Issue in HCI**
Eric Corbett, Yanni Loukissas (*Georgia Institute of Technology*)
- Paper 281: Exploring Virtual Agents for Augmented Reality**
Isaac Wang, Jesse Smith, Jaime Ruiz (*University of Florida*)
- Paper 282: Privacy, Power, and Invisible Labor on Amazon Mechanical Turk**
Shruti Sannon, Dan Cosley (*Cornell University*)

Paper 283: Beyond Schematic Capture: Meaningful Abstractions for Better Electronics Design Tools

Richard Lin, Rohit Ramesh, Antonio Iannopollo, Alberto Sangiovanni Vincentelli, Prabal Dutta, Elad Alon, Björn Hartmann (*University of California, Berkeley*)

Paper 284: TutoriVR: A Video-Based Tutorial System for Design Applications in Virtual Reality

Balasaravanan Thoravi Kumaravel (*University of California, Berkeley*), Cuong Nguyen, Stephen DiVerdi (*Adobe Research*), Björn Hartmann (*University of California, Berkeley*)

Paper 285: Can Mobile Augmented Reality Stimulate a Honeytrap Effect?

Observations from Santa's Lil Helper

Ryan M. Kelly, Hasan Shahid Ferdous, Niels Wouters, Frank Vetere (*University of Melbourne*)

Paper 286: Infrastructuring the Imaginary: How Sea-Level Rise Comes to Matter

in the San Francisco Bay Area

Robert Soden (*University of Colorado Boulder*), Nate Kauffman (*University of California, Berkeley*)

Paper 287: The Right to the Sustainable Smart City

Sara Heitlinger (*City, University of London*), Nick Bryan-Kinns (*Queen Mary University of London*), Rob Comber (*KTH Royal Institute of Technology*)

Paper 288: A Place to Play: The (Dis)Abled Embodied Experience for Autistic Children in Online Spaces

Kathryn E. Ringland (*Northwestern University*)

Paper 289: 'Think secure from the beginning': A Survey with Software Developers

Hala Assal, Sonia Chiasson (*Carleton University*)

Paper 290: "Wait, Do I Know This Person?": Understanding Misdirected Email

Emilee Rader, Anjali Munasinghe (*Michigan State University*)

Paper 291: Effects of Locomotion and Visual Overview on Spatial Memory when Interacting with Wall Displays

Yvonne Jansen (*CNRS - Sorbonne Université*), Jonas Schjerlund, Kasper Hornbæk (*University of Copenhagen*)

Paper 292: Crowdsourcing Multi-label Audio Annotation Tasks with Citizen Scientists

Mark Cartwright, Graham Dove (*New York University*), Ana Elisa Méndez Méndez (*New York University*), Juan P. Bello, Oded Nov (*New York University*)

Paper 293: Interactive Repair of Tables Extracted from PDF Documents on Mobile Devices

Jane Hoffswell (*University of Washington & Adobe Research*), Zhicheng Liu (*Adobe Research*)

Paper 294: Frequency-Based Design of Smart Textiles

Jussi Mikkonen (*Syddansk Universitet*), Riikka Townsend (*Aalto University*)

Paper 295: 3D Pen + 3D Printer: Exploring the Role of Humans and Fabrication Machines in Creative Making

Haruki Takahashi (*Meiji University*), Jeeeon Kim (*University of Colorado Boulder*)

Paper 296: Metaphoria: An Algorithmic Companion for Metaphor Creation

Katy Ilonka Gero, Lydia B. Chilton (*Columbia University*)

Paper 297: RePlay: Contextually Presenting Learning Videos Across Software Applications

C. Ailie Fraser (*University of California, San Diego & Adobe Research*), Tricia J. Ngoon (*University of California, San Diego*), Mira Dontcheva (*Adobe Research*), Scott Klemmer (*University of California, San Diego*)

Paper 298: The Promise of Empathy: Design, Disability, and Knowing the “Other”

Cynthia L. Bennett, Daniela K. Rosner (*University of Washington*)

Paper 299: Just Give Me What I Want: How People Use and Evaluate Music Search

Christine Hosey (*Spotify*), Lara Vujovic (*TripAdvisor*), Brian St. Thomas, Jean Garcia-Gathright, Jennifer Thom (*Spotify*)

Paper 300: Towards Enabling Blind People to Independently Write on Printed Forms

Shirin Feiz, Syed Masum Billah, Vikas Ashok, Roy Shilkrot, IV Ramakrishnan (*Stony Brook University*)

Paper 301: Social, Cultural and Systematic Frustrations Motivating the Formation of a DIY Hearing Loss Hacking Community

Aisling Ann O’Kane (*University of Bristol*),

Abdinasir Aliomar, Rebecca Zheng, Britta Schulte (*University College London*),

Gianluca Trombetta (*Hearing Hacks*)

Paper 302: My Naturewatch Camera: Disseminating Practice Research with a Cheap and Easy DIY Design

William Gaver, Andy Boucher, Michail Vanis, Andy Sheen, Dean Brown, Liliana Ovalle, Naho Matsuda (*Goldsmiths, University of London*), Amina Abbas-Nazari, Robert Phillips (*Royal College of Art*)

Paper 303: Social Media TestDrive: Real-World Social Media Education for the Next Generation

Dominic DiFranzo, Yoon Hyung Choi, Amanda Purington (*Cornell University*),

Jessie G. Taft (*Cornell Tech*), Janis Whitlock, Natalya N. Bazarova (*Cornell University*)

Paper 304: Investigating the Impact of a Real-time, Multimodal Student Engagement Analytics Technology in Authentic Classrooms

Sinem Aslan, Nese Alyuz, Cagri Tanrıover (*Intel Corporation*), Sinem E. Mete (*Bahcesehir University*),

Eda Okur (*Intel Corporation*), Sidney K. D’Mello (*University of Colorado Boulder*),

Asli Arslan Esme (*Intel Corporation*)

Paper 305: How do People Sort by Ratings?

Jerry O. Talton (*Carta, Inc.*),

Krishna Dusad, Konstantinos Koiliaris, Ranjitha S. Kumar (*University of Illinois at Urbana-Champaign*)

Paper 306: The Smartphone as a Pacifier and its Consequences:

Young adults’ smartphone usage in moments of solitude and correlations to self-reflection

Sarah Dieffenbach, Kim Borrmann (*Ludwig Maximilians University Munich*)

Paper 307: Privacy and Security Considerations For Digital Technology Use in Elementary Schools

Priya C. Kumar (*University of Maryland, College Park*), Marshini Chetty (*Princeton University*),

Tamara L. Clegg, Jessica Vitak (*University of Maryland, College Park*)

Paper 308: Relations are more than Bytes: Re-thinking the Benefits of Smart Services through People and Things

Claude P. R. Heath (*Royal Holloway, University of London*), Clara Crivellaro (*Newcastle University*),

Lizzie Coles-Kemp (*Royal Holloway, University of London*)

Paper 309: VoiceAssist: Guiding Users to High-Quality Voice Recordings

Prem Seetharaman (*Northwestern University*), Gautham Mysore (*Adobe Research*),

Bryan Pardo (*Northwestern University*), Paris Smaragdis (*University of Illinois at Urbana Champaign*),

Celso Gomes (*Adobe Research*)

Paper 310: On the Usability of HTTPS Deployment

Matthew Bernhard (*University of Michigan*),

Jonathan Sharman, Claudia Ziegler Acemyan, Philip Kortum, Dan S. Wallach (*Rice University*),

J. Alex Halderman (*University of Michigan*)

Paper 311: PledgeWork: Online Volunteering through Crowdwork

Keiko Katsuragawa, Qi Shu, Edward Lank (*University of Waterloo*)

Paper 312: Modeling the Engagement-Disengagement Cycle of Compulsive Phone Use

Jonathan A. Tran, Katie S. Yang, Katie Davis, Alexis Hiniker (*University of Washington*)

Paper 313: Social Reflections on Fitness Tracking Data: A Study with Families in Low-SES Neighborhoods

Herman Saksono (*Northeastern University*),

Carmen Castaneda-Sceppa, Jessica Hoffman, Magy Seif El-Nasr (*Northeastern University*),

Vivien Morris (*Mattapan Food and Fitness Coalition*), Andrea G. Parker (*Northeastern University*)

Paper 314: “Occupational Therapy is Making”: Clinical Rapid Prototyping and Digital Fabrication

Megan Hofmann, Kristin William, Toni Kaplan, Stephanie Valencia,

Gabriella Hann, Scott E. Hudson (*Carnegie Mellon University*),

Jennifer Mankoff (*University of Washington*), Patrick Carrington (*Carnegie Mellon University*)

Paper 315: Communicating Hurricane Risks: Multi-Method Examination of Risk Imagery Diffusion

Melissa Bica (*University of Colorado Boulder*), Julie L. Demuth (*National Center for Atmospheric Research*),

James E. Dykes, Leysia Palen (*University of Colorado Boulder*)

Paper 316: “Collective Wisdom”: Inquiring into Collective Homes as a Site for HCI Design
Jo Shin, Gabriela Aceves Sepúlveda, William Odom (*Simon Fraser University*)

Paper 317: Symbiotic Encounters: HCI and Sustainable Agriculture
Szu-Yu (Cyn) Liu, Shaowen Bardzell, Jeffrey Bardzell (*Indiana University*)

Paper 318: Freedom to Personalize My Digital Classroom: Understanding Teachers’ Practices and Motivations
Laton Vermette (*Simon Fraser University*), Joanna McGrenere (*University of British Columbia*), Colin Birge, Adam Kelly (*Microsoft Corporation*), Parmit K. Chilana (*Simon Fraser University*)

Paper 319: Healthy Lies: The Effects of Misrepresenting Player Health Data on Experience, Behavior, and Performance
Jason Wuertz (*University of New Brunswick*), Max V. Birk (*Eindhoven University of Technology*), Scott Bateman (*University of New Brunswick*)

Paper 320: Pseudo-Haptic Weight: Changing the Perceived Weight of Virtual Objects By Manipulating Control-Display Ratio
Majed Samad, Elia Gatti, Anne Hermes, Hrvoje Benko, Cesare Parise (*Facebook Reality Labs*)

Paper 321: EnhancedTouchX: Smart Bracelets for Augmenting Interpersonal Touch Interactions
Taku Hachisu, Baptiste Bourreau, Kenji Suzuki (*University of Tsukuba*)

Paper 322: Older People Inventing their Personal Internet of Things with the IoT Un-Kit Experience
Aloha Hufana Ambe, Margot Brereton, Alessandro Soro, Min Zhen Chai, Laurie Buys, Paul Roe (*Queensland University of Technology*)

Paper 323: Brick: Toward A Model for Designing Synchronous Colocated Augmented Reality Games
Po Bhattacharyya, Radha Nath, Yein Jo, Ketki Jadhav, Jessica Hammer (*Carnegie Mellon University*)

Paper 324: Instrumenting and Analyzing Fabrication Activities, Users, and Expertise
Jun Gong (*Autodesk Research & Dartmouth College*), Fraser Anderson, George Fitzmaurice (*Autodesk Research*), Tovi Grossman (*Autodesk Research & University of Toronto*)

Paper 325: Scaptics and Highlight-Planes: Immersive Interaction Techniques for Finding Occluded Features in 3D Scatterplots
Arnaud Prouzeau, Maxime Cordeil, Clement Robin, Barrett Ens (*Monash University*), Bruce H. Thomas (*University of South Australia*), Tim Dwyer (*Monash University*)

Paper 326: Chewlt. An Intraoral Interface for Discreet Interactions
Pablo Gallego Cascón (*University of Auckland*), Denys J.C. Matthies (*Auckland Bioengineering Institute*), Sachith Muthukumaran (*University of Auckland*), Suranga Nanayakkara (*Auckland Bioengineering Institute, The University of Auckland*)

Paper 327: The Scale and Structure of Personal File Collections
Jesse David Dinneen (*Victoria University of Wellington*), Charles-Antoine Julien, Ilja Frissen (*McGill University*)

Paper 328: The Effects of Interruption Timings on Autonomous Height-Adjustable Desks that Respond to Task Changes
Bokyung Lee (*Korea Advanced Institute of Science and Technology*), Sindy Wu (*University of Florida*), Maria Reyes, Daniel Saakes (*Korea Advanced Institute of Science and Technology*)

Paper 329: SurfaceSight: A New Spin on Touch, User, and Object Sensing for IoT Experiences
Gierad Laput, Chris Harrison (*Carnegie Mellon University*)

Paper 330: Conservation of Procrastination: Do Productivity Interventions Save Time Or Just Redistribute It?
Geza Kovacs, Drew Mylander Gregory (*Stanford University*), Zilin Ma (*Bucknell University*), Zhengxuan Wu, Golrokhs Emami, Jacob Ray, Michael S. Bernstein (*Stanford University*)

Paper 331: Understanding Law Enforcement Strategies and Needs for Combating Human Trafficking
Julia Deeb-Swihart, Alex Endert, Amy Bruckman (*Georgia Institute of Technology*)

Paper 332: Vocal Shortcuts for Creative Experts
Yea-Seul Kim (*University of Washington*), Mira Dontcheva (*Adobe Research*), Eytan Adar (*University of Michigan*), Jessica Hullman (*Northwestern University*)

- Paper 333: Rumors and Collective Sensemaking: Managing Ambiguity in an Informal Marketplace**
Priyank Chandra, Joyojeet Pal (*University of Michigan*)
- Paper 334: Temporal Rhythms and Patterns of Electronic Documentation in Time-Critical Medical Work**
Swathi Jagannath, Aleksandra Sarcevic, Victoria Young (*Drexel University*),
Sage Myers (*The Children's Hospital of Philadelphia*)
- Paper 335: Personas and Identity: Looking at Multiple Identities to Inform the Construction of Personas**
Nicola Marsden, Monika Pröbster (*Heilbronn University*)
- Paper 336: Hands Holding Clues for Object Recognition in Teachable Machines**
Kyungjun Lee, Hernisa Kacorri (*University of Maryland, College Park*)
- Paper 337: Friending to Flame: How Social Features Affect Player Behaviours in an Online Collectible Card Game**
Selen Türkay, Sonam Adinolf (*Queensland University of Technology*)
- Paper 338: Sensing Fine-Grained Hand Activity with Smartwatches**
Gieran Laput, Chris Harrison (*Carnegie Mellon University*)
- Paper 339: Human-Computer Insurrection: Notes on an Anarchist HCI**
Os Keyes, Josephine Hoy, Margaret Drouhard (*University of Washington*)
- Paper 340: Beyond “One-Size-Fits-All”: Understanding the Diversity in How Software Newcomers Discover and Make Use of Help Resources**
Kimia Kiani, George Cui (*Simon Fraser University*), Andrea Bunt (*University of Manitoba*),
Joanna McGrenere (*University of British Columbia*), Parmit K. Chilana (*Simon Fraser University*)
- Paper 341: City Explorer: The Design and Evaluation of a Location-Based Community Information System**
Carolyn Pang, Rui Pan, Carman Neustaedter, Kate Hennessy (*Simon Fraser University*)
- Paper 342: Dynamics of Visual Attention in Multiparty Collaborative Problem Solving using Multidimensional Recurrence Quantification Analysis**
Hana Vrzakova, Mary Jean Amon, Angela E. B. Stewart, Sidney K. D'Mello (*University of Colorado Boulder*)
- Paper 343: Upside and Downside Risk in Online Security for Older Adults with Mild Cognitive Impairment**
Helena M. Mentis, Galina Madjaroff, Aaron K. Massey (*University of Maryland, Baltimore County*)
- Paper 344: Seekers, Providers, Welcomers, and Storytellers: Modeling Social Roles in Online Health Communities**
Diyi Yang, Robert E. Kraut (*Carnegie Mellon University*), Tenbroeck Smith (*American Cancer Society, Inc.*),
Elijah Mayfield (*Carnegie Mellon University*), Dan Jurafsky (*Stanford University*)
- Paper 345: AdaCAD: Crafting Software For Smart Textiles Design**
Mikhaila Friske, Shanel Wu, Laura Devendorf (*University of Colorado Boulder*)
- Paper 346: Trust and Recall of Information across Varying Degrees of Title-Visualization Misalignment**
Ha-Kyung Kong (*University of Illinois at Urbana-Champaign*), Zhicheng Liu (*Adobe Research*),
Karrie Karahalios (*Adobe Research & University of Illinois at Urbana-Champaign*)
- Paper 347: RealityCheck: Blending Virtual Environments with Situated Physical Reality**
Jeremy Hartmann (*University of Waterloo & Microsoft Research*),
Christian Holz, Eyal Ofek, Andrew D. Wilson (*Microsoft Research*)
- Paper 348: Lost in Style: Gaze-driven Adaptive Aid for VR Navigation**
Rawan Alghofaili (*George Mason University*), Yasuhito Sawahata (*Japan Broadcasting Corporation*),
Haikun Huang (*University of Massachusetts Boston*), Hsueh-Cheng Wang (*National Chiao Tung University*),
Takaaki Shiratori (*Facebook Reality Labs*), Lap-Fai Yu (*George Mason University*)
- Paper 349: “If It’s Important It Will Be A Headline”: Cybersecurity Information Seeking in Older Adults**
James Nicholson, Lynne Coventry, Pamela Briggs (*Northumbria University*)

Paper 350: Engaging Lived and Virtual Realities

Aditya Vishwanath (*Stanford University*), Naveena Karusala (*University of Washington*),
Marisol Wong-Villacres, Neha Kumar (*Georgia Institute of Technology*)

Paper 351: Alternative Avenues for IoT: Designing with Non-Stereotypical Homes

Audrey Desjardins, Jeremy E. Viny, Cayla Key, Nouela Johnston (*University of Washington*)

Paper 352: Collaborative Futures: Co-Designing Research Methods for Younger People Living with Dementia

Jeanette Bell, Tuck Wah Leong (*University of Technology, Sydney*)

Paper 353: "I was really, really nervous posting it": Communicating about Invisible Chronic Illnesses across Social Media Platforms

Shruti Sannon (*Cornell University*), Elizabeth I. Murnane (*Stanford University*),
Natalya N. Bazarova, Geri Gay (*Cornell University*)

Paper 354: The Effect of Field-of-View Restriction on Sex Bias in VR Sickness and Spatial Navigation Performance

Majed Al Zayer, Isayas B. Adhanom, Paul MacNeilage, Eelke Folmer (*University of Nevada*)

Paper 355: Implementing Multi-Touch Gestures with Touch Groups and Cross Events

Steve Oney, Rebecca Krosnick (*University of Michigan*), Joel Brandt (*Adobe*),
Brad Myers (*Carnegie Mellon University*)

Paper 356: Witchcraft and HCI: Morality, Modernity, and Postcolonial Computing in Rural Bangladesh

Sharifa Sultana (*Cornell University*), Syed Ishtiaque Ahmed (*University of Toronto*)

Paper 357: QuizBot: A Dialogue-based Adaptive Learning System for Factual Knowledge

Sherry Ruan (*Stanford University*), Liwei Jiang (*Colby College*),
Justin Xu, Bryce Joe-Kun Tham, Zhengneng Qiu (*Stanford University*), Yeshuang Zhu (*Tsinghua University*),
Elizabeth L. Murnane, Emma Brunskill, James A. Landay (*Stanford University*)

Paper 358: The Adventures of Older Authors: Exploring Futures through Co-Design Fictions

Aloha Hufana Ambe, Margot Brereton, Alessandro Soro, Laurie Buys, Paul Roe
(*Queensland University of Technology*)

Paper 359: Beyond The Force: Using Quadcopters to Appropriate Objects and the Environment for Haptics in Virtual Reality

Parastoo Abtahi, Benoit Landry, Jackie (Junrui) Yang, Marco Pavone, Sean Follmer, James A. Landay
(*Stanford University*)

Paper 360: Using Presence Questionnaires in Virtual Reality

Valentin Schwind (*University of Stuttgart*), Pascal Knierim (*Ludwig Maximilian University of Munich*),
Nico Haas (*University of Stuttgart*), Niels Henze (*University of Regensburg*)

Paper 361: Understanding the Social Acceptability of Mobile Devices using the Stereotype Content Model

Valentin Schwind (*University of Stuttgart*), Niklas Deierlein (*University of Hagen*),
Romina Poguntke (*VIS, University of Stuttgart*), Niels Henze (*University of Regensburg*)

Paper 362: Anchoring Effects and Troublesome Asymmetric Transfer in Subjective Ratings

Andy Cockburn (*University of Canterbury*), Carl Gutwin (*University of Saskatchewan*)

Paper 363: Aggregated Visualization of Playtesting Data

Günter Wallner (*Eindhoven University of Technology*),
Nour Halabi (*University of Ontario Institute of Technology*),
Pejman Mirza-Babaei (*University of Ontario Institute of Technology*)

Paper 364: Look-From Camera Control for 3D Terrain Maps

Kurtis Danyluk (*University of Calgary*), Bernhard Jenny (*Monash University*),
Wesley Willett (*University of Calgary*)

Paper 365: ZeRONE: Safety Drone with Blade-Free Propulsion

Wataru Yamada, Hiroyuki Manabe, Daizo Ikeda (*NTT DOCOMO*)

Paper 366: Beyond the Patient Portal: Supporting Needs of Hospitalized Patients

Shefali Haldar, Sonali R. Mishra, Maher Khelifi (*University of Washington*),
Ari H. Pollack (*Seattle Children's Hospital*), Wanda Pratt (*University of Washington*)

Paper 367: Can Privacy Be Satisfying? On Improving Viewer Satisfaction for Privacy-Enhanced Photos Using Aesthetic Transforms

Rakibul Hasan (*Indiana University*), Yifang Li (*Clemson University*),
Eman Hassan (*Indiana University*), Kelly Caine (*Clemson University*),
David J. Crandall (*Indiana University*), Roberto Hoyle (*Oberlin College*),
Apu Kapadia (*Indiana University*)

Paper 368: An Analytic Model for Time Efficient Personal Hierarchies

William Delamare (*Kochi University of Technology & University of Manitoba*),
Ali Neshati, Pourang Irani (*University of Manitoba*), Xiangshi Ren (*Kochi University of Technology*)

Paper 369: Geppetto: Enabling Semantic Design of Expressive Robot Behaviors

Ruta Desai (*Carnegie Mellon University*), Fraser Anderson, Justin Matejka (*Autodesk Research*),
Stelian Coros (*ETH Zurich*), James McCann (*Carnegie Mellon University*),
George Fitzmaurice, Tovi Grossman (*Autodesk Research*)

Paper 370: Personal Health Oracle: Explorations of Personalized Predictions in Diabetes Self-Management

Pooja M. Desai (*Columbia University Teachers College*), Elliot G. Mitchell (*Columbia University Medical Center*),
Maria L. Hwang (*Fashion Institute of Technology*), Matthew E. Levine (*California Institute of Technology*),
David J. Albers (*University of Colorado Medicine; Columbia University Medical Center*),
Lena Mamkina (*Columbia University Medical Center*)

Paper 371: Exploring Factors that Influence Connected Drivers to (Not) Use or Follow Recommended Optimal Routes

Briane Paul V. Samson (*De La Salle University & Future University Hakodate*),
Yasuyuki Sumi (*Future University Hakodate*)

Paper 372: "I Bought This for Me to Look More Ordinary": A Study of Blind People Doing Online Shopping

Guanhong Liu (*Tsinghua University & Ministry of Education*), Xianghua Ding (*Fudan University*),
Chun Yu (*Tsinghua University & Ministry of Education*), Lan Gao (*Beihang University*),
Xingyu Chi (*Kensington Park School*), Yuanchun Shi (*Tsinghua University & Ministry of Education*)

Paper 373: Touchscreen Haptic Augmentation Effects on Tapping, Drag and Drop, and Path Following

Mitchell L. Gordon (*Stanford University*), Shumin Zhai (*Google*)

Paper 374: Opportunities for Automating Email Processing: A Need-Finding Study

Soya Park, Amy X. Zhang, Luke S. Murray, David R. Karger (*Massachusetts Institute of Technology*)

Paper 375: Examining Augmented Virtuality Impairment Simulation for Mobile App Accessibility Design

Kenny Tsu Wei Choo, Rajesh Krishna Balan (*Singapore Management University*),
Youngki Lee (*Seoul National University*)

Paper 376: Accessible Gesture Typing for Non-Visual Text Entry on Smartphones

Syed Masum Billah, Yu-Jung Ko, Vikas Ashok, Xiaojun Bi, IV Ramakrishnan (*Stony Brook University*)

Paper 377: Gabber: Supporting Voice in Participatory Qualitative Practices

Jay Rainey, Kyle Montague (*Newcastle University*), Pamela Briggs (*Northumbria University*),
Robert Anderson, Thomas Nappey (*Newcastle University*), Patrick Olivier (*Monash University*)

Paper 378: Voice User Interfaces in Schools: Co-designing for Inclusion with Visually-Impaired and Sighted Pupils

Oussama Metatla, Alison Oldfield, Taimur Ahmed, Antonis Vafeas, Sunny Miglani (*University of Bristol*)

Paper 379: Programmable Donations: Exploring Escrow-Based Conditional Giving

Chris Elsden (*Northumbria University*),
Ludwig Trotter, Mike Harding, Nigel Davies (*Lancaster University*),
Chris Speed (*University of Edinburgh*), John Vines (*Northumbria University*)

Paper 380: Like A Second Skin: Understanding How Epidermal Devices Affect Human Tactile Perception

Aditya Shekhar Nittala (*Saarland University*), Klaus Kruttwig (*INM-Leibniz Institute for New Materials*), Jaeyeon Lee (*Korea Advanced Institute of Science and Technology*), Roland Bennewitz, Eduard Arzt (*INM-Leibniz Institute for New Materials*), Jürgen Steimle (*Saarland University, Saarland Informatics Campus*)

Paper 381: Exploring Crowdsourced Work in Low-Resource Settings

Manu Chopra, Indrani Medhi Thies, Joyojeet Pal, Colin Scott, William Thies, Vivek Seshadri (*Microsoft Research India*)

Paper 382: Using Both Hands: Tangibles for Stroke Rehabilitation in the Home

Mikko Kytö (*Aalto University & University of Helsinki*), Laura Maye (*Aalto University & University College Cork*), David McGookin (*Aalto University*)

Paper 383: Barriers to End-User Designers of Augmented Fabrication

Chandan Mahapatra (*Rochester Institute of Technology*), Jonas Kjeldmand Jensen (*University of Copenhagen*), Michael McQuaid (*Rochester Institute of Technology*), Daniel Ashbrook (*University of Copenhagen*)

Paper 384: Bookly: An Interactive Everyday Artifact Showing the Time of Physically Accumulated Reading Activity

Somi Ju, Kyung-Ryong Lee, Subin Kim, Young-Woo Park (*Ulsan National Institute of Science and Technology*)

Paper 385: Empowering Expression for Users with Aphasia through Constrained Creativity

Timothy Neate, Abi Roper, Stephanie Wilson, Jane Marshall (*City, University of London*)

Paper 386: The Race Towards Digital Wellbeing: Issues and Opportunities

Alberto Monge Roffarello, Luigi De Russis (*Politecnico di Torino*)

Paper 387: Autonomous Distributed Energy Systems: Problematising the Invisible through Design, Drama and Deliberation

Larissa Pschetz (*University of Edinburgh*), Kruakae Pothong (*University College London*), Chris Speed (*University of Edinburgh*)

Paper 388: Empowering End Users in Debugging Trigger-Action Rules

Fulvio Corno, Luigi De Russis, Alberto Monge Roffarello (*Politecnico di Torino*)

Paper 389: Mapping the Landscape of Creativity Support Tools in HCI

Jonas Frich, Lindsay MacDonald Vermeulen, Christian Remy, Michael Mose Biskjaer, Peter Dalsgaard (*Aarhus University*)

Paper 390: Follow the Money: Managing Personal Finance Digitally

Makayla Lewis, Mark Perry (*Brunel University London*)

Paper 391: Crowdworker Economics in the Gig Economy

Jason T. Jacques, Per Ola Kristensson (*University of Cambridge*)

Paper 392: Why Do You Need This? Selective Disclosure of Data Among Citizen Scientists

Anna Rudnicka, Anna L. Cox (*University College London*), Sandy J. J. Gould (*University of Birmingham*)

Paper 393: Frame Analysis of Voice Interaction Gameplay

Fraser Allison, Joshua Newn, Wally Smith (*The University of Melbourne*), Marcus Carter (*The University of Sydney*), Martin Gibbs (*The University of Melbourne*)

Paper 394: A Tale of Two Perspectives: A Conceptual Framework of User Expectations and Experiences of Instructional Fitness Apps

Ahed Aladwan, Ryan M. Kelly, Steven Baker, Eduardo Velloso (*University of Melbourne*)

Paper 395: PicMe: Interactive Visual Guidance for Taking Requested Photo Composition

Minju Kim (*Korea Advanced Institute of Science and Technology*), Jungjin Lee (*KAI Inc.*)

Paper 396: Power Struggles and Disciplined Designers - A Nexus Analytic Inquiry on Cross-Disciplinary Research and Design

Netta Iivari (*University of Oulu*)

Paper 397: Evaluating Sustainable Interaction Design of Digital Services: The Case of YouTube

Chris Preist, Daniel Schien, Paul Shabajee (*University of Bristol*)

Paper 398: Affinity Lens: Data-Assisted Affinity Diagramming with Augmented Reality

Hariharan Subramonyam (*University of Michigan*), Steven M. Drucker (*Microsoft Research*),
Eytan Adar (*University of Michigan*),

Paper 399: Managing Multimorbidity: Identifying Design Requirements for a Digital Self-Management Tool to Support Older Adults with Multiple Chronic Conditions

Julie Doyle (*Dundalk Institute of Technology*), Emma Murphy (*Trinity College Dublin*),
Janneke Kuiper (*Vrije Universiteit Brussel*), Suzanne Smith (*Dundalk Institute of Technology*),
Caoimhe Hannigan (*Trinity College Dublin*), An Jacobs (*Vrije Universiteit Brussel*),
John Dinsmore (*Trinity College Dublin*)

Paper 400: The Performative Mirror Space

Rachel Jacobs, Holger Schnädelbach (*University of Nottingham*), Nils Jäger (*University of Loughborough*), Silvia Leal, Robin Shackford (*Independent Creative*), Steve Benford, Roma Patel (*University of Nottingham*)

Paper 401: The Inflatable Cat: Idiosyncratic Ideation of Smart Objects for the Home

Arne Berger (*Chemnitz University of Technology*), William Odom (*Simon Fraser University*),
Michael Storz, Andreas Bischof, Albrecht Kurze (*Chemnitz University of Technology*),
Eva Hornecker (*Bauhaus-Universität Weimar*)

Paper 402: Grasping Microgestures: Eliciting Single-hand Microgestures for Handheld Objects

Adwait Sharma, Joan Sol Roo, Jürgen Steimle (*Saarland University, Saarland Informatics Campus*)

Paper 403: AutoFritz: Autocomplete for Prototyping Virtual Breadboard Circuits

Jo-Yu Lo, Da-Yuan Huang, Tzu-Sheng Kuo (*National Taiwan University*),
Chen-Kuo Sun (*National Taiwan University of Science and Technology*), Jun Gong (*Dartmouth College*),
Teddy Seyed (*University of Calgary*), Xing-Dong Yang (*Dartmouth College*),
Bing-Yu Chen (*National Taiwan University*)

Paper 404: Printer Pals: Experience-Centered Design to Support Agency for People with Dementia

Sarah Foley (*University College Cork*), Daniel Welsh (*Newcastle University*),
Nadia Pantidi (*University College Cork*), Kellie Morrissey, Tom Nappey (*Newcastle University*),
John McCarthy (*University College Cork*)

Paper 405: Using Time and Space Efficiently in Driverless Cars: Findings of a Co-Design Study

Gunnar Stevens (*University of Siegen*),
Paul Bossauer, Stephanie Vonholdt, Christina Pakusch (*Bonn-Rhein-Sieg University*)

Paper 406: Expression of Curiosity in Social Robots: Design, Perception, and Effects on Behaviour

Jessy Ceha, Nalin Chhibber, Joslin Goh, Corina McDonald (*University of Waterloo*),
Pierre-Yves Oudeyer (*Inria Bordeaux Sud-Ouest*), Dana Kulic, Edith Law (*University of Waterloo*)

Paper 407: Understanding and Mitigating Worker Biases in the Crowdsourced Collection of Subjective Judgments

Christoph Hube, Besnik Fetahu, Ujwal Gadiraju (*Leibniz Universität Hannover*)

Paper 408: Magnetips: Combining Fingertip Tracking and Haptic Feedback for Around-Device Interaction

Jess McIntosh, Paul Strohmeier (*University of Copenhagen*), Jarrod Knibbe (*Monash University*),
Sebastian Boring, Kasper Hornbæk (*University of Copenhagen*)

Paper 409: Measuring the Influences of Musical Parameters on Cognitive and Behavioral Responses to Audio Notifications Using EEG and Large-scale Online Studies

Fu-Yin Cherng, Yi-Chen Lee, Jung-Tai King, Wen-Chieh Lin (*National Chiao Tung University*)

Paper 410: Design Considerations for Interactive Office Lighting: Interface Characteristics, Shared and Hybrid Control

Thomas van de Werff (*Eindhoven University of Technology*),
Charlotte van Lotringen (*Eindhoven University of Technology & Utrecht University*),
Harm van Essen, Berry Eggen (*Eindhoven University of Technology*)

Paper 411: Will You Accept an Imperfect AI? Exploring Designs for Adjusting End-user Expectations of AI Systems

Rafal Kocielnik (*University of Washington*), Saleema Amershi, Paul N. Bennett (*Microsoft Research*)

Paper 412: Voice-Based Quizzes for Measuring Knowledge Retention in Under-Connected Populations

Agha Ali Raza, Zain Tariq, Shan Randhawa, Bilal Saleem (*Information Technology University*),
Awais Athar (*European Bioinformatics Institute (EMBL-EBI)*),
Umar Saif (*Information Technology University*),
Roni Rosenfeld (*Carnegie Mellon University*)

Paper 413: ORC Layout: Adaptive GUI Layout with OR-Constraints

Yue Jiang (*University of Maryland, College Park*),
Ruofei Du (*University of Maryland, College Park & Google, LLC*),
Christof Lutteroth (*University of Bath*), Wolfgang Stuerzlinger (*Simon Fraser University*)

Paper 414: Exploring Interaction Fidelity in Virtual Reality: Object Manipulation and Whole-Body Movements

Katja Rogers, Jana Funke, Julian Frommel, Sven Stamm, Michael Weber (*Ulm University*)

Paper 415: Can Children Understand Machine Learning Concepts? The Effect of Uncovering Black Boxes

Tom Hitron, Yoav Orlev, Iddo Wald, Ariel Shamir, Hadas Erel, Oren Zuckerman (*Interdisciplinary Center*)

Paper 416: Evaluation of Appearance-Based Methods and Implications for Gaze-Based Applications

Xucong Zhang (*Saarland Informatics Campus*), Yusuke Sugano (*Osaka University*),
Andreas Bulling (*University of Stuttgart*)

Paper 417: Explicating “Implicit Interaction”: An Examination of the Concept and Challenges for Research

Baříš Serim (*University of Helsinki & Aalto University*), Giulio Jacucci (*University of Helsinki*)

Paper 418: Charting Subtle Interaction in the HCI Literature

Henning Pohl, Andreea Muresan, Kasper Hornbæk (*University of Copenhagen*)

Paper 419: Monotasking or Multitasking: Designing for Crowdworkers’ Preferences

Laura Lascau (*University College London*), Sandy J. J. Gould (*University of Birmingham*),
Anna L. Cox, Elizaveta Karmannaya, Duncan P. Brumby (*University College London*)

Paper 420: On the Latency of USB-Connected Input Devices

Raphael Wimmer, Andreas Schmid, Florian Bockes (*University of Regensburg*)

Paper 421: Analyzing the Use of Camera Glasses in the Wild

Taryn Bipat (*University of Washington*),
Maarten Willem Bos, Rajan Vaish, Andrés Monroy-Hernández (*Snap Inc.*)

Paper 422: HawkEye – Deploying a Design Fiction Probe

Renee Noortman (*Eindhoven University of Technology*), Britta F. Schulte (*University College London*),
Paul Marshall (*University of Bristol*), Saskia Bakker (*Eindhoven University of Technology*),
Anna L. Cox (*University College London*)

Paper 423: Exploring Media Capture of Meaningful Experiences to Support Families Living with Dementia

James Hodge, Kyle Montague (*Newcastle University*), Sandra Hastings (*Silverline Memories*),
Kellie Morrissey (*Open Lab*)

Paper 424: Understanding the Impact of TVs on Technology Use and Selection by Children with Visual Impairments

Catherine M. Baker (*Creighton University*), Lauren R. Milne (*Macalester University*),
Richard E. Ladner (*University of Washington*)

Paper 425: Student Perspectives on Digital Phenotyping: The Acceptability of Using Smartphone Data to Assess Mental Health

John Rooksby (*Northumbria University*), Alistair Morrison (*University of Glasgow*),
Dave Murray-Rust (*University of Edinburgh*)

Paper 426: A-line: 4D Printing Morphing Linear Composite Structures

Guanyun Wang (*Carnegie Mellon University*), Ye Tao (*Zhejiang University & Carnegie Mellon University*),
Ozguc Bertug Capunaman, Humphrey Yang, Lining Yao (*Carnegie Mellon University*)

Paper 427: Detecting Visuo-Haptic Mismatches in Virtual Reality using the Prediction Error Negativity of Event-Related Brain Potentials

Lukas Gehrke, Sezen Akman (*Technical University of Berlin*),
Pedro Lopes (*University of Chicago & Hasso Plattner Institute, University of Potsdam*),
Albert Chen (*University of Chicago*), Avinash Kumar Singh (*National Chiao Tung University*),
Hsiang-Ting Chen, Chin-Teng Lin (*University of Technology Sydney*),
Klaus Gramann (*University of California, San Diego & Technische Universität Berlin*)

Paper 428: A Field Study of Teachers Using a Curriculum-integrated Digital Game

Zhongxiu Peddycord-Liu, Veronica Cateté, Jessica Vandenberg, Tiffany Barnes, Collin F. Lynch,
Teomara Rutherford (*North Carolina State University*)

Paper 429: Feeling Fireworks: An Inclusive Tactile Firework Display

Dorothea Reusser (*Disney Research & ETH Zurich*), Espen Knoop (*Disney Research*),
Roland Siegwart (*ETH Zurich*), Paul Beardsley (*Disney Research*)

Paper 430: Social Play in an Exergame: How the Need to Belong Predicts Adherence

Maximus D. Kaos (*Queen's University & Aalto University*), Ryan E. Rhodes (*University of Victoria*),
Perttu Hämäläinen (*Aalto University*), T.C. Nicholas Graham (*Queen's University*)

Paper 431: Around the (Virtual) World: Infinite Walking in Virtual Reality Using Electrical Muscle Stimulation

Jonas Auda, Max Pascher, Stefan Schneegass (*Universität Duisburg-Essen*)

Paper 432: How Do Distance Learners Connect?: Shared Identity, Focused Work and Future Possibilities

Na Sun, Xiying Wang, Mary Beth Rosson (*Pennsylvania State University*)

Paper 433: Security Managers Are Not The Enemy Either

Lena Reinfelder (*Friedrich-Alexander-Universität Erlangen-Nürnberg*),
Robert Landwirth (*Technical University Darmstadt & Fraunhofer SIT*),
Zinaida Benenson (*Friedrich-Alexander-Universität Erlangen-Nürnberg*)

Paper 434: Older Voices: Supporting Community Radio Production for Civic Participation in Later Life

Arlind Reuter (*Newcastle University*), Tom Bartindale (*Monash University*),
Kellie Morrissey, Thomas Scharf, Jennifer Liddle (*Newcastle University*)

Paper 435: Reveal: Investigating Proactive Location-Based Reminiscing with Personal Digital Photo Repositories

David McGookin (*Aalto University*)

Paper 436: "What is Fair Shipping, Anyway?": Using Design Fiction to Raise Ethical Awareness in an Industrial Context

Yiying Wu (*Aalto University*), Sus Lyckvi (*Chalmers University of Technology*),
Virpi Roto (*Aalto University*)

Paper 437: Our Story: Addressing Challenges in Development Contexts for Sustainable Participatory Video

Tom Bartindale (*Monash University*), Delvin Varghese (*Newcastle University*),
Guy Schofield (*University of York*),
Miki Tsukamoto (*International Federation of Red Cross & Red Crescent Societies*)

Paper 438: Integrating Multimedia Tools to Enrich Interactions in Live Streaming for Language Learning

Di (Laura) Chen (*University of Toronto*), Dustin Freeman (*Escape Character Inc.*),
Ravin Balakrishnan (*University of Toronto*)

Paper 439: Spaces and Traces: Implications of Smart Technology in Public Housing

Sandjar Kozubaev, Fernando Rochaix, Carl DiSalvo, Christopher A. Le Dantec (*Georgia Institute of Technology*)

Paper 440: Mazi: Tangible Technologies as a Channel for Collaborative Play

Antonella Nonnis, Nick Bryan-Kinns (*Queen Mary University of London*)

Paper 441: Making Diabetes Education Interactive: Tangible Educational Toys for Children with Type-1 Diabetes

Charalampos Kyfondidis, Marilyn Lennon (*University of Strathclyde*)

Paper 442: Ten-Minute Silence: A New Notification UX of Mobile Instant Messenger
In-geon Shin, Jin-min Seok, Youn-kyung Lim (*Korea Advanced Institute of Science and Technology*)

Paper 443: Quantitative Measurement of Tool Embodiment for Virtual Reality Input Alternatives
Ayman Alzayat, Mark Hancock (*University of Waterloo*),
Miguel A. Nacenta (*University of St Andrews*)

Paper 444: DMove: Directional Motion-based Interaction for Augmented Reality Head-Mounted Displays
Wenge Xu, Hai-Ning Liang, Yuxuan Zhao, Difeng Yu, Diego Monteiro
(*Xi'an Jiaotong-Liverpool University*)

Paper 445: Trigger-Action Programming for Personalising Humanoid Robot Behaviour
Nicola Leonardi, Marco Manca, Fabio Paternò, Carmen Santoro (*CNR-ISTI*)

Paper 446: Augmented Reality Views for Occluded Interaction
Klemen Lilija, Henning Pohl, Sebastian Boring, Kasper Hornbæk (*University of Copenhagen*)

Paper 447: A is for Artificial Intelligence: The Impact of Artificial Intelligence Activities on Young Children's Perceptions of Robots
Randi Williams, Hae Won Park, Cynthia Breazeal (*Massachusetts Institute of Technology*)

Paper 448: i'sFree: Eyes-Free Gesture Typing via a Touch-Enabled Remote Control
Suwen Zhu (*Stony Brook University*), Jingjie Zheng, Shumin Zhai (*Google*),
Xiaojun Bi (*Stony Brook University*)

Paper 449: Beyond Tutoring: Opportunities for Intergenerational Mentorship at a Community Level
Ye Yuan, Svetlana Yarosh (*University of Minnesota*)

Paper 450: Beyond Dyadic Interactions: Considering Chatbots as Community Members
Joseph Seering, Michal Luria, Geoff Kaufman, Jessica Hammer (*Carnegie Mellon University*)

Paper 451: Face and Ecological Validity in Simulations: Lessons from Search-and-Rescue HRI
Lorin Dole, Wendy Ju (*Cornell Tech*)

Paper 452: PaCaPa: A Handheld VR Device for Rendering Size, Shape, and Stiffness of Virtual Objects in Tool-based Interactions
Yuqian Sun (*The University of Tokyo*), Shigeo Yoshida, Takuji Narumi (*The University of Tokyo & JST PRESTO*),
Michitaka Hirose (*The University of Tokyo*)

Paper 453: Search as News Curator: The Role of Google in Shaping Attention to News Information
Daniel Trielli, Nicholas Diakopoulos (*Northwestern University*)

Paper 454: ./trilaterate: A Fabrication Pipeline to Design and 3D Print Hover-, Touch-, and Force-Sensitive Objects
Martin Schmitz, Martin Stitz, Florian Müller, Markus Funk, Max Mühlhäuser (*Technische Universität Darmstadt*)

Paper 455: Designing for Reproducibility: A Qualitative Study of Challenges and Opportunities in High Energy Physics
Sebastian S. Feger (*Ludwig Maximilian University of Munich & CERN*),
Sünje Dallmeier-Tiessen (*CERN*), Albrecht Schmidt (*Ludwig Maximilian University of Munich*),
Pawel W. Woźniak (*Utrecht University*)

Paper 456: Color Builder: A Direct Manipulation Interface for Versatile Color Theme Authoring
Maria Shugrina, Wenjia Zhang, Fanny Chevalier, Sanja Fidler, Karan Singh (*University of Toronto*)

Paper 457: A Review & Analysis of Mindfulness Research in HCI: Framing Current Lines of Research and Future Opportunities
Nada Terzimehić, Renate Häuslschmid, Heinrich Hussmann
(*Ludwig Maximilian University of Munich*), m.c. schraefel (*University of Southampton*)

Paper 458: Making Healthcare Infrastructure Work: Unpacking the Infrastructuring Work of Individuals
Xinning Gui, Yunan Chen (*University of California, Irvine*)

Paper 459: “Like Popcorn”: Crossmodal Correspondences Between Scents, 3D Shapes and Emotions in Children

Oussama Metatla (*University of Bristol*), Emanuela Maggioni (*University of Sussex*),
Clare Cullen (*University of Bristol*), Marianna Obrist (*University of Sussex*)

Paper 460: Gamification in Science: A Study of Requirements in the Context of Reproducible Research

Sebastian S. Feger (*Ludwig Maximilian University of Munich & CERN*),
Sünje Dallmeier-Tiessen (*CERN*), Paweł W. Woźniak (*Utrecht University*),
Albrecht Schmidt (*Ludwig Maximilian University of Munich*)

Paper 461: Understanding the Shared Experience of Runners and Spectators in Long-Distance Running Events

Tao Bi, Nadia Bianchi-Berthouze, Aneesha Singh, Enrico Costanza (*University College London*)

Paper 462: Local Standards for Anonymization Practices in Health, Wellness, Accessibility, and Aging Research at CHI

Jacob Abbott, Haley MacLeod, Novia Nurain, Gustave Ekobe, Sameer Patil (*Indiana University Bloomington*)

Paper 463: Dynamic Difficulty Adjustment Impact on Players’ Confidence

Thomas Constant, Guillaume Levieux (*Conservatoire National des Arts et Métiers*)

Paper 464: Continuous Alertness Assessments: Using EOG Glasses to Unobtrusively Monitor Fatigue Levels In-The-Wild

Benjamin Tag (*Keio University*),
Andrew W. Vargo (*The Kyoto College of Graduate Studies for Informatics*),
Aman Gupta, George Chernyshov, Kai Kunze (*Keio University*),
Tilman Dingler (*University of Melbourne*)

Paper 465: “Everyone Brings Their Grain of Salt”: Designing for Low-Literate Parental Engagement with a Mobile Literacy Technology in Côte d’Ivoire

Michael A. Madaio (*Carnegie Mellon University*),
Fabrice Tanoh (*Université Félix Houphouët-Boigny*),
Axel Blahoua Seri (*Institut de la Dignité et des Droits Humains*),
Kaja Jasinska (*University of Delaware*), Amy Organ (*Carnegie Mellon University*)

Paper 466: Streaming, Multi-Screens and YouTube: The New (Unsustainable) Ways of Watching in the Home

Kelly Widdicks, Mike Hazas, Oliver Bates, Adrian Friday (*Lancaster University*)

Paper 467: Overcoming Distractions during Transitions from Break to Work using a Conversational Website-Blocking System

Vincent W.-S. Tseng (*Cornell University*),
Matthew L. Lee, Laurent Denoue, Daniel Avrahami (*FX Palo Alto Laboratory, Inc.*)

Paper 468: Techies Against Facebook: Understanding Negative Sentiment Toward Facebook via User Generated Content

Abu Saleh Md Noman, Sanchari Das, Sameer Patil (*Indiana University Bloomington*)

Paper 469: Making Well-being: Exploring the Role of Makerspaces in Long Term Care Facilities

Kayla Carucci, Kentaro Toyama (*University of Michigan*)

Paper 470: Supporting Communication About Values Between People with Multiple Chronic Conditions and their Providers

Andrew B. L. Berry (*University of Washington*),
Catherine Y. Lim (*Kaiser Permanente Washington Health Research Institute*),
Tad Hirsch (*Northeastern University*), Andrea L. Hartzler (*University of Washington*),
Linda M. Kiel, Zoë A. Bermet, James D. Ralston (*Kaiser Permanente Washington Health Research Institute*)

Paper 471: SmartEye: Assisting Instant Photo Taking via Integrating User Preference with Deep View Proposal Network

Shuai Ma (*Institute of Software, Chinese Academy of Sciences & University of Chinese Academy of Sciences*),
Zijun Wei (*Stony Brook University*),
Feng Tian, Xiangmin Fan (*Institute of Software, Chinese Academy of Sciences & University of Chinese Academy of Sciences*),
Jianming Zhang (*Adobe Research*), Xiaohui Shen (*ByteDance AI Lab*),
Zhe Lin (*Adobe Research*), Jin Huang (*Chinese Academy of Sciences & University of Chinese Academy of Sciences*),
Radomír Měch (*Adobe Research*), Dimitris Samaras (*Stony Brook University*),
Hongan Wang (*Institute of Software, Chinese Academy of Sciences & University of Chinese Academy of Sciences*)

Paper 472: People Who Can Take It: How Women Wikipedians Negotiate and Navigate Safety

Amanda Menking (*University of Washington*), Ingrid Erickson (*Syracuse University*),
Wanda Pratt (*University of Washington*)

Paper 473: SuperVision: Playing with Gaze Aversion and Peripheral Vision

Argenis Ramirez Gomez, Hans Gellersen (*Lancaster University*)

Paper 474: Psychologically Inclusive Design: Cues Impact Women's Participation in STEM Education

René F. Kizilcec (*Cornell University*), Andrew J. Saltarelli (*Stanford University*)

Paper 475: What Makes a Good Conversation? Challenges in Designing Truly Conversational Agents

Leigh Clark (*University College Dublin*), Nadia Pantidi (*University College Cork*),
Orla Cooney (*University College Dublin*), Philip Doyle (*Voxis Ltd.*),
Diego Garaialde, Justin Edwards (*University College Dublin*),
Brendan Spillane, Emer Gilmartin (*Trinity College Dublin*),
Christine Murad (*University of Toronto*), Cosmin Munteanu (*University of Toronto Mississauga*),
Vincent Wade (*Trinity College Dublin*), Benjamin R. Cowan (*University College Dublin*)

Paper 476: Encumbered Interaction: A Study of Musicians Preparing to Perform

Juan Pablo Martinez Avila, Chris Greenhalgh, Adrian Hazzard, Steve Benford,
Alan Chamberlain (*The University of Nottingham*)

Paper 477: Mind the Tap: Assessing Foot-Taps for Interacting with Head-Mounted Displays

Florian Müller (*TU Darmstadt*), Joshua McManus (*Simon Fraser University*),
Sebastian Günther, Martin Schmitz, Max Mühlhäuser, Markus Funk (*TU Darmstadt*)

Paper 478: Only one item left? Heuristic Information Trumps Calorie Count When Supporting Healthy Snacking Under Low Self-Control

Daniel Reinhardt, Jörn Hurtienne (*Ulrich-Maximilians-Universität*)

Paper 479: Some Prior(s) Experience Necessary: Templates for Getting Started With Bayesian Analysis

Chanda Phelan (*University of Michigan*), Jessica Hullman (*Northwestern University*),
Matthew Kay, Paul Resnick (*University of Michigan*)

Paper 480: Parting the Red Sea: Sociotechnical Systems and Lived Experiences of Menopause

Amanda Lazar (*University of Maryland, College Park*),
Norman Makoto Su, Jeffrey Bardzell, Shaowen Bardzell (*Indiana University*)

Paper 481: Turn to the Self in Human-Computer Interaction: Care of the Self in Negotiating the Human-Technology Relationship

Yubo Kou (*Florida State University*),
Xinning Gui, Yunan Chen, Bonnie Nardi (*University of California, Irvine*)

Paper 482: Engaging High School Students in Cameroon with Exam Practice Quizzes via SMS and WhatsApp

Anthony Poon, Sarah Giroux, Parfait Eloundou-Enyegue, François Guimbretière (*Cornell University*),
Nicola Dell (*Cornell Tech*)

Paper 483: VARI-SOUND: A Varifocal Lens for Sound

Gianluca Memoli, Letizia Chisari, Jonathan P. Eccles (*University of Sussex*),
Mihai Caleap, Bruce W. Drinkwater (*University of Bristol*),
Sriram Subramanian (*University of Sussex*)

Paper 484: Co-Performing Agent: Design for Building User-Agent Partnership in Learning and Adaptive Services

Da-jung Kim, Youn-kyung Lim (*Korea Advanced Institute of Science and Technology*)

Paper 485: Leveraging Distal Vibrotactile Feedback for Target Acquisition

Jay Henderson, Jeff Avery (*University of Waterloo*), Laurent Grisoni (*University of Lille*), Edward Lank (*INRIA & University of Waterloo*)

Paper 486: Designing for the Infrastructure of the Supply Chain of Malay Handwoven Songket in Terengganu

Min Zhang, Corina Sas, Zoe Lambert (*Lancaster University*), Masitah Ahmad (*Universiti Teknologi MARA*)

Paper 487: Let Me Explain: Impact of Personal and Impersonal Explanations on Trust in Recommender Systems

Johannes Kunkel, Tim Donkers, Lisa Michael, Catalin-Mihai Barbu, Jürgen Ziegler (*University of Duisburg-Essen*)

Paper 488: Springlets: Expressive, Flexible and Silent On-Skin Tactile Interfaces

Nur Al-huda Hamdan, Adrian Wagner, Simon Voelker (*RWTH Aachen University*), Jürgen Steimle (*Saarland University, Saarland Informatics Campus*), Jan Borchers (*RWTH Aachen University*)

Paper 489: “Can you believe [1:21]?!”: Content and Time-Based Reference Patterns in Video Comments

Matin Yarmand, Dongwook Yoon, Samuel Dodson, Ido Roll, Sidney S. Fels (*University of British Columbia*)

Paper 490: Do We Care About Diversity in Human Computer Interaction: A Comprehensive Content Analysis on Diversity Dimensions in Research

Julia Himmelsbach, Stephanie Schwarz, Cornelia Gerdenitsch, Beatrix Wais-Zechmann, Jan Bobeth (*AIT Austrian Institute of Technology GmbH*), Manfred Tscheligi (*University of Salzburg & AIT Austrian Institute of Technology GmbH*)

Paper 491: Gaze-Guided Narratives: Adapting Audio Guide Content to Gaze in Virtual and Real Environments

Tiffany C.K. Kwok, Peter Kiefer, Victor R. Schinazi (*ETH Zurich*), Benjamin Adams (*University of Canterbury*), Martin Raubal (*ETH Zurich*)

Paper 492: StoryBlocks: A Tangible Programming Game To Create Accessible Audio Stories

Varsha Koushik, Darren Guinness, Shaun K. Kane (*University of Colorado Boulder*)

Paper 493: Managerial Visions: Stories of Upgrading and Maintaining the Public Restroom with IoT

Sarah E. Fox (*University of California, San Diego*), Kiley Sobel, Daniela K. Rosner (*University of Washington*)

Paper 494: User Attitudes towards Algorithmic Opacity and Transparency in Online Reviewing Platforms

Motahhare Eslami, Kristen Vaccaro (*University of Illinois at Urbana-Champaign*), Min Kyung Lee (*Carnegie Mellon University*), Amit Elazari Bar On (*University of California, Berkeley*), Eric Gilbert (*University of Michigan*), Karrie Karahalios (*University of Illinois at Urbana-Champaign*)

Paper 495: Examining the “Global” Language of Emojis: Designing for Cultural Representation

Philippe Kimura-Thollander, Neha Kumar (*Georgia Institute of Technology*)

Paper 496: Time to Scale: Generalizable Affect Detection for Tens of Thousands of Students across An Entire School Year

Stephen Hutt, Joseph F. Grafsgaard, Sidney K. D’Mello (*University of Colorado Boulder*)

Paper 497: Eye-Write: Gaze Sharing for Collaborative Writing

Grete Helena Kütt, Kevin Lee, Ethan Hardacre, Alexandra Papoutsaki (*Pomona College*)

Paper 498: Heimdall: A Remotely Controlled Inspection Workbench For Debugging Microcontroller Projects

Mitchell Karchemsky (*University of California, Berkeley*), J.D. Zamfirescu-Pereira (*Cornell Tech*), Kuan-Ju Wu (*University of California, Berkeley*), François Guimbretière (*Cornell University*), Bjoern Hartmann (*University of California, Berkeley*)

Paper 499: HOPE for Computing Education: Towards the Infrastructuring of Support for University-School Partnerships
Megan Venn-Wycherley, Ahmed Kharrufa (*Newcastle University*)

Paper 500: Unintended Consonances: Methods to Understand Robot Motor Sound Perception
Dylan Moore (*Stanford University*), Tobias Dahl (*SINTEF*), Paula Varela (*Nofima*),
Wendy Ju (*Cornell Tech*), Tormod Næs, Ingunn Berget (*Nofima*)

Paper 501: PinchList: Leveraging Pinch Gestures for Hierarchical List Navigation on Smartphones
Teng Han (*University of Manitoba*), Jie Liu (*Institute of Software, Chinese Academy of Sciences*),
Khalad Hasan (*University of British Columbia - Okanagan*), Mingming Fan (*University of Toronto*),
Junhyeok Kim (*University of Manitoba*), Jiannan Li (*University of Toronto*),
Xiangmin Fan, Feng Tian (*Institute of Software, Chinese Academy of Sciences*),
Edward Lank (*University of Waterloo*), Pourang Irani (*University of Manitoba*)

Paper 502: Together in Bed? Couples' Mobile Technology Use in Bed
Tarja Salmela, Ashley Colley, Jonna Häkkilä (*University of Lapland*)

Paper 503: 23 Ways to Nudge: A Review of Technology-Mediated Nudging in Human-Computer Interaction
Ana Caraban (*Instituto Superior Técnico, Persuasive Tech Lab, Madeira-ITI*),
Evangelos Karapanos (*Persuasive Tech Lab, Cyprus University of Technology*),
Daniel Gonçalves (*Instituto Superior Técnico, University of Lisbon*),
Pedro Campos (*Madeira-ITI, University of Madeira*)

Paper 504: ALAP: Accessible LaTeX Based Mathematical Document Authoring and Presentation
Ahtsham Manzoor, Safa Arooj, Shaban Zulfiqar, Murayyam Parvez,
Suleman Shahid, Asim Karim (*Lahore University of Management Sciences*)

Paper 505: Embodied Imagination: An Approach to Stroke Recovery Combining Participatory Performance and Interactive Technology
Rosella P. Galindo Esparza, Patrick G. T. Healey, Lois Weaver (*Queen Mary University of London*),
Matthew Delbridge (*Melbourne University*)

Paper 506: Behind the Curtain of the “Ultimate Empathy Machine”: On the Composition of Virtual Reality Nonfiction Experiences
Chris Bevan (*University of Bristol*), David Philip Green (*University of the West of England*),
Harry Farmer (*University of Bath*), Mandy Rose (*University of the West of England*),
Kirsten Cater (*University of Bristol*), Danaë Stanton Fraser, Helen Brown (*University of Bath*)

Paper 507: Online, VR, AR, Lab, and In-Situ: Comparison of Research Methods to Evaluate Smart Artifacts
Alexandra Voit, Sven Mayer, Valentin Schwind (*University of Stuttgart*),
Niels Henze (*University of Regensburg*)

Paper 508: Guideline-Based Evaluation of Web Readability
Aliaksei Miniukovich (*University of Trento*), Michele Scaltritti (*Università degli Studi di Trento*),
Simone Sulpizio (*Vita-Salute San Raffaele University*),
Antonella De Angeli (*Free University of Bolzano*)

Paper 509: Trolled by the Trolley Problem: On What Matters for Ethical Decision Making in Automated Vehicles
Alexander G. Mirnig, Alexander Meschtscherjakov (*University of Salzburg*)

Paper 510: Exploring and Designing for Memory Impairments in Depression
Chengcheng Qu, Corina Sas (*Lancaster University*), Gavin Doherty (*Trinity College Dublin*)

Paper 511: Understanding Kinaesthetic Creativity in Dance
Stacy Hsueh (*University Paris-Sud, CNRS, Inria, Université Paris-Saclay*),
Sarah Fdili Alaoui (*LRI, University Paris-Sud, CNRS, Inria, Université Paris-Saclay*),
Wendy E. Mackay (*Inria & Université Paris-Saclay*)

Paper 512: Evaluating Preference Collection Methods for Interactive Ranking Analytics
Caitlin Kuhlman, Diana Doherty, Malika Nurbekova, Goutham Deva, Zarni Phyto,
Paul-Henry Schoenhagen, MaryAnn VanValkenburg, Elke Rundensteiner,
Lane Harrison (*Worcester Polytechnic Institute*)

Paper 513: To Repeat or Not to Repeat? Redesigning Repeating Auditory Alarms Based on EEG Analysis
Yi-Chen Lee, Fu-Yin Cherng, Jung-Tai King, Wen-Chieh Lin (*National Chiao Tung University*)

Paper 514: “It Broadens My Mind”: Empowering People with Cognitive Disabilities through Computing Education
Varsha Koushik, Shaun K. Kane (*University of Colorado Boulder*)

Paper 515: Should I Agree? Delegating Consent Decisions Beyond the Individual
Bettina Nissen (*University of Edinburgh*), Victoria Neumann, Mateusz Mikusz (*Lancaster University*),
Rory Gianni (*University of Edinburgh*), Sarah Clinch (*University of Manchester*),
Chris Speed (*University of Edinburgh*), Nigel Davies (*Lancaster University*)

Paper 516: Design and Evaluation of a Social Media Writing Support Tool for People with Dyslexia
Shaomei Wu, Lindsay Reynolds, Xian Li, Francisco Guzmán (*Facebook*)

Paper 517: VIPBoard: Improving Screen-Reader Keyboard for Visually Impaired People with Character-Level Auto Correction
Weinan Shi, Chun Yu (*Tsinghua University & Ministry of Education*),
Shuyi Fan, Feng Wang, Tong Wang (*Tsinghua University*),
Xin Yi (*Tsinghua University & Ministry of Education*), Xiaojun Bi (*Stony Brook University*),
Yuanchun Shi (*Tsinghua University & Ministry of Education*)

Paper 518: Put Your Warning Where Your Link Is: Improving and Evaluating Email Phishing Warnings
Justin Petelka (*University of Washington*), Yixin Zou, Florian Schaub (*University of Michigan*)

Paper 519: Encoding Materials and Data for Iterative Personalization
Troy Nachigall (*Eindhoven University of Technology*),
Oscar Tomico (*Eindhoven University of Technology & Elisava*),
Ron Wakkary (*Eindhoven University of Technology & Simon Fraser University*),
Pauline van Dongen (*Eindhoven University of Technology*)

Paper 520: Automation Accuracy Is Good, but High Controllability May Be Better
Quentin Roy, Futian Zhang, Daniel Vogel (*University of Waterloo*)

Paper 521: Gehna: Exploring the Design Space of Jewelry as an Input Modality
Jatin Arora, Kartik Mathur, Aryan Saini, Aman Parnami (*Indraprastha Institute of Information Technology*)

Paper 522: I’m a Giant: Walking in Large Virtual Environments at High Speed Gains
Parastoo Abtahi (*Stanford University*), Mar Gonzalez-Franco, Eyal Ofek (*Microsoft Research*),
Anthony Steed (*University College London*)

Paper 523: Understanding the Impact of Information Representation on Willingness to Share Information
Stefan Schneegass (*University of Duisburg-Essen*), Romina Poguntke (*University of Stuttgart*),
Tonja Machulla (*LMU Munich*)

Paper 524: The Impact of Web Browser Reader Views on Reading Speed and User Experience
Qisheng Li (*University of Washington*), Meredith Ringel Morris (*Microsoft Research*),
Adam Fournier (*Microsoft Research*), Kevin Larson (*Microsoft*),
Katharina Reinecke (*University of Washington*)

Paper 525: Does Being Verified Make You More Credible? Account Verification’s Effect on Tweet Credibility
Tavish Vaidya (*Georgetown University*),
Daniel Votipka, Michelle L. Mazurek (*University of Maryland, College Park*),
Micah Sherr (*Georgetown University*)

Paper 526: Does Who Matter? Studying the Impact of Relationship Characteristics on Receptivity to Mobile IM Messages
Hao-Ping Lee, Kuan-Yin Chen, Chih-Heng Lin (*National Chiao Tung University*),
Chia-Yu Chen (*National Chengchi University*), Yu-Lin Chung (*National Tsing Hua University*),
Yung-Ju Chang (*National Chiao Tung University*), Chien-Ru Sun (*National Chengchi University*)

Paper 527: #HandsOffMyADA: A Twitter Response to the ADA Education and Reform Act

Brooke E. Auxier, Cody L. Buntain, Paul Jaeger, Jennifer Golbeck,
Hernisa Kacorri (*University of Maryland, College Park*)

Paper 528: Poirot: A Web Inspector for Designers

Kesler Tanner (*Stanford University*), Naomi Johnson (*University of Virginia*),
James A. Landay (*Stanford University*)

Paper 529: Understanding and Designing for Deaf or Hard of Hearing Drivers on Uber

Sooyeon Lee (*Pennsylvania State University*), Bjorn Hubert-Wallander, Molly Stevens (*Uber Technologies, Inc.*),
John M. Carroll (*Pennsylvania State University*)

Paper 530: Street-Level Algorithms: A Theory at the Gaps Between Policy and Decisions

Ali Alkhatib, Michael Bernstein (*Stanford University*)

Paper 531: Cicero: Multi-Turn, Contextual Argumentation for Accurate Crowdsourcing

Quanze Chen, Jonathan Bragg, Lydia B. Chilton, Dan S. Weld (*University of Washington*)

Paper 532: Personalising the TV Experience using Augmented Reality: An Exploratory Study on Delivering Synchronised Sign Language Interpretation

Vinoba Vinayagamoorthy, Maxine Glancy (*BBC R&D*), Christoph Ziegler, Richard Schäffer (*IRT*)

Paper 533: FTVR in VR: Evaluation of 3D Perception With a Simulated Volumetric Fish-Tank Virtual Reality Display

Dylan Fafard, Ian Stavness, Martin Dechant, Regan Mandryk (*University of Saskatchewan*),
Qian Zhou, Sidney Fels (*University of British Columbia*)

Paper 534: Exploring How Privacy and Security Factor into IoT Device Purchase Behavior

Pardis Emami-Naeini, Henry Dixon, Yuvraj Agarwal, Lorrie Faith Cranor (*Carnegie Mellon University*)

Paper 535: An Explanation of Fitts' Law-like Performance in Gaze-Based Selection Tasks Using a Psychophysics Approach

Immo Schuetz, T. Scott Murdison, Kevin J. MacKenzie, Marina Zannoli (*Facebook Reality Labs*)

Paper 536: MultiTrack: Multi-User Tracking and Activity Recognition Using Commodity WiFi

Sheng Tan, Linghan Zhang, Zi Wang, Jie Yang (*Florida State University*)

Paper 537: What is Mixed Reality?

Maximilian Speicher (*University of Michigan & C&A Europe*),
Brian D. Hall, Michael Nebeling (*University of Michigan*)

Paper 538: Machine Heuristic: When We Trust Computers More than Humans with Our Personal Information

S. Shyam Sundar, Jinyoung Kim (*The Pennsylvania State University*)

Paper 539: Critter: Augmenting Creative Work with Dynamic Checklists, Automated Quality Assurance, and Contextual Reviewer Feedback

Aditya Bharadwaj (*Virginia Tech*), Pao Siangliue, Adam Marcus (*B12*), Kurt Luther (*Virginia Tech*)

Paper 540: Do People Consume the News they Trust?: Incidental News Usage and the High-Choice Media Environment

Harsh Taneja (*University of Illinois Urbana-Champaign*), Katie Yaeger (*University of Missouri*)

Paper 541: Saliency Deficit and Motion Outlier Detection in Animated Scatterplots

Rafael Veras, Christopher Collins (*University of Ontario Institute of Technology*)

Paper 542: Understanding Affective Experiences with Conversational Agents

Xi Yang, Marco Aurisicchio, Weston Baxter (*Imperial College London*)

Paper 543: Rehumanized Crowdsourcing: A Labeling Framework Addressing Bias and Ethics in Machine Learning

Natã M. Barbosa (*Syracuse University & Figure Eight Inc.*), Monchu Chen (*Figure Eight Inc.*)

Paper 544: What Can We Learn from Augmented Reality (AR)?: Benefits and Drawbacks of AR for Inquiry-based Learning of Physics

Iulian Radu, Bertrand Schneider (*Harvard University*)

Paper 545: Serpentine: A Self-Powered Reversibly Deformable Cord Sensor for Human Input

Fereshteh Shahmiri, Chaoyu Chen, Anandghan Waghmare, Dingtian Zhang,
Shivan Mittal, Steven L. Zhang (*Georgia Institute of Technology*),
Yi-Cheng Wang (*University of Illinois at Urbana-Champaign*),
Zhong Lin Wang, Thad E. Starner, Gregory D. Abowd (*Georgia Institute of Technology*)

Paper 546: VRsneaky: Increasing Presence in VR Through Gait-Aware Auditory Feedback

Matthias Hopp, Jakob Karolus, Felix Dietz (*Ludwig Maximilian University of Munich*),
Pawel W. Woźniak (*Utrecht University*),
Albrecht Schmidt, Tonja Machulla (*Ludwig Maximilian University of Munich*)

Paper 547: Comparing the Effects of Paper and Digital Checklists on Team Performance in Time-Critical Work

Leah Kulp, Aleksandra Sarcevic (*Drexel University*),
Megan Cheng, Yinan Zheng, Randall S. Burd (*Children's National Medical Center*)

Paper 548: Enabling Identification and Behavioral Sensing in Homes using Radio Reflections

Chen-Yu Hsu, Rumen Hristov, Guang-He Lee, Mingmin Zhao,
Dina Katabi (*Massachusetts Institute of Technology*)

Paper 549: I (Don't) See What You Typed There! Shoulder-surfing Resistant Password Entry on Gamepads

Peter Mayer, Nina Gerber, Benjamin Reinheimer (*Karlsruhe Institute of Technology*),
Philipp Rack, Kristoffer Braun (*Technische Universität Darmstadt*),
Melanie Volkamer (*SECUSO, Karlsruhe Institute of Technology*)

Paper 550: NVGaze: An Anatomically-Informed Dataset for Low-Latency, Near-Eye Gaze Estimation

Joohwan Kim, Michael Stengel, Alexander Majercik, Shalini De Mello (*NVIDIA*),
David Dunn (*University of North Carolina - Chapel Hill*),
Samuli Laine, Morgan McGuire, David Luebke (*NVIDIA*)

Paper 551: Transforming Game Difficulty Curves using Function Composition

Anurag Sarkar, Seth Cooper (*Northeastern University*)

Paper 552: How Users Interpret Bugs in Trigger-Action Programming

Will Brackenbury, Abhimanyu Deora, Jillian Ritchey, Jason Vallee, Weijia He (*University of Chicago*),
Guan Wang, Michael L. Littman (*Brown University*), Blase Ur (*University of Chicago*)

Paper 553: Evaluating Expert Curation in a Baby Milestone Tracking App

Ayelet Ben-Sasson (*University of Haifa*),
Eli Ben-Sasson, Kayla Jacobs, Elisheva Rotman Argaman, Eden Saig (*Technion*)

Paper 554: Pose-Guided Level Design

Yongqi Zhang, Biao Xie, Haikun Huang, Elisa Ogawa, Tongjian You (*University of Massachusetts Boston*),
Lap-Fai Yu (*George Mason University*)

Paper 555: Improving Early Navigation in Time-Lapse Video with Spread-Frame Loading

Carl Gutwin, Michael van der Kamp, Md. Sami Uddin, Kevin Stanley, Ian Stavness (*University of Saskatchewan*),
Sally Vail (*Agriculture and Agri-Food Canada*)

Paper 556: Evaluating Pan and Zoom Timelines and Sliders

Michail Schwab, Sicheng Hao, Olga Vitek (*Northeastern University*),
James Tompkin, Jeff Huang (*Brown University*), Michelle A. Borkin (*Northeastern University*)

Paper 557: Investigating Implicit Gender Bias and Embodiment of White Males in Virtual Reality with Full Body Visuomotor Synchrony

Sarah Lopez, Yi Yang, Kevin Beltran, Soo Jung Kim, Jennifer Cruz Hernandez, Chelsy Simran,
Bingkun Yang, Beste F. Yuksel (*University of San Francisco*)

Paper 558: Haptipedia: Accelerating Haptic Device Discovery to Support Interaction & Engineering Design

Hasti Seifi, Farimah Fazlollahi (*Max Planck Institute for Intelligent Systems*),
Michael Oppermann, John Andrew Sastrillo, Jessica Ip, Ashutosh Agrawal (*University of British Columbia*),
Gunhyuk Park, Katherine J. Kuchenbecker (*Max Planck Institute for Intelligent Systems*),
Karon E. MacLean (*University of British Columbia*)

**Paper 559: Explaining Decision-Making Algorithms through UI:
Strategies to Help Non-Expert Stakeholders**

Hao-Fei Cheng (*University of Minnesota*), Ruotong Wang (*Macalester College*),
Zheng Zhang (*University of Minnesota*), Fiona O'Connell (*University of Chicago*),
Terrance Gray, F. Maxwell Harper, Haiyi Zhu (*University of Minnesota*)

**Paper 560: Geometrically Compensating Effect of End-to-End Latency
in Moving-Target Selection Games**

Injung Lee (*Korea Advanced Institute of Science and Technology*), Sunjun Kim (*Aalto University*),
Byungjoo Lee (*Korea Advanced Institute of Science and Technology*)

Paper 561: Who Gets to Future? Race, Representation, and Design Methods in Africatown

Jasper Tran O'Leary (*University of Washington*), Sara Zewde (*Studio Zewde*),
Jennifer Mankoff, Daniela K. Rosner (*University of Washington*)

**Paper 562: Cross-Device Taxonomy: Survey, Opportunities and Challenges of Interactions
Spanning Across Multiple Devices**

Frederik Brudy (*University College London*), Christian Holz (*Microsoft Research*),
Roman Rädle (*Aarhus University*), Chi-Jui Wu, Steven Houben (*Lancaster University*),
Clemens Nylandsted Klokmose (*Aarhus University*), Nicolai Marquardt (*University College London*)

**Paper 563: The Gendered Geography of Contributions to OpenStreetMap: Complexities
in Self-Focus Bias**

Maitraye Das, Brent Hecht, Darren Gergle (*Northwestern University*)

Paper 564: Shaping Pro-Social Interaction in VR: An Emerging Design Framework

Joshua McVeigh-Schultz, Anya Kolesnichenko, Katherine Isbister (*University of California, Santa Cruz*)

Paper 565: Behind the Voices: The Practice and Challenges of Esports Casters

Lucas Kempe-Cook, Stephen Tsung-Han Sher, Norman Makoto Su (*Indiana University*)

Paper 566: Kyub: A 3D Editor for Modeling Sturdy Laser-Cut Objects

Patrick Baudisch, Arthur Silber, Yannis Kommana, Milan Gruner, Ludwig Wall, Kevin Reuss, Lukas Heilman, Robert Kovacs, Daniel Rechlitz, Thijs Roumen (*Hasso Plattner Institute*)

**Paper 567: FiberWire: Embedding Electronic Function into 3D Printed Mechanically Strong,
Lightweight Carbon Fiber Composite Objects**

Saiganesh Swaminathan, Kadri Bugra Oztemiz, Carmel Majidi, Scott E. Hudson (*Carnegie Mellon University*)

Paper 568: Tool Extension in Human-Computer Interaction

Joanna Bergström, Aske Mottelson, Andreea Muresan, Kasper Hornbaek (*University of Copenhagen*)

Paper 569: Participatory Design of VR Scenarios for Exposure Therapy

Eivind Fløbak (*University of Bergen*), Jo D. Wake (*University of Bergen & NORCE*),
Joakim Vindenes (*University of Bergen*), Smiti Kahlon (*Haukeland University Hospital*),
Tine Nordgreen (*Haukeland University Hospital & University of Bergen*),
Frode Guribye (*University of Bergen & Haukeland University Hospital*)

Paper 570: Steering Performance with Error-accepting Delays

Shota Yamanaka (*Yahoo Japan Corporation*)

Paper 571: Card Mapper: Enabling Data-Driven Reflections on Ideation Cards

Dimitrios Darzentas (*University of Nottingham*), Raphael Velt (*Breda University of Applied Sciences*),
Richard Wetzel (*Lucerne University of Applied Sciences and Arts*),
Peter J. Craigon, Hanne G. Wagner (*University of Nottingham*),
Lachlan D. Urquhart (*University of Edinburgh*), Steve Benford (*University of Nottingham*)

**Paper 572: REsCUE: A framework for REal-time feedback on behavioral CUEs
using multimodal anomaly detection**

Riku Arakawa (*University of Tokyo*), Hiromu Yakura (*Teambox Inc. & University of Tsukuba*)

Paper 573: Visualizing Uncertainty and Alternatives in Event Sequence Predictions

Shunan Guo (*East China Normal University*),
Fan Du, Sana Malik, Eunyee Koh, Sungchul Kim, Zhicheng Liu, Donghyun Kim (*Adobe Research*),
Hongyuan Zha (*East China Normal University*), Nan Cao (*Tongji University*)

Paper 574: Towards Understanding the Design of Positive Pre-sleep Through a Neurofeedback Artistic Experience

Nathan Arthur Semertzidis, Betty Sargeant, Justin Dwyer, Florian Floyd Mueller, Fabio Zambetta (*RMIT University*)

Paper 575: MessageOnTap: A Suggestive Interface to Facilitate Messaging-related Tasks

Fanglin Chen (*Carnegie Mellon University*), Kewei Xia (*Wuhan University*), Karan Dhabalia, Jason I. Hong (*Carnegie Mellon University*)

Paper 576: HeatCraft: Designing Playful Experiences with Ingestible Sensors via Localized Thermal Stimuli

Zhuying Li, Yan Wang (*RMIT University*), Wei Wang, Chen (*University of Melbourne*), Ti Hoang (*RMIT University*), Stefan Greuter (*Deakin University*), Florian Floyd Mueller (*RMIT University*)

Paper 577: TalkTraces: Real-Time Capture and Visualization of Verbal Content in Meetings

Senthil Chandrasegaran (*University of California, Davis*), Chris Bryan (*Arizona State University*), Hidekazu Shidara, Tung-Yen Chuang, Kwan-Liu Ma (*University of California, Davis*)

Paper 578: DreamGigs: Designing a Tool to Empower Low-Resource Job Seekers

Tawanna R. Dillahunt, Alex Lu (*University of Michigan*)

Paper 579: Gamut: A Design Probe to Understand How Data Scientists Understand Machine Learning Models

Fred Hohman (*Georgia Institute of Technology*), Andrew Head (*University of California, Berkeley*), Rich Caruana, Robert DeLine, Steven M. Drucker (*Microsoft Research*)

Paper 580: Guerilla Warfare and the Use of New (and Some Old) Technology: Lessons from FARC's Armed Struggle in Colombia

Débora de Castro Leal, Max Krueger (*University of Siegen*), Kaoru Misaki (*International Institute of Socio-Informatics*), David Randall, Volker Wulf (*University of Siegen*),

Paper 581: Abstract Machines: Overlaying Virtual Worlds on Physical Rides

Paul Tennent, Joe Marshall, Patrick Brundell, Brendan Walker, Steve Benford (*University of Nottingham*)

Paper 582: What's Missing: The Role of Instructional Design in Children's Games-Based Learning

Laura Benton, Asimina Vasalou (*University College London*), Wolmet Barendregt, Leona Bunting (*University of Gothenburg*), Andrea Révész (*University College London*)

Paper 583: Impacts of Telemanipulation in Robotic Assisted Surgery

Ignacio Avellino, Gilles Bailly (*Sorbonne Université, CNRS, ISIR*), Geoffroy Canlorbe (*Hôpital Pitié Salpêtrière & Sorbonne Université*), Jérémie Belghihi (*Hôpital Pitié Salpêtrière*), Guillaume Morel, Marie-Aude Vitrani (*Sorbonne Université, CNRS, ISIR*)

Paper 584: SmartManikin: Virtual Humans with Agency for Design Tools

Bokyung Lee, Taeil Jin, Sung-Hee Lee, Daniel Saakes (*Korea Advanced Institute of Science and Technology*)

Paper 585: TrackCap: Enabling Smartphones for 3D Interaction on Mobile Head-Mounted Displays

Peter Mohr (*Graz University of Technology & VRVis Zentrum fur Virtual Reality und Visualisierung Forschungs-GmbH*), Markus Tatzgern (*Salzburg University of Applied Sciences*), Tobias Langlotz (*University of Otago*), Andreas Lang (*Graz University of Technology & Salzburg University of Applied Sciences*), Dieter Schmalstieg, Denis Kalkofen (*Graz University of Technology*)

Paper 586: Continuous Evaluation of Video Lectures from Real-Time Difficulty Self-Report

Namrata Srivastava, Eduardo Veloso (*University of Melbourne*), Jason M. Lodge (*University of Queensland*), Sarah Erfani, James Bailey (*The University of Melbourne*)

Paper 587: Group Interactions in Location-Based Gaming: A Case Study of Raiding in Pokéémon GO

Arpita Bhattacharya, Travis W. Windleharth, Rio Anthony Ishii, Ivy M. Acevedo, Cecilia R. Aragon, Julie A. Kientz, Jason C. Yip, Jin Ha Lee (*University of Washington*)

Paper 588: Interstices: Sustained Spatial Relationships between Hands and Surfaces Reveal Anticipated Action

Andrew M. Webb (*Inria, Université Paris-Saclay and Texas A&M University*),
Hannah Fowler, Andruid Kerne, Galen Newman (*Texas A&M University*),
Jun-Hyun Kim (*Michigan State University*), Wendy E. Mackay (*Inria, Université Paris-Saclay*)

Paper 589: Vulnerability & Blame: Making Sense of Unauthorized Access to Smartphones

Diogo Marques, Tiago Guerreiro, Luís Carriço (*Universidade de Lisboa*),
Ivan Beschastnikh, Konstantin Beznosov (*University of British Columbia*)

Paper 590: Understanding Online News Behaviors

Frank Bentley, Katie Quehl, Jordan Wirfs-Brock, Melissa Bica (*Yahoo/Oath*)

Paper 591: VelociWatch: Designing and Evaluating a Virtual Keyboard for the Input of Challenging Text

Keith Vertanen, Dylan Gaines, Crystal Fletcher, Alex M. Stanage,
Robbie Watling (*Michigan Technological University*), Per Ola Kristensson (*University of Cambridge*)

Paper 592: Co-Designing Food Trackers with Dietitians: Identifying Design Opportunities for Food Tracker Customization

Yuhan Luo, Peiyi Liu, Eun Kyoung Choe (*University of Maryland, College Park*)

Paper 593: Engaging Low-Income African American Older Adults in Health Discussions through Community-based Design Workshops

Christina N. Harrington, Katya Borgos-Rodriguez, Anne Marie Piper (*Northwestern University*)

Paper 594: It's My Data! Tensions Among Stakeholders of a Learning Analytics Dashboard

Kaiwen Sun, Abraham H. Mhaidli, Sonakshi Watel, Christopher A. Brooks,
Florian Schaub (*University of Michigan*)

Paper 595: Automating the Administration and Analysis of Psychiatric Tests: The Case of Attachment in School Age Children

Giorgio Roffo, Dong-Bach Vo, Mohammad Tayarani,
Maki Rooksby, Alessandra Sorrentino (*University of Glasgow*), Simona Di Folco (*University of Edinburgh*),
Helen Minnis, Stephen Brewster, Alessandro Vinciarelli (*University of Glasgow*)

Paper 596: 360proto: Making Interactive Virtual Reality & Augmented Reality Prototypes from Paper

Michael Nebeling, Katy Madier (*University of Michigan*)

Paper 597: A Walk on the Child Side: Investigating Parents' and Children's Experience and Perspective on Mobile Technology for Outdoor Child Independent Mobility

Michela Ferron, Chiara Leonardi, Paolo Massa, Gianluca Schiavo, Amy L. Murphy,
Elisabetta Farella (*Fondazione Bruno Kessler*)

Paper 598: Voice Presentation Attack Detection through Text-Converted Voice Command Analysis

Il-Youp Kwak, Jun Ho Huh, Seung Taek Han, Iljoo Kim (*Samsung Research*),
Jiwon Yoon (*Korea University*)

Paper 599: Emotion and Experience in Negotiating HIV-Related Digital Resources: "It's not just a runny nose!"

Aneesha Singh, Jo Gibbs, Ann Blandford (*University College London*),

Paper 600: Improving Fairness in Machine Learning Systems: What Do Industry Practitioners Need?

Kenneth Holstein (*Carnegie Mellon University*), Jennifer Wortman Vaughan (*Microsoft Research*),
Hal Daumé (*Microsoft Research & University of Maryland*),
Miro Dudik, Hanna Wallach (*Microsoft Research*)

Paper 601: Designing Theory-Driven User-Centric Explainable AI

Danding Wang (*National University of Singapore*), Qian Yang (*Carnegie Mellon University*),
Ashraf Abdul, Brian Y. Lim (*National University of Singapore*)

Paper 602: Emotion Work in Experience-Centered Design

Madeline Balaam, Rob Comber (*KTH Royal Institute of Technology*),
Rachel E. Clarke (*Northumbria University*), Charles Windlin (*KTH Royal Institute of Technology*),
Anna Ståhl (*RISE, Research Institutes of Sweden*),
Kristina Höök (*KTH Royal Institute of Technology*), Geraldine Fitzpatrick (*Technische Universität Wien*)

Paper 603: Voice as a Design Material: Sociophonetic Inspired Design Strategies in Human-Computer Interaction

Selina Jeanne Sutton (*Northumbria University*), Paul Foulkes (*University of York*),
David Kirk, Shaun Lawson (*Northumbria University*)

Paper 604: A Promise Is A Promise: The Effect of Commitment Devices on Computer Security Intentions

Alisa Frik (*International Computer Science Institute & University of California, Berkeley*),
Nathan Malkin (*University of California, Berkeley*),
Marian Harbach (*International Computer Science Institute*), Eyal Peer (*Hebrew University of Jerusalem*),
Serge Egelman (*International Computer Science Institute & University of California, Berkeley*)

Paper 605: Security – Visible, Yet Unseen?: How Displaying Security Mechanisms Impacts User Experience and Perceived Security

Verena Distler, Marie-Laure Zollinger, Carine Lallemand, Peter B. Roenne, Peter Y. A. Ryan,
Vincent Koenig (*University of Luxembourg*)

Paper 606: Designing User Interface Elements to Improve the Quality and Civility of Discourse in Online Commenting Behaviors

Joseph Seering, Tianmi Fang, Luca Damasco, Mianhong ‘Cherie’ Chen, Likang Sun,
Geoff Kaufman (*Carnegie Mellon University*)

Paper 607: The “Comadre” Project: An Asset-Based Design Approach to Connecting Low-Income Latinx Families to Out-of-School Learning Opportunities

Alexander Cho, Roxana G. Herrera, Luis Chaidez, Adilene Uriostegui (*University of California, Irvine*)

Paper 608: Warping Deixis: Distorting Gestures to Enhance Collaboration

Maurício Sousa, Rafael Kufner dos Anjos, Daniel Mendes (*INESC-ID Lisboa & University of Lisbon*),
Mark Billinghurst (*University of South Australia*),
Joaquim Jorge (*INESC-ID Lisboa & University of Lisbon*)

Paper 609: The Mental Image Revealed by Gaze Tracking

Xi Wang, Andreas Ley, Sebastian Koch (*Technische Universität Berlin*),
David Lindlbauer (*Technische Universität Berlin & ETH Zurich*),
James Hays (*Georgia Institute of Technology*), Kenneth Holmqvist (*Universität Regensburg*),
Marc Alexa (*Technische Universität Berlin*)

Paper 610: Care and Design: An Ethnography of Mutual Recognition in the Context of Advanced Dementia

Sarah Foley, Nadia Pantidi, John McCarthy (*University College Cork*)

Paper 611: Communication Cost of Single-user Gesturing Tool in Laparoscopic Surgical Training

Yuanyuan Feng (*University of Maryland, Baltimore County*), Katie Li (*Pomona College*),
Azin Semsar, Hannah McGowan (*University of Maryland, Baltimore County*),
Jacqueline Mun (*Vassar College*), H. Reza Zahiri (*Anne Arundel Medical Center*),
Ivan George (*Johns Hopkins University*), Adrian Park (*Anne Arundel Medical Center*),
Andrea Kleinsmith, Helena M. Mentis (*University of Maryland, Baltimore County*)

Paper 612: Resolving Target Ambiguity in 3D Gaze Interaction through VOR Depth Estimation

Diako Mardanbegi (*Lancaster University*), Tobias Langlotz (*University of Otago*),
Hans Gellersen (*Lancaster University*)

Paper 613: Slow Robots for Unobtrusive Posture Correction

Joon-Gi Shin (*Korea Advanced Institute of Science and Technology*), Eiji Onchi (*University of Tsukuba*),
Maria Jose Reyes (*Korea Advanced Institute of Science and Technology*), Junbong Song (*teamVoid*),
Uichin Lee (*Korea Advanced Institute of Science and Technology*), Seung-Hee Lee (*University of Tsukuba*),
Daniel Saakes (*Korea Advanced Institute of Science and Technology*)

Paper 614: Understanding Digitally-Mediated Empathy: An Exploration of Visual, Narrative, and Biosensory Informational Cues

Max T. Curran, Jeremy Raboff Gordon, Lily Lin (*University of California, Berkeley*),
Priyashri Kamlesh Sridhar (*Singapore University of Technology and Design*),
John Chuang (*University of California, Berkeley*)

Paper 615: Understanding Personal Productivity: How Knowledge Workers Define, Evaluate, and Reflect on Their Productivity

Young-Ho Kim (*Seoul National University*), Eun Kyoung Choe (*University of Maryland, College Park*), Bongshin Lee (*Microsoft Research*), Jinwook Seo (*Seoul National University*)

Paper 616: Vistribute: Distributing Interactive Visualizations in Dynamic Multi-Device Setups

Tom Horak (*Technische Universität Dresden*), Andreas Mathisen, Clemens N. Klokmosse (*Aarhus University*), Raimund Dachselt (*Technische Universität Dresden*), Niklas Elmquist (*University of Maryland, College Park*)

Paper 617: Dancing With Drones: Crafting Novel Artistic Expressions Through Intercorporeality

Sara Eriksson (*KTH Royal Institute of Technology*), Åsa Unander-Scharin (*Luleå University of Technology*), Vincent Trichon (*KTH Royal Institute of Technology*), Carl Unander-Scharin (*Karlstad University*), Hedvig Kjellström (*KTH Royal Institute of Technology*), Kristina Höök (*KTH Royal Institute of Technology*)

Paper 618: Crossing-Based Selection with Virtual Reality Head-Mounted Displays

Huawei Tu, Susu Huang, Jiabin Yuan (*Nanjing University of Aeronautics and Astronautics*), Xiangshi Ren (*Kochi University of Technology*), Feng Tian (*Institute of Software, Chinese Academy of Sciences*)

Paper 619: ARPen: Mid-Air Object Manipulation Techniques for a Bimanual AR System with Pen & Smartphone

Philipp Wacker, Oliver Nowak, Simon Voelker, Jan Borchers (*RWTH Aachen University*)

Paper 620: NaviBike: Comparing Unimodal Navigation Cues for Child Cyclists

Andrii Matvienko (*OFFIS - Institute for Information Technology*), Swamy Ananthanarayan (*University of Oldenburg*), Abdallah El Ali (*Centrum Wiskunde & Informatica (CWI)*), Wilko Heuten (*OFFIS - Institute for Information Technology*), Susanne Boll (*University of Oldenburg*)

Paper 621: Audible Panorama: Automatic Spatial Audio Generation for Panorama Imagery

Haikun Huang, Michael Solah (*University of Massachusetts, Boston*), Dingzeyu Li (*Adobe Research & Columbia University*), Lap-Fai Yu (*George Mason University*)

Paper 622: Interactive Body-Driven Graphics for Augmented Video Performance

Nazmus Saquib (*Massachusetts Institute of Technology*), Rubaiat Habib Kazi, Li-Yi Wei (*Adobe Research*), Wilmot Li (*Adobe*)

Paper 623: Augmenting Couples' Communication with *Lifelines*: Shared Timelines of Mixed Contextual Information

Carla F. Griggio (*University Paris-Sud, CNRS, Inria & Université Paris-Saclay*), Midas Nouwens (*Aarhus University & University Paris-Sud, CNRS, Inria, Université Paris-Saclay*), Joanna McGrenere (*University of British Columbia & University Paris-Sud, CNRS, Inria, Université Paris-Saclay*), Wendy E. Mackay (*Inria & Université Paris-Saclay*)

Paper 624: Friend, Collaborator, Student, Manager: How Design of an AI-Driven Game Level Editor Affects Creators

Matthew Guzdial, Nicholas Liao, Jonathan Chen, Shao-Yu Chen, Shukan Shah, Vishwa Shah, Joshua Reno (*Georgia Institute of Technology*), Gillian Smith (*Worcester Polytechnic Institute*), Mark O. Riedl (*Georgia Institute of Technology*)

Paper 625: A Design Space for Gaze Interaction on Head-mounted Displays

Teresa Hirzle, Jan Gugenheimer, Florian Geiselhart (*Ulm University*), Andreas Bulling (*University of Stuttgart*), Enrico Rukzio (*University of Ulm*)

Paper 626: The Heat is On: Exploring User Behaviour in a Multisensory Virtual Environment for Fire Evacuation

Emily Shaw, Tessa Roper, Tommy Nilsson, Glyn Lawson, Sue V.G. Cobb, Daniel Miller (*University of Nottingham*)

Paper 627: Transformation through Provocation?: Designing a “Bot of Conviction” to Challenge Conceptions and Evoke Critical Reflection

Maria Roussou (*National and Kapodistrian University of Athens*), Sara Perry (*University of York*), Akrivi Katifori (*Athena Research & Innovation Center*), Stavros Vassos (*Helvia Technologies*), Angeliki Tzouganatou (*University of Hamburg*), Sierra McKinney (*University of York*)

Paper 628: FoldTronics: Creating 3D Objects with Integrated Electronics Using Foldable Honeycomb Structures

Junichi Yamaoka (*The University of Tokyo & Massachusetts Institute of Technology*),
Mustafa Doga Dogan, Katarina Bulovic (*Massachusetts Institute of Technology*),
Kazuya Saito, Yoshihiro Kawahara, Yasuaki Kakehi (*The University of Tokyo*),
Stefanie Mueller (*Massachusetts Institute of Technology*)

Paper 629: An Exploration of Bitcoin Mining Practices: Miners' Trust Challenges and Motivations

Irni Eliana Khairuddin (*Universiti Teknologi MARA*), Corina Sas (*Lancaster University*)

Paper 630: JourneyCam: Exploring Experiences of Accessibility and Mobility among Powered Wheelchair Users through Video and Data

Sunil Rodger, Dan Jackson (*Newcastle University*), John Vines (*Northumbria University*),
Janice McLaughlin, Peter Wright (*Newcastle University*)

Paper 631: Let's Play Together: Adaptation Guidelines of Board Games for Players with Visual Impairment

Frederico da Rocha Tomé Filho (*University of Ontario Institute of Technology*),
Pejman Mirza-Babaei (*University of Ontario Institute of Technology*),
Bill Kapralos (*University of Ontario Institute of Technology*),
Glaudiney Moreira Mendonça Junior (*Federal University of Ceará*)

Paper 632: ElectroDermis: Fully Untethered, Stretchable, and Highly-Customizable Electronic Bandages

Eric Markvicka, Guanyun Wang, Yi-Chin Lee, Gierad Laput, Carmel Majidi,
Lining Yao (*Carnegie Mellon University*)

Paper 633: May AI? Design Ideation with Cooperative Contextual Bandits

Janin Koch, Andrés Lucero, Lena Hegemann, Antti Oulasvirta (*Aalto University*)

Paper 634: PeerLens: Peer-inspired Interactive Learning Path Planning in Online Question Pool

Meng Xia, Mingfei Sun, Huan Wei, Qing Chen, Yong Wang (*Hong Kong University of Science and Technology*),
Lei Shi (*Beihang University*),
Huamin Qu, Xiaojuan Ma (*Hong Kong University of Science and Technology*)

Paper 635: Electronic Health Records Are More Than a Work Tool: Conflicting Needs of Direct and Indirect Stakeholders

Åsa Cajander (*Uppsala University*),
Christiane Grünloh (*KTH Royal Institute of Technology & Technische Hochschule Köln*)

Paper 636: Text Entry Throughput: Towards Unifying Speed and Accuracy in a Single Performance Metric

Mingrui Ray Zhang (*University of Washington*), Shumin Zhai (*Google*),
Jacob O. Wobbrock (*University of Washington*)

Paper 637: Is Now A Good Time? An Empirical Study of Vehicle-Driver Communication Timing

Rob Semmens (*Naval Postgraduate School*), Nikolas Martelaro (*Accenture Technology Labs*),
Pushyami Kaveti (*Northeastern University*), Simon Stent (*Toyota Research Institute*), Wendy Ju (*Cornell Tech*)

Paper 638: A 2nd Person Social Perspective on Bodily Play

Florian Floyd Mueller, Zhuying Li, Richard Byrne, Yash Dhanpal Mehta, Peter Arnold,
Tuomas Kari (*RMIT University*)

Paper 639: Tracking the Consumption of Home Essentials

Carolina Fuentes, Martin Porcheron, Joel E. Fischer (*University of Nottingham*),
Enrico Costanza (*University College London*), Obaid Malik, Sarvapali D. Ramchurn (*University of Southampton*)

Paper 640: Peripheral Notifications in Large Displays: Effects of Feature Combination and Task Interference

Aristides Mairena, Carl Gutwin (*University of Saskatchewan*),
Andy Cockburn (*University of Canterbury*)

Paper 641: Pulp Friction: Exploring the Finger Pad Periphery for Subtle Haptic Feedback

Alix Goguey, Deepak Ranjan Sahoo, Simon Robinson, Jennifer Pearson, Matt Jones (*Swansea University*)

Paper 642: Development of a Checklist for the Prevention of Intradialytic Hypotension in Hemodialysis Care: Design Considerations Based on Activity Theory

Pei-Yi Kuo (*University of Michigan & National Tsing Hua University*),
Rajiv Saran (*University of Michigan*), Marissa Argentina (*National Kidney Foundation*),
Michael Heung , Jennifer L. Bragg-Gresham (*University of Michigan*),
Dinesh Chattoth (*Fresenius Medical Care North America*), Brenda Gillespie (*University of Michigan*),
Sarah Krein (*University of Michigan Medical School & Veteran's Health Administration*),
Rebecca Wingard (*Fresenius Medical Care North America*), Kai Zheng (*University of California, Irvine*),
Tiffany C. Veinot (*University of Michigan*)

Paper 643: Preemptive Action: Accelerating Human Reaction using Electrical Muscle Stimulation Without Compromising Agency

Shunichi Kasahara (*Sony CSL & University of Tokyo*), Jun Nishida, Pedro Lopes (*University of Chicago*)

Paper 644: An Exploratory Study on Visual Exploration of Model Simulations by Multiple Types of Experts

Nadia Boukhelifa (*UMR GMPA, AgroParisTech, INRA, University Paris-Saclay*),
Anastasia Bezerianos (*University Paris-Sud & CNRS (LRI), Inria, University Paris-Saclay*),
Ioan Cristian Trelea, Nathalie Mejean Perrot (*UMR GMPA, AgroParisTech, INRA, University Paris-Saclay*),
Evelyne Lutton (*UMR GMPA, AgroParisTech, INRA, University Paris-Saclay*)

Paper 645: Protection, Productivity and Pleasure in the Smart Home: Emerging Expectations and Gendered Insights from Australian Early Adopters

Yolande Strengers (*Monash University*), Jenny Kennedy, Paula Arcari, Larissa Nicholls (*RMIT University*),
Melissa Gregg (*Intel Corporation*)

Paper 646: Keeping Rumors in Proportion: Managing Uncertainty in Rumor Systems

Peter M. Krafft, Emma S. Spiro (*University of Washington*)

Paper 647: Understanding Metamaterial Mechanisms

Alexandra Ion (*Hasso Plattner Institute, University of Potsdam*),
David Lindlbauer (*Technische Universität Berlin & ETH Zurich*),
Philipp Herholz, Marc Alexa (*Technische Universität Berlin*),
Patrick Baudisch (*Hasso Plattner Institute, University of Potsdam*)

Paper 648: Understanding Life Transitions: A Case Study of Support Needs of Low-Income Mothers

Annu Sible Prabhakar (*Indiana University & University of Cincinnati*),
Erik Stolterman, Selma Šabanović (*Indiana University*)

Paper 649: Online Grocery Delivery Services: An Opportunity to Address Food Disparities in Transportation-scarce Areas

Tawanna R. Dillahunt, Sylvia Simioni, Xuecong Xu (*University of Michigan*)

Paper 650: Co-Created Personas: Engaging and Empowering Users with Diverse Needs Within the Design Process

Timothy Neate, Aikaterini Bourazeri, Abi Roper, Simone Stumpf, Stephanie Wilson (*City, University of London*)

Paper 651: "Notjustgirl": Exploring Male-related Eating Disordered Content across Social Media Platforms

Jessica A. Pater (*Parkview Research Center & Georgia Institute of Technology*),
Lauren E. Reining (*Parkview Research Center*),
Andrew D. Miller (*Indiana University Purdue University Indianapolis (IUPUI)*),
Tammy Toscos (*Parkview Research Center*), Elizabeth D. Mynatt (*Georgia Institute of Technology*)

Paper 652: Technologies for Social Justice: Lessons from Sex Workers on the Front Lines

Angelika Strohmayer (*Newcastle University*), Jenn Clamen (*Stella, l'amie de Maimie*),
Mary Laing (*Northumbria University*)

Paper 653: Career Mentoring in Online Communities: Seeking and Receiving Advice from an Online Community

Maria Tomprou, Laura Dabbish, Robert E. Kraut, Fannie Liu (*Carnegie Mellon University*)

Paper 654: Cognitive Aids in Acute Care: Investigating How Cognitive Aids Affect and Support In-hospital Emergency Teams

Tobias Grundgeiger, Stephan Huber, Daniel Reinhardt (*Julius-Maximilians-University*),
Andreas Steinisch, Oliver Happel, Thomas Wurmb (*University Hospital of Würzburg*)

Paper 655: Facilitating Self-reflection about Values and Self-care Among Individuals with Chronic Conditions

Catherine Y. Lim (*Kaiser Permanente Washington Health Research Institute*),
Andrew B.L. Berry, Andrea L. Hartzler (*University of Washington*), Tad Hirsch (*Northeastern University*),
David S. Carrell, Zoë A. Bermet, James D. Ralston (*Kaiser Permanente Washington Health Research Institute*),

Paper 656: Pyrus: Designing A Collaborative Programming Game to Promote Problem Solving Behaviors

Joshua Shi, Armaan Shah, Garrett Hedman, Eleanor O'Rourke (*Northwestern University*)

Paper 657: Inalienability: Understanding Digital Gifts

Jocelyn Spence (*University of Nottingham*)

Paper 658: As Light as You Aspire to Be: Changing Body Perception with Sound to Support Physical Activity

Ana Tajadura-Jiménez (*Universidad Carlos III de Madrid*),
Joseph Newbold, Linge Zhang (*University College London*),
Patricia Rick (*Universidad Loyola Andalucia*), Nadia Bianchi-Berthouze (*University College London*)

Paper 659: Who Would You Like to Work With?: Use of Individual Characteristics and Social Networks in Team Formation Systems

Diego Gómez-Zará (*Pontificia Universidad Católica de Chile*),
Matthew Paras, Marlon Twyman (*Northwestern University*), Jacqueline N. Lane (*Harvard Business School*),
Leslie A. DeChurch, Noshir S. Contractor (*Northwestern University*)

Paper 660: ModiFiber: Two-Way Morphing Soft Thread Actuators for Tangible Interaction

Jack Forman, Taylor Tabb, Youngwook Do, Meng-Han Yeh, Adrian Galvin,
Lining Yao (*Carnegie Mellon University*)

Paper 661: Breakdowns in Home-School Collaboration for Behavioral Intervention

Gabriela Marcu, Allison Spiller (*University of Michigan*),
Jonathan Arevalo Garay, James E. Connell (*Drexel University*),
Laura R. Pina (*University of Washington*)

Paper 662: VizNet: Towards A Large-Scale Visualization Learning and Benchmarking Repository

Kevin Hu, Snehal Kumar 'Neil' S. Gaikwad, Madelon Hulsebos, Michiel A. Bakker,
Emanuel Zgraggen, César Hidalgo, Tim Kraska (*Massachusetts Institute of Technology*),
Guoliang Li (*Tsinghua University*),
Arvind Satyanarayan, Çağatay Demiralp (*Massachusetts Institute of Technology*)

Paper 663: Shape Structuralizer: Design, Fabrication, and User-driven Iterative Refinement of 3D Mesh Models

Subramanian Chidambaram (*Purdue University*), Yunbo Zhang (*Rochester Institute of Technology*),
Venkatraghavan Sundararajan (*Purdue University*), Niklas Elmquist (*University of Maryland, College Park*),
Karthik Ramani (*Purdue University*)

Paper 664: Designing Participatory Sensing with Remote Communities to Conserve Endangered Species

Tshering Dema, Margot Brereton, Paul Roe (*Queensland University of Technology*)

Paper 665: "Tricky to get your head around": Information Work of People Managing Chronic Kidney Disease in the UK

Eleanor R. Burgess, Madhu C. Reddy (*Northwestern University*),
Andrew Davenport (*Royal Free Hospital*), Paul Laboi (*York Teaching Hospital NHS Foundation Trust*),
Ann Blandford (*University College London*)

Paper 666: Long-Term Value of Social Robots through the Eyes of Expert Users

Dmitry Dereshev, David Kirk (*Northumbria University at Newcastle*),
Kohei Matsumura (*Ritsumeikan University*), Toshiyuki Maeda (*Hannan University*)

Paper 667: Measuring and Understanding Photo Sharing Experiences in Social Virtual Reality

Jie Li, Yiping Kong, Thomas Röggl, Francesca De Simone (*Centrum Wiskunde & Informatica (CWI)*),
Swamy Ananthanarayanan (*University of Oldenburg*),
Huib de Ridder (*Delft University of Technology*),
Abdallah El Ali (*Centrum Wiskunde & Informatica (CWI)*),
Pablo Cesar (*Centrum Wiskunde & Informatica (CWI) and Delft University of Technology*)

Paper 668: Email Makes You Sweat: Examining Email Interruptions and Stress Using Thermal Imaging

Fatema Akbar, Ayse Elvan Bayraktaroglu (*University of California, Irvine*),
Pradeep Buddharaju (*University of Houston*),
Dennis Rodrigo Da Cunha Silva (*Texas A&M University*),
Ge Gao, Ted Grover (*University of California, Irvine*),
Ricardo Gutierrez-Osuna (*Texas A&M University*), Nathan Cooper Jones (*University of Houston*),
Gloria Mark (*University of California, Irvine*),
Ioannis Pavlidis (*University of Houston*), Kevin Storer (*University of California, Irvine*),
Zelun Wang (*Texas A&M University*), Amanveer Wesley, Shaila Zaman (*University of Houston*)

Paper 669: Measuring the Separability of Shape, Size, and Color in Scatterplots

Stephen Smart, Danielle Albers Szafir (*University of Colorado Boulder*)

Paper 670: Beyond Behavior: The Coach's Perspective on Technology in Health Coaching

Heleen Rutjes, Martijn C. Willemsen, Wijnand A. IJsselsteijn (*Eindhoven University of Technology*)

Paper 671: Privacy, Anonymity, and Perceived Risk in Open Collaboration:

A Study of Service Providers

Nora McDonald (*Drexel University*), Benjamin Mako Hill (*University of Washington*),
Rachel Greenstadt (*New York University*), Andrea Forte (*Drexel University*)

Paper 672: Aarnio: Passive Kinesthetic Force Output for Foreground Interactions on an Interactive Chair

Shan-Yuan Teng (*National Taiwan University*), Da-Yuan Huang, Chi Wang (*National Chiao Tung University*),
Jun Gong (*Dartmouth College*), Teddy Seyed (*University of Calgary*), Xing-Dong Yang (*Dartmouth College*),
Bing-Yu Chen (*National Taiwan University*)

Paper 673: Does It Feel Real? Using Tangibles with Different Fidelities to Build and Explore Scenes in Virtual Reality

Thomas Muender, Anke V. Reinschluessel, Sean Drewes, Dirk Wenig, Tanja Döring,
Rainer Malaka (*University of Bremen*)

Paper 674: How Do Humans Assess the Credibility on Web Blogs: Qualifying and Verifying Human Factors with Machine Learning

Yonggeol Jo, Minwoo Kim, Kyungsik Han (*Ajou University*)

Paper 675: Adding Proprioceptive Feedback to Virtual Reality Experiences Using Galvanic Vestibular Stimulation

Misha Sra, Abhinandan Jain, Pattie Maes (*Massachusetts Institute of Technology*)

Paper 676: VibEye: Vibration-Mediated Object Recognition for Tangible Interactive Applications

Seungjae Oh, Gyeore Yun, Chaeyong Park, Jinsoo Kim, Seungmoon Choi
(*Pohang University of Science and Technology (POSTECH)*)

Paper 677: Sound Forest: Evaluation of an Accessible Multisensory Music Installation

Emma Frid (*KTH Royal Institute of Technology*),
Hans Lindetorp (*KTH Royal Institute of Technology & KMH Royal College of Music*),
Kjetil Falkenberg Hansen, Ludvig Elblaas, Roberto Bresin (*KTH Royal Institute of Technology*)

Paper 678: Making Sense of Human-Food Interaction

Ferran Altarriba Bertran, Samvid Jhaveri, Rosa Lutz, Katherine Isbister (*University of California, Santa Cruz*),
Danielle Wilde (*University of Southern Denmark*)

Paper 679: Designing for Digital Playing Out

Gavin Wood, Thomas Dylan, Abigail Durrant (*Northumbria University*),
Pablo E. Torres (*University College London*),
Philip Ulrich, Amanda Carr (*Canterbury Christ Church University*),
Mutlu Cukurova (*UCL Institute of Education*),
Denise Downey, Phil McGrath (*The Cedarwood Trust*),
Madeline Balaam (*Royal Institute of Technology (KTH)*), Alice Ferguson (*Playing Out CIC*),
John Vines, Shaun Lawson (*Northumbria University*)

Paper 680: Life-Affirming Biosensing in Public: Sounding Heartbeats on a Red Bench

Noura Howell, Greg Niemeyer, Kimiko Ryokai (*University of California, Berkeley*)

Paper 681: ATMSeer: Increasing Transparency and Controllability in Automated Machine Learning

Qianwen Wang, Yao Ming (*Hong Kong University of Science and Technology*),
Zhihua Jin (*Zhejiang University*),
Qiaomu Shen, Dongyu Liu (*Hong Kong University of Science and Technology*),
Micah J. Smith, Kalyan Veeramachaneni (*Massachusetts Institute of Technology*),
Huamin Qu (*Hong Kong University of Science and Technology*)

Paper 682: A Bayesian Cognition Approach to Improve Data Visualization

Yea-Seul Kim, Logan A. Walls, Peter Kraff, Jessica Hullman (*Northwestern University*)

Paper 683: PersonalTouch: Improving Touchscreen Usability by Personalizing Accessibility Settings based on Individual User's Touchscreen Interaction

Yi-Hao Peng, Muh-Tarn Lin, Yi Chen, TzuChuan Chen, Pin Sung Ku (*National Taiwan University*),
Paul Taele (*Texas A&M University*), Chin Guan Lim, Mike Y. Chen (*National Taiwan University*)

Paper 684: The Parenting Actor-Network of Latino Immigrants in the United States

Marisol Wong-Villacres (*Escuela Superior Politecnica del Litoral & Georgia Institute of Technology*),
Neha Kumar, Betsy DiSalvo (*Georgia Institute of Technology*)

Paper 685: Geallery: A Mixed Reality Social Media Platform

Ruofei Du, David Li, Amitabh Varshney (*University of Maryland, College Park*)

Paper 686: Passquerade: Improving Error Correction of Text Passwords on Mobile Devices by using Graphic Filters for Password Masking

Mohamed Khamis (*University of Glasgow & Ludwig Maximilian University of Munich*),
Tobias Seitz, Leonhard Mertl, Alice Nguyen, Mario Schneller, Zhe Li (*Ludwig Maximilian University of Munich*)

Paper 687: HoloDoc: Enabling Mixed Reality Workspaces that Harness Physical and Digital Content

Zhen Li (*University of Toronto*), Michelle Annett (*MishMashMakers*),
Ken Hinckley (*Microsoft Research*), Karan Singh, Daniel Wigdor (*University of Toronto*)

Paper 688: SwarmHaptics: Haptic Display with Swarm Robots

Lawrence H. Kim, Sean Follmer (*Stanford University*)

Paper 689: Estimating Touch Force with Barometric Pressure Sensors

Philip Quinn (*Google*)

Paper 690: A Badge, Not a Barrier: Designing for-and Throughout-Digital Badge Implementation

Caroline Pitt, Adam Bel, Edgar Onofre, Katie Davis (*University of Washington*)

Paper 691: Virtual Objects in the Physical World: Relatedness and Psychological Ownership in Augmented Reality

Lev Poretski, Ofer Arazy, Joel Lanir, Shalev Shahar (*University of Haifa*),
Oded Nov (*New York University*)

Paper 692: Signal Appropriation of Explicit HIV Status Disclosure Fields in Sex-Social Apps used by Gay and Bisexual Men

Mark Warner (*University College London*), Juan F. Maestre (*Indiana University*),
Jo Gibbs (*University College London*), Chia-Fang Chung (*Indiana University*),
Ann Blandford (*University College London*)

Paper 693: HapTwist: Creating Interactive Haptic Proxies in Virtual Reality Using Low-cost Twistable Artefacts

Kening Zhu, Taizhou Chen (*City University of Hong Kong*),
Feng Han (*Hong Kong University of Science and Technology*),
Yi-Shiu Wu (*École Polytechnique Fédérale de Lausanne*)

Paper 694: Falcon: Balancing Interactive Latency and Resolution Sensitivity for Scalable Linked Visualizations

Dominik Moritz, Bill Howe, Jeffrey Heer (*University of Washington*)

Paper 695: When the Elephant Trumps: A Comparative Study on Spatial Audio for Orientation in 360° Videos

Paulo Bala, Raul Masu, Valentina Nisi, Nuno Nunes
(*Madeira Interactive Technologies Institute & IST, University of Lisbon*)

Paper 696: Egocentric Smaller-person Experience through a Change in Visual Perspective

Jun Nishida (*JSPS & University of Chicago*),
Soichiro Matsuda, Mika Oki, Hikaru Takatori, Kosuke Sato (*University of Tsukuba*),
Kenji Suzuki (*University of Tsukuba & JST*)

Paper 697: LocknType: Lockout Task Intervention for Discouraging Smartphone App Use

Jaejeung Kim, Joonyoung Park, Hyunsoo Lee (*Korea Advanced Institute of Science and Technology*),
Minsam Ko (*Hanyang University*), Uichin Lee (*Korea Advanced Institute of Science and Technology*)

Paper 698: Effect of Orientation on Unistroke Touch Gestures

Sven Mayer, Valentin Schwind, Huy Viet Le, Dominik Webe, Jonas Vogelsang,
Johannes Wolf, Niels Henze (*University of Regensburg*),

Paper 699: LASEC: Instant Fabrication of Stretchable Circuits Using a Laser Cutter

Daniel Groeger, Jürgen Steinle (*Saarland University, Saarland Informatics Campus*)

Paper 700: Sensory Alignment in Immersive Entertainment

Joe Marshall, Steve Benford (*University of Nottingham*), Richard Byrne (*RMIT University*),
Paul Tennent (*University of Nottingham*)

Paper 701: How to Design Voice Based Navigation for How-To Videos

Minsuk Chang (*Korea Advanced Institute of Science and Technology*),
Anh Truong, Oliver Wang (*Adobe Research*), Maneesh Agrawala (*Stanford University*),
Juho Kim (*Korea Advanced Institute of Science and Technology*)

Paper 702: Caring for Vincent: A Chatbot for Self-Compassion

Minha Lee, Sander Ackermans, Nena van As, Hanwen Chang, Enzo Lucas, Wijnand IJsselsteijn
(*Technical University of Eindhoven*)

Paper 703: A Wee Bit More Interaction: Designing and Evaluating an Overactive Bladder App

Ana-Maria Sala, Lynne Baillie (*Heriot-Watt University*)

Paper 705: HandSee: Enabling Full Hand Interaction on Smartphone with Front Camera-based Stereo Vision

Chun Yu (*Global Innovation eXchange Institute & Tsinghua University*),
Xiaoying Wei, Shubh Vachher, Yue Qin, Chen Liang, Yuetong Weng, Yizheng Gu (*Tsinghua University*),
Yuanchun Shi (*Global Innovation eXchange Institute & Tsinghua University*)

CHI 2019 Organization

General Chairs

Stephen Brewster, *University of Glasgow, UK*
Geraldine Fitzpatrick, *TU Wien, Austria*

Assistant to the General Chairs

Katta Spiel, *TU Wien, Austria*
Aris Malapascas, *University of Glasgow, UK*

Technical Program Chairs

Anna Cox, *University College London, UK*
Vassilis Kostakos, *University of Melbourne, Australia*

Assistant to the Technical Program Chairs

Katarzyna Stawarz, *Bristol University, UK*
Niels van Berkel, *University of Melbourne, Australia*

Papers Chairs

Anind Dey, *University of Washington, USA*
Shengdong Zhao, *National University of Singapore, Singapore*

Assistant to the Papers Chairs

Briane Paul V. Samson, *Future University Hakodate, Japan*
Sonali R. Mishra, *University of Washington, USA*

alt.chi chairs

Conor Linehan, *University College Cork, Ireland*
Ann Light, *University of Sussex, UK*
Ben Kirman, *University of York, UK*

Case Studies Chairs

Allan MacLean, *Amdeo, UK*
Maja Vukovic, *IBM, USA*

Courses Chairs

Daniela Busse, *Oracle, USA*
Evan Karapanos, *Cyprus University of Technology, Cyprus*
Paul Cairns, *University of York, UK*

Doctoral Consortium Chairs

Florian 'Floyd' Mueller, *RMIT University, Australia*
Koji Yatani, *University of Tokyo, Japan*
Laura Dabbish, *Carnegie Mellon University, USA*

Interactivity Chairs

Julie Williamson, *University of Glasgow, UK*
Ian Oakley, *Ulsan National Institute of Science and Technology, Republic of Korea*
Sarah Clinch, *University of Manchester, UK*

Late Breaking Work Chairs

Madeline Balaam, *KTH Stockholm, Sweden*
Denzil Ferreira, *University of Oulu, Finland*
Kathrin Gerling, *KU Leuven, Belgium*
Anirudha Joshi, *IIT Bombay, India*
Antti Salovaara, *Aalto University, Finland*

Panels Chairs

Albrecht Schmidt, *University of Stuttgart, Germany*
Jeni Paay, *Swinburne University of Technology, Australia*
Max L. Wilson, *University of Nottingham, UK*
Sunny Consolvo, *Google, USA*

Video Previews Chairs

Alex Mariakakis, *University of Washington, Seattle, USA*
Zhanna Sarsenbayeva, *University of Melbourne, Australia*

Video Showcase Chairs

Valentina Nisi, *Madeira Interactive Technologies Institute, Portugal*
Nadia Pantidi, *University College Cork, Ireland*

Workshops Chairs

Jorge Goncalves, *University of Melbourne, Australia*
Sandy Gould, *University of Birmingham, UK*
Xinru Page, *Bentley University, USA*

Posters Chair

Graham Wilson, *University of Strathclyde, UK*

Student Design Competition Chairs

Hiromi Nakamura, *National Institute of Advanced Industrial Science and Technology (AIST), Japan*
Roisin McNamey, *University of Bristol, UK*
Nick Taylor, *University of Dundee, UK*

Student Research Competition Chairs

Frank Vetere, *University of Melbourne, Australia*
Katrin Wolf, *Hamburg University of Applied Sciences, Germany*

Special Interest Groups Chairs

Rob Comber, *RISE Research Institutes of Sweden, Sweden*
Lindsay Reynolds, *Facebook, USA*

CHI Stories

Nazanin Andalibi, *University of Michigan, USA*
Naveen Bagalkot, *Srishti Institute of Art, Design, & Technology, Bangalore*
Wendy Moncur, *University of Dundee, UK*
Katie Siek, *Indiana University, USA*

Student Volunteers Chairs

Jessica Colnago, *Carnegie Mellon University, USA*
Haley MacLeod, *Indiana University, USA*

Analytics Chair

Sandy Gould, *University of Birmingham, UK*

Award Chair

Tovi Grossmann, *Autodesk Research, Canada*

Lead Data and Proceedings Chair

Frederik Brudy, *University College London, UK*

PCS Chair

Tom Horak, *TU Dresden, Germany*

COBI Scheduling System Chairs

Sven Mayer, *Universität Stuttgart, Germany*
Michael Stewart, *James Madison University, USA*

Print Programme Chair

Earnest Wheeler, *University of Michigan, USA*

Web Programme Chair

Toni-Jan Monserrat, *University of the Philippines Los Baños, Philippines*

Data Chairs

Danula Hettiachchi, *University of Melbourne, Australia*

Journals Chair

Duncan Brumby, *University College London, UK*

Career Development Chairs

Cosmin Munteanu, *University of Toronto Mississauga, Canada*
Sharon Oviatt, *Monash University, Australia*

Local Arrangements Chairs

Marilyn Lennon, *University of Strathclyde, UK*
Martin Halvey, *University of Strathclyde, UK*

Local Sponsorship Chairs

Lynne Hall, *University of Sunderland, UK*
Jennefer Hart, *BBC, UK*

Equity Chairs

Cayley MacArthur, *University of Waterloo, Canada*
Cale Passmore, *University of Saskatchewan, Canada*

Accessibility Chairs

Sunyoung Kim, *Rutgers, USA*
Edith Law, *University of Waterloo, Canada*

CHI Family/Childcare Chairs

Louise Barkhuus, *IT University of Copenhagen, Denmark*
David Flatla, *University of Guelph, Canada*

Diversity and Inclusion Lunch Chairs

Anicia Peters, *Namibia University of Science and Technology, Namibia*
Anke Brock, *Ecole Nationale de l'Aviation Civile, France*
Nitesh Goyal, *Google, USA*
Gopinaath Kannabiran, *Aarhus University, Denmark*

Language Inclusion Chairs

Sue Fussell, *Cornell University, USA*
Hao-Chuan Wang, *University of California, USA*
Naomi Yamashita, *Nippon Telegraph and Telephone Corporation, Japan*

Newcomers Chairs

Daria Loi, *Intel Labs, USA*
Jofish Kaye, *Mozilla, USA*

Sustainability Chairs

Oliver Bates, *Lancaster University, UK*
Adrian Friday, *Lancaster University, UK*
Mike Hazas, *Lancaster University, UK*
Christian Remy, *Aarhus University, Denmark*

Communications Chair

Maria Wolters, *University of Edinburgh, UK*

Social Media Chairs

Dakuo Wang, *IBM Research, USA*
Rina R. Wehbe, *University of Waterloo, Canada*
Cristina Zaga, *University of Twente, The Netherlands*

Telepresence Chairs

Carman Neustaedter, *Simon Fraser University, Canada*
Tony Tang, *University of Calgary, Canada*

Live Streaming Chairs

William (Bill) Hamilton, *New Mexico State University, USA*
Dong-Bach Vo, *University of Glasgow, UK*
Matthew Miller, *University of Saskatchewan, Canada*

Web Chair

Euan Freeman, *University of Glasgow, UK*

Party Liaison Chairs

Irina Shklovski, *IT University of Copenhagen, Denmark*
Mark Handel, *Facebook, USA*

Keynotes Chairs

Elizabeth Churchill, *Google, USA*
Matt Jones, *Swansea University, UK*

Lunch@CHI Chairs

David McGookin, *Aalto University, Finland*
Joanna Bergström-Lehtovirta, *University of Copenhagen, Denmark*
Anusha Withana, *Saarland University, Germany*

Industry Liaisons

Elizabeth Buie, *Northumbria University, UK*
Lisa Tweedie, *TIBCO, UK*
Alan Dix, *Swansea University, UK*

Video Capture Chairs

David Lindlbauer, *ETH Zurich, Switzerland*
Roman Rädle, *Aarhus University, Denmark*

ACM Liaison

Ashley Cozzi, *ACM, USA*

SIGCHI Steering Committee Liaison

Philippe Palanque, *Université Paul Sabatier, France*

Sponsor & Exhibit Director

Carol Klyver, *Foundations of Excellence, USA*

Logistics Manager

Roxane Rose, *Foundations of Excellence, USA*

Registration Manager

Taylor Vick, *Executive Events, USA*

CHI 2019 Papers Chairs, Committee Members & Reviewers

Chairs

Anind Dey, *University of Washington, USA*

Shengdong Zhao, *National University of Singapore, Singapore*

Committee Chairs

Morten Fjeld, *Chalmers University, Sweden*

Julie Williamson, *University of Glasgow, UK*

Tawanna Dillahunt, *University of Michigan, USA*

Steven Drucker, *Microsoft Research, USA*

Amy Ogan, *Carnegie Mellon University, USA*

Joseph Jay Williams, *University of Toronto, Canada*

Luigina Ciolfi, *Sheffield Hallam University, UK*

Sadat Shami, *IBM, USA*

Irina Shklovski, *IT University of Copenhagen, Denmark*

Kate Starbird, *University of Washington, USA*

Katherine Isbister, *University of California, Santa Cruz, USA*

Z O. Toups, *New Mexico State University, USA*

Anastasia Bezerianos, *University of Paris-South, France*

Sameer Patil, *Indiana University, USA*

Sean Munson, *University of Washington, USA*

Katie Siek, *Indiana University, USA*

Tiago Guerreiro, *University of Lisbon, Portugal*

Anne Marie Piper, *Northwestern University, USA*

Madeline Balaam, *KTH, Sweden*

Bill Gaver, *Goldsmiths, UK*

Youn-kyung Lim, *KAIST, Korea*

Kristina Andersen, *TU Eindhoven, The Netherlands*

Dan Ashbrook, *University of Copenhagen, Denmark*

Stefanie Mueller, *Massachusetts Institute of Technology, USA*

Nicolai Marquardt, *University College London, UK*

Dan Vogel, *University of Waterloo, Canada*

Duncan Brumby, *University College London, UK*

Xianghua (Sharon) Ding, *Fudan University, China*

Wai-Tat Fu, *University of Illinois, USA*

Wendy Ju, *Cornell University, USA*

Yang Li, *Google, USA*

Helena Mentis, *University of Maryland-Baltimore County, USA*

Karon MacLean, *University of British Columbia, Canada*

Koji Yatani, *University of Tokyo, Japan*

Committee Members

Syed Ishtiaque Ahmed, *University of Toronto, Canada*

Jason Alexander, *Lancaster University, UK*

Florian Alt, *Bundeswehr University Munich, Germany*

Swamy Ananthanarayanan, *University of Oldenburg, Germany*

Nazanin Andalibi, *University of Michigan, USA*

Erik Andersen, *Cornell University, USA*

Fraser Anderson, *Autodesk Research, Canada*

Michelle Annett, *MishMashMakers, Canada*

Lisa Anthony, *University of Florida, USA*

Rosa I. Arriaga, *Georgia Institute of Technology, USA*

Shiri Azenkot, *Cornell Tech, USA*

Benjamin Bach, *Edinburgh University, UK*

Gilles Bailly, *Sorbonne Université, CNRS, ISIR, France*

Jakob E. Bardram, *Technical University of Denmark, Denmark*

Louise Barkhuus, *IT University of Copenhagen, Denmark*

Lyn Bartram, *Simon Fraser University, Canada*

Scott Bateman, *University of New Brunswick, Canada*

Patrick Baudisch, *Hasso Plattner Institute, Germany*

Eric P. S. Baumer, *Lehigh University, USA*

Michel Beaudouin-Lafon, *Université Paris-Sud, France*

Frank Bentley, *Yahoo, USA*

Joanna Bergström, *University of Copenhagen, Denmark*

Regina Bernhaupt, *Eindhoven University of Technology, Netherlands*

Enrico Bertini, *NYU, USA*

Konstantin (Kosta) Beznosov, *University of British Columbia, Canada*

Xiaojun Bi, *Stony Brook University, USA*

Andrea Bianchi, *KAIST, Republic of Korea*

Nicola J Bidwell, *International University of Management, Namibia*

Jeffrey Philip Bigham, *Carnegie Mellon University, USA*

Mark Billinghurst, *University of South Australia, Australia*

Eli Blevis, *Indiana University, USA*

Mark Blythe, *Northumbria University, UK*

Committee Members (continued)

Susanne Bødker, *Aarhus University, Denmark*
Kristin Boehner, *University of Washington, USA*
Susanne Boll, *University of Oldenburg, Germany*
Elizabeth Bonsignore, *University of Maryland, USA*
Jan Borchers, *RWTH Aachen University, Germany*
Rita Borgo, *King's College London, UK*
Sebastian Boring, *University of Copenhagen, Denmark*
Erin Brady, *Indiana University (IUPUI), USA*
Stacy Branham, *University of California, Irvine, USA*
Robin N. Brewer, *Northwestern University, USA*
Pamela Briggs, *Northumbria University, UK*
Lauren Britton, *Ithaca College, USA*
Miguel Bruns, *TU Eindhoven, Netherlands*
Andreas Bulling, *University of Stuttgart, Germany*
Andrea Bunt, *University of Manitoba, Canada*
Oğuz Turan Buruk, *Tampere University, Finland*
Carrie J. Cai, *Google, USA*
Kelly Caine, *Clemson University, USA*
Patrick Carrington, *Carnegie Mellon University, USA*
Géry Casiez, *Université de Lille, France*
Debaleena Chattopadhyay, *University of Illinois at Chicago, USA*
Yu Chen, *University of California, Irvine, USA*
Xiang Anthony Chen, *University of California, Los Angeles, USA*
Mike Y. Chen, *National Taiwan University, Taiwan*
Jay Chen, *New York University, United Arab Emirates*
Erin Cherry, *Northrop Grumman Mission Systems, USA*
Peggy Chi, *Google AI, USA*
Parmit K. Chilana, *Simon Fraser University, Canada*
Lydia Chilton, *Columbia University, USA*
Eun Kyoung Choe, *University of Maryland, USA*
Lewis L Chuang, *LMU Munich, Germany*
Yaliang Chuang, *Eindhoven University of Technology, Netherlands*
Chia-Fang Chung, *Indiana University Bloomington, USA*
Rachel E. Clarke, *Northumbria University, UK*
Adrian Clear, *Northumbria University, UK*
Maribeth Gandy Coleman, *Georgia Tech, USA*
Tommaso Colommino, *Naver Labs Europe, France*
Lynne Coventry, *Northumbria University, UK*
David Coyle, *University College Dublin, Ireland*
Justin Cranshaw, *Microsoft Research, USA*
Clara Crivellaro, *Newcastle University, UK*
Sauvik Das, *Georgia Institute of Technology, USA*
Sayamindu Dasgupta, *University of North Carolina at Chapel Hill, USA*
Scott Davidoff, *California Institute of Technology, USA*
Katie Davis, *University of Washington, USA*

Antonella de Angeli, *University of Lincoln, UK*
Munmun De Choudhury, *Georgia Institute of Technology, USA*
Alexander De Luca, *Google, Switzerland*
Nicola Dell, *Cornell Tech, USA*
Audrey Desjardins, *University of Washington, USA*
Kayla DesPortes, *New York University, USA*
Tilman Dingler, *University of Melbourne, Australia*
Carl DiSalvo, *Georgia Institute of Technology, USA*
Betsy DiSalvo, *Georgia Institute of Technology, USA*
Gavin Doherty, *Trinity College Dublin, Ireland*
Lynn Dombrowski, *Indiana University, IUPUI, USA*
Mira Dontcheva, *Adobe Research, USA*
Afsaneh Doryab, *Carnegie Mellon University, USA*
James Eagan, *LTCI, Télécom ParisTech, Université Paris-Saclay, France*
Florian Echtler, *Bauhaus-Universität Weimar, Germany*
Niklas Elmquist, *University of Maryland, College Park, USA*
Alex Endert, *Georgia Institute of Technology, USA*
Barrett Ens, *Monash University, Australia*
Daniel A. Epstein, *University of California, Irvine, USA*
Jordan Eschler, *University of Washington, USA*
Stephen Fairclough, *LJMU, UK*
Melanie Feinberg, *University of North Carolina at Chapel Hill, USA*
Steven Feiner, *Columbia University, USA*
Rebecca Fiebrink, *Goldsmiths, University of London, UK*
Joel E Fischer, *University of Nottingham, UK*
Martin Flintham, *The University of Nottingham, UK*
Sean Follmer, *Stanford University, USA*
Pin Sym Foong, *National University of Singapore, Singapore*
Adam Fourney, *Microsoft Research, USA*
Sarah Fox, *University of California, San Diego, USA*
Mathias Funk, *Eindhoven University of Technology, Netherlands*
Markus Funk, *TU Darmstadt, Germany*
Susan R. Fussell, *Cornell University, USA*
Krzysztof Z. Gajos, *Harvard University, USA*
Ge Gao, *University of Maryland, USA*
Kathrin Gerling, *KU Leuven, Belgium*
Antonio Gomes, *NA, Canada*
Nanna Gorm, *IT University of Copenhagen, Denmark*
Nitesh Goyal, *Cornell University, USA*
Sukeshini Grandhi, *Eastern Connecticut State University, USA*
Colin M. Gray, *Purdue University, USA*
David Philip Green, *University of the West of England, UK*
Catherine Grevet, *Wellesley College, USA*

Committee Members (continued)

Erik Grönvall, *IT University of Copenhagen, Denmark*
Jens Grubert, *Coburg University, Germany*
Bin Guo, *Northwestern Polytechnical University, China*
Philip Guo, *University of California, San Diego, USA*
Aakar Gupta, *University of Toronto, Canada*
Carl Gutwin, *University of Saskatchewan, Canada*
Oliver L. Haimson, *University of Michigan, USA*
Michael Haller, *University of Applied Sciences Upper Austria, Austria*
Bill Hamilton, *Texas A&M University, USA*
Mark Handel, *Facebook, USA*
Benjamin V. Hanrahan, *Pennsylvania State University, USA*
Kotaro Hara, *Singapore Management University, Singapore*
Erik Harpstead, *Carnegie Mellon University, USA*
Christina Harrington, *Northwestern University, USA*
Andrea Hartzler, *University of Washington, USA*
Niels Henze, *University of Stuttgart, Germany*
Seongkook Heo, *University of Toronto, Canada*
Uta Hinrichs, *The University of St Andrews, UK*
Christian Holz, *Microsoft Research, USA*
Hwajung Hong, *Seoul National University, Republic of Korea*
Ehsan Hoque, *University of Rochester, USA*
Anthony J. Hornof, *University of Oregon, USA*
Youyang Hou, *Google Inc., USA*
Chien-Ming Huang, *Johns Hopkins University, USA*
Yun Huang, *School of Information Studies, USA*
Scott E Hudson, *Carnegie Mellon University, USA*
Amanda Lee Hughes, *Brigham Young University, USA*
Jina Huh-Yoo, *Michigan State University, USA*
Julie Hui, *University of Michigan, USA*
Jessica Hullman, *University of Washington, USA*
Ioanna Iacovides, *University of York, UK*
Alexandra Ion, *Hasso Plattner Institute, Germany*
Shamsi Iqbal, *Microsoft Research, USA*
Lilly Irani, *University of California, San Diego, USA*
Petra Isenberg, *Inria, France*
Maia Jacobs, *Harvard University, USA*
Tom Jenkins, *Georgia Institute of Technology, USA*
Hans-Christian Jetter, *University of Applied Sciences Upper Austria, Austria*
Wei Jun, *Alibaba AI Lab, China*
Hernisa Kacorri, *University of Maryland, USA*
Shaun Kane, *University of Colorado Boulder, USA*
Chris Kanich, *University of Illinois Chicago, USA*
Apu Kapadia, *Indiana University, USA*
Elizabeth Kaziunas, *New York University, USA*

Patrick Gage Kelley, *Google, USA*
Aisling Kelliher, *Virginia Tech, USA*
Mohamed Khamis, *University of Glasgow, UK*
Ahmed Kharrufa, *Newcastle University, UK*
Kibum Kim, *Hanyang University, Republic of Korea*
Juho Kim, *KAIST, Republic of Korea*
Jin Ryong Kim, *Alibaba Research, USA*
David Kirk, *Northumbria University, UK*
René F. Kizilcec, *Cornell University, USA*
Jarrod Knibbe, *Monash University, Australia*
Bran Knowles, *Lancaster University, UK*
Lone Koefoed Hansen, *Aarhus University, Denmark*
Marina Kogan, *University of New Mexico, USA*
Yubo Kou, *Florida State University, USA*
Yong Ming Kow, *City University of Hong Kong, Hong Kong*
Josua Krause, *Accern, USA*
Peter Gall Krogh, *Aarhus University, Denmark*
Antonio Krüger, *DFKI, Saarland Informatics Campus, Germany*
Neha Kumar, *Georgia Tech, USA*
Ponnurangam Kumaraguru, *IIT-Delhi, India*
Andrew L Kun, *University of New Hampshire, USA*
Nicolas James LaLone, *Bellevue University, USA*
Monica Landoni, *Università della Svizzera italiana, USI, Switzerland*
Edward Lank, *University of Waterloo, Canada*
Gierad Laput, *Carnegie Mellon University, USA*
Walter S Lasecki, *University of Michigan, USA*
Celine Latulipe, *University of North Carolina, USA*
Annie Lau, *Centre for Health Informatics, Australian Institute of Health Informatics, Macquarie University, Australia*
Edith Law, *University of Waterloo, Canada*
Effie Law, *University of Leicester, UK*
Shaun Lawson, *Northumbria University, UK*
Amanda Lazar, *University of Maryland, USA*
Min Kyung Lee, *Carnegie Mellon University, USA*
Uichin Lee, *KAIST, Republic of Korea*
Byungjoo Lee, *KAIST, Republic of Korea*
Michael J. Lee, *New Jersey Institute of Technology, USA*
Daniel Leithinger, *University of Colorado, Boulder, USA*
Marilyn Lennon, *University of Strathclyde, UK*
Myriam Lewkowicz, *UTT, France*
Alexander Lex, *University of Utah, USA*
Q. Vera Liao, *IBM T.J. Watson Research Center, USA*
Ilaria Liccardi, *Massachusetts Institute of Technology, USA*
Brian Y Lim, *National University of Singapore, Singapore*
David Lindlbauer, *TU Berlin, Germany*
Janne Lindqvist, *Rutgers University, USA*

Committee Members (continued)

Stephen Lindsay, *Swansea University, UK*
Shixia Liu, *Tsinghua University, China*
Can Liu, *City University of Hong Kong, Hong Kong*
Zhe Liu, *IBM Almaden Research Center, USA*
Pedro Lopes, *University of Chicago, USA*
Danielle Lottridge, *Yahoo Inc, USA*
Tun Lu, *Fudan University, China*
Andrés Lucero, *Aalto University, Finland*
Thomas Ludwig, *University of Siegen, Germany*
Ewa Luger, *Edinburgh University, UK*
Michelle Lui, *University of Illinois at Chicago, USA*
Fei Lyu, *Beijing University of Posts and Telecommunications, China*
Xiaojuan Ma, *Hong Kong University of Science and Technology, Hong Kong*
Wendy Elizabeth Mackay, *Inria, France*
Haley MacLeod, *Facebook Research, USA*
Brian Magerko, *Georgia Institute of Technology, USA*
Jalal Mahmud, *IBM Research - Almaden, USA*
Meethu Malu, *University of Maryland College Park, USA*
Jennifer Marlow, *FXPAL, USA*
Elena Marquez Segura, *Uppsala University, Sweden*
Joe Marshall, *University of Nottingham, UK*
Nikolas Martelaro, *Accenture Technology Labs, USA*
Roberto Martinez-Maldonado, *University of Technology Sydney, Australia*
Aqueasha Martin-Hammond, *Indiana University - Purdue University Indianapolis, USA*
Afra Mashhadi, *University of Washington, USA*
Justin Matejka, *Autodesk Research, Canada*
Sven Mayer, *University of Stuttgart, Germany*
Roisin McNaney, *University of Bristol, UK*
Elisa D Mekler, *University of Basel, Switzerland*
Edward Melcer, *University of California, Santa Cruz, USA*
Maria Menendez Blanco, *University of Copenhagen, Denmark*
Oussama Metatla, *University of Bristol, UK*
Ronald Metoyer, *University of Notre Dame, USA*
Jochen Meyer, *OFFIS - Institute for IT, Germany*
Andrew D Miller, *IUPUI (Indiana University Purdue University Indianapolis), USA*
Karyn Moffatt, *McGill University, Canada*
Maletsabisa Molapo, *IBM, South Africa*
Toni-Jan Keith Palma Monserrat, *University of the Philippines Los Baños, Philippines*
Kyle Montague, *Newcastle University, UK*
Kellie Morrissey, *Open Lab, UK*
Martez Mott, *University of Washington, USA*
Omar Mubin, *Western Sydney University, Australia*

Florian Floyd Mueller, *RMassachusetts Institute of Technology University, Australia*

Michael Muller, *IBM Research, USA*

Cosmin Munteanu, *University of Toronto Mississauga, Canada*

Michael Nebeling, *University of Michigan, USA*

Matti Nelimarkka, *Aalto University, Finland*

Grace Ngai, *The Hong Kong Polytechnic University, Hong Kong*

Jeff Nichols, *Google, USA*

Hugo Nicolau, *Universidade de Lisboa, Portugal*

Francisco Nunes, *Fraunhofer Portugal AICOS, Portugal*

Ian Oakley, *UNIST, Republic of Korea*

Mohammad Obaid, *University of New South Wales, Australia*

William Odom, *Simon Fraser University, Canada*

Erick Oduor, *IBM Research Africa, Kenya*

Lora Oehlberg, *University of Calgary, Canada*

Eyal Ofek, *Microsoft Research, USA*

Alice Oh, *Korea Advanced Institute of Science and Technology, Republic of Korea*

Aisling O'Kane, *University of Bristol, UK*

Nigini Oliveira, *University of Washington, USA*

Steve Oney, *University of Michigan, USA*

Eleanor O'Rourke, *Northwestern University, USA*

Joyojeet Pal, *University of Michigan, USA*

Viktoria Pammer-Schindler, *Graz University of Technology, Austria*

Pablo Paredes, *Stanford University, USA*

Sun Young Park, *University of Michigan, USA*

Young-Woo Park, *UNIST, Republic of Korea*

Huaishu Peng, *Cornell University, USA*

Simon Tangi Perrault, *Singapore University of Technology and Design, Singapore*

Marianne Graves Petersen, *Aarhus University, Denmark*

Daniela Petrelli, *Sheffield Hallam University, UK*

Max Pfeiffer, *University of Munster, Germany*

Ken Pfeuffer, *Bundeswehr University Munich, Germany*

Bastian Pfleging, *Eindhoven University of Technology, Netherlands*

Aparecido Fabiano Pinatti de Carvalho, *University of Siegen, Germany*

Henning Pohl, *University of Copenhagen, Denmark*

Aaron J. Quigley, *University of St Andrews, UK*

Rebecca M. Quintana, *University of Michigan, USA*

Roman Rädle, *Aarhus University, Denmark*

Raf Ramakers, *Hasselt University, Belgium*

Gonzalo Ramos, *Microsoft Research, USA*

Rabindra Ratan, *Michigan State University, USA*

Committee Members (continued)

Agha Ali Raza, *Information Technology University, Pakistan*
Kyle K Rector, *University of Iowa, USA*
Stuart Reeves, *University of Nottingham, UK*
Derek Reilly, *Dalhousie University, Canada*
Christian Remy, *Aarhus University, Denmark*
Gabriela Richard, *Pennsylvania State University, USA*
Nathalie Riche, *Microsoft, USA*
Kathryn E. Ringland, *Northwestern University, USA*
Jessica Roberts, *Carnegie Mellon University, USA*
Michael Rohs, *University of Hannover, Germany*
John Rooksby, *Northumbria University, UK*
Carolyn Rosé, *Carnegie Mellon University, USA*
Daniela Rosner, *University of Washington, USA*
Virpi Roto, *Aalto University, Finland*
Anne Roudaut, *University of Bristol, UK*
Jaime Ruiz, *University of Florida, USA*
Daisuke Sakamoto, *Hokkaido University, Japan*
Antti Salovaara, *Aalto University, Finland*
Nithya Sambasivan, *Google, USA*
Alanson Sample, *The University of Michigan, USA*
Pedro Sanches, *KTH, Sweden*
Eunice Sari, *UX Indonesia, Australia*
Corina Sas, *Lancaster University, UK*
Florian Schaub, *University of Michigan, USA*
Thecla Schiphorst, *Simon Fraser University, Canada*
Stefan Schneegass, *Universität Duisburg-Essen, Germany*
Oliver Schneider, *University of Waterloo, Canada*
Jodi Schneider, *University of Illinois at Urbana-Champaign, USA*
Magy Seif El-Nasr, *Northeastern University, USA*
Bryan Semaan, *Syracuse University, USA*
Ehud Sharlin, *University of Calgary, Canada*
Aaron Shaw, *Northwestern University, USA*
Kristen Shinohara, *Rochester Institute of Technology, USA*
Adalberto L. Simeone, *KU Leuven, Belgium*
Vivek K Singh, *Rutgers University, USA*
Aneesha Singh, *University College London, UK*
Petr Slovak, *UCL, UK*
Marie Louise Juul Søndergaard, *KTH Royal Institute of Technology, Sweden*
Jürgen Steimle, *Saarland University, Saarland Informatics Campus, Germany*
Constance Steinkuehler, *University of California, Irvine, USA*
Gunnar Stevens, *University of Siegen, Germany*
Wolfgang Stuerzlinger, *Simon Fraser University, Canada*
Norman Makoto Su, *Indiana University, USA*
Sriram Subramanian, *University of Sussex, UK*

Jose Such, *King's College London, UK*

Danielle Albers Szafir, *University of Colorado Boulder, USA*

Anthony Tang, *University of Calgary, Canada*

John Tang, *Microsoft, USA*

Yla Tausczik, *University of Maryland, USA*

Nick Taylor, *University of Dundee, UK*

Edison Thomaz, *The University of Texas at Austin, USA*

Feng Tian, *Chinese Academy of Sciences, China*

Eran Toch, *Tel Aviv University, Israel*

Austin L Toombs, *Purdue University, USA*

Tammy Toscos, *Parkview Health, USA*

Shari Trewin, *IBM, USA*

Vasiliki Tsaknaki, *Royal Institute of Technology, Sweden*

Theophanis Tsandilas, *Inria, France*

Yuan-Chi Tseng, *National Tsing Hua University, Taiwan*

Joe Tullio, *Facebook, USA*

Selen Turkay, *QUT, Australia*

Nobuyuki Umetani, *The University of Tokyo, Japan*

Anna Vallgårda, *IT University of Copenhagen, Denmark*

Kami Vaniea, *University of Edinburgh, UK*

Radu-Daniel Vatavu, *University Stefan cel Mare of Suceava, Romania*

Marynel Vázquez, *Stanford University, USA*

Tiffany Veinot, *University of Michigan, USA*

Eduardo Velloso, *University of Melbourne, Australia*

Nervo Verdezoto, *University of Leicester, UK*

Keith Vertanen, *Michigan Technological University, USA*

Sarah Vieweg, *Facebook, USA*

John Vines, *Northumbria University, UK*

Simon Voelker, *RWTH Aachen University, Germany*

Emanuel von Zezschwitz, *University of Bonn, Germany*

Annika Waern, *Uppsala University, Sweden*

Erin Walker, *University of Pittsburgh, USA*

Günter Wallner, *University of Applied Arts Vienna, Austria*

Dakuo Wang, *IBM T.J. Watson Research Center, USA*

Yang Wang, *Syracuse University, USA*

Hao-Chuan Wang, *UC Davis, USA*

Rick Wash, *Michigan State University, USA*

Astrid Weber, *Google Inc., Switzerland*

Jason Wiese, *University of Utah, USA*

Andrew D Wilson, *Microsoft Research, USA*

Max L Wilson, *University of Nottingham, UK*

Graham Wilson, *University of Strathclyde, UK*

Heather Wiltse, *Umeå University, Sweden*

Sarah Wiseman, *Goldsmiths, University of London, UK*

Pamela J. Wisniewski, *University of Central Florida, USA*

Anusha Withana, *The University of Sydney, Australia*

Committee Members (continued)

Donghee Yvette Wohn, *New Jersey Institute of Technology, USA*
Maria Wolters, *University of Edinburgh, UK*
Richmond Y. Wong, *University of California, Berkeley, USA*
Paweł W. Woźniak, *University of Stuttgart, Germany*
Peta Wyeth, *Queensland University of Technology, Australia*
Haijun Xia, *University of Toronto, Canada*
Robert Xiao, *Carnegie Mellon University, USA*
Anbang Xu, *IBM Research - Almaden, USA*

Reviewers

Rafael A.Calvo, *The University of Sydney, Australia*
Mark Aakhur, *Rutgers University, USA*
Konstantin Aal, *University of Siegen, Germany*
Yomna Abdelrahman, *University of Stuttgart, Germany*
Ashraf Abdul, *National University of Singapore, Singapore*
Saeed Abdullah, *Pennsylvania State University, USA*
Saeed Abdullah, *Penn State, USA*
Alfie Abdul-Rahman, *King's College London, UK*
Khuloud ABOU AMSHA, *Troyes Université of technology, France*
Gregory D Abowd, *Georgia Institute of Technology, USA*
Dor Abrahamson, *University of California, Berkeley, USA*
Parastoo Abtahi, *Stanford University, USA*
Yasemin Acar, *Leibniz Universität Hannover, Germany*
Gabriela Aceves Sepúlveda, *Simon Fraser University, Canada*
Mark S. Ackerman, *University of Michigan, Ann Arbor, USA*
Nicoletta Adamo, *Purdue University, USA*
Alexander Adams, *Cornell University, USA*
Eytan Adar, *University of Michigan, USA*
Daniel Afergan, *Google, USA*
Leila Aflatoony, *University of British Columbia, Canada*
Elena Agapie, *University of Washington, USA*
Deepti Aggarwal, *University of Melbourne, Australia*
Eugene Agichtein, *Emory University, USA*
David Ahlström, *Alpen-Adria-Universität Klagenfurt, Austria*
Naseem Ahmadpour, *The University of Sydney, Australia*
Alex Ahmed, *Northeastern University, USA*
Tousif Ahmed, *Indiana University Bloomington, USA*
Shameem Ahmed, *Western Washington University, USA*
Nova Ahmed, *North South University, Bangladesh*
Dragan Ahmetovic, *Università degli studi di torino, Italy*
Karan Ahuja, *Carnegie Mellon University, USA*
Luca Maria Aiello, *Nokia Bell Labs, UK*

Xing-Dong Yang, *Dartmouth College, USA*
Lining Yao, *Carnegie Mellon University, USA*

Dongwook Yoon, *University of British Columbia, Canada*
Chun Yu, *Tsinghua University, China*
Shumin Zhai, *Google, USA*
Haimo Zhang, *University of Auckland, New Zealand*
Jian Zhao, *FX Palo Alto Laboratory, USA*
Haiyi Zhu, *University of Minnesota, USA*
Kening Zhu, *City University of Hong Kong, China*
Oren Zuckerman, *The Interdisciplinary Center (IDC) Herzliya, Israel*

Luca Maria Aiello, *Nokia Bell Labs, UK*
Wolfgang Aigner, *St. Poelten University of Applied Sciences, Austria*

Roland Aigner, *Upper Austria University of Applied Sciences, Austria*
Tanja Aitamurto, *Northwestern University, USA*
Dena Al Thani, *Hamad Bin Khalifa University, Qatar*
Sarah Fdili Alaoui, *LRI, Univ. Paris-Sud, CNRS, Inria, Université Paris-Saclay, France*

Lea Albaugh, *Carnegie Mellon University, USA*
Georgia Albuquerque, *TU Braunschweig, Germany*
Dmitry Alexandrovsky, *University of Bremen, Germany*
Sultan Alharthi, *New Mexico State University, USA*
Abdullah Ali, *University of Washington, USA*
Mirela Alistar, *University of Colorado, USA*
Mehrdad Alizadeh, *University of Illinois at Chicago, USA*
Ghayda Aljuwaiser, *Sheffield Hallam University, UK*
Ali Alkhatib, *Stanford University, USA*
Sedeeq Al-khazraji, *Rochester Institute of Technology, USA*
Elizabeth Allen, *Brazen Consulting, Canada*
Fraser Allison, *The University of Melbourne, Australia*
Jon Allsop, *Central Flying School, Royal Air Force College Cranwell, UK*

A.S. Almeida, *CISUC - University of Coimbra, Portugal*
Teresa Almeida, *Independent Researcher, Portugal*
Asam Hamed Abbas Almohamed, *Queensland University of Technology, Australia*

Hanan Alnizami, *Jaguar Land Rover, USA*
Basak Alper, *NASA, USA*
Meryl Alper, *Northeastern University, USA*
Nabil Alshurafa, *Northwestern University, USA*
Adriana Alvarado Garcia, *Georgia Institute of Technology, USA*
Jessalyn Alvina, *INRIA, France*
Morgan G. Ames, *UC Berkeley, USA*

Reviewers (continued)

- Fereshteh Amini, *University of Manitoba, Canada*
Ofra Amir, *Technion - Israel Institute of Technology, Israel*
Tawfiq Ammari, *University of Michigan, USA*
Judith Amores Fernandez, *Massachusetts Institute of Technology Medialab, USA*
Tariq Osman Andersen, *University of Copenhagen, Denmark*
Bonnie Brinton Anderson, *1971, USA*
ken anderson, *Intel, USA*
Jennings Anderson, *University of Colorado Boulder, USA*
Richard Anderson, *University of Washington, USA*
Nazareno Andrade, *Universidade Federal de Campina Grande, Brazil*
Gennady Andrienko, *Fraunhofer Institute IAIS, Germany*
Sean Andrist, *Microsoft Research, USA*
Chee Siang Ang, *Uni of Kent, UK*
Leonardo Angelini, *HumanTech Institute, Switzerland*
Craig Anslow, *Victoria University of Wellington, New Zealand*
Christoph Anthes, *University of Applied Sciences Upper Austria, Austria*
Alissa Antle, *Simon Fraser University, Canada*
Annie Anton, *Georgia Institute of Technology, USA*
Paul M. Aoki, *consultant, USA*
Caroline Appert, *Univ. Paris-Sud, CNRS, INRIA, Université Paris-Saclay., France*
Noah Apthorpe, *Princeton University, USA*
Nalin Asanka Gamagedara Arachchilage, *University of New South Wales, Australia*
Julie H Aranda, *Google, USA*
Ian Arawjo, *Cornell University, USA*
Ofer Arazy, *University of Haifa, Israel*
Daniel Archambault, *Swansea University, UK*
Carmelo Ardito, *University of Bari Aldo Moro, Italy*
Mohammed Safayet Arefin, *Mississippi State University, USA*
Dustin L Arendt, *Pacific Northwest National Laboratory, USA*
Ferran Argelaguet Sanz, *Inria, France*
Ahmed Sabbir Arif, *University of California, Merced, USA*
Ahmer Arif, *University of Washington, USA*
Kenneth C. Arnold, *Harvard University, USA*
Rahul Arora, *University of Toronto, Canada*
Lora M Aroyo, *VU Amsterdam, USA*
Mattias Arvola, *Linköping University, Sweden*
Ali Arya, *Carleton University, Canada*
Mariam Asad, *Georgia Institute of Technology, USA*
Doris Aschenbrenner, *TU Delft, Netherlands*
Bon Adriel Aseniero, *University of Calgary, Canada*
Auzi Asfarian, *Bogor Agricultural University, Indonesia*
Zahra Ashktorab, *IBM Research, USA*
Hala Assal, *Carleton University, Canada*
Siddhartha Asthana, *Indraprastha Institute of Information Technology, Delhi, India*
Tim Au Yeung, *University of Calgary, Canada*
Jonas Auda, *University of Duisburg-Essen, Germany*
Mirjam Augstein, *University of Applied Sciences Upper Austria, Austria*
Tal August, *University of Washington, USA*
Ignacio Avellino, *Sorbonne Université, CNRS, INSERM, ISIR-Agathe, France*
Jeff Avery, *University of Waterloo, Canada*
Adam J. Aviv, *USNA, USA*
Seyram Avle, *University of Michigan, USA*
Daniel Avrahami, *FXPAL, USA*
Gabriela Avram, *University of Limerick, Ireland*
Kagonya Awori, *Safaricom, Kenya*
Oshrat Ayalon, *Tel Aviv University, Israel*
Amid Ayobi, *UCL, UK*
Ehsan Azimi, *Johns Hopkins University, USA*
Teo Babic, *BMW Group, Germany*
Khaled Bachour, *University of Lincoln, UK*
Myroslav Bachynskyi, *Bayreuth University, Germany*
Jon Back, *Uppsala University, Sweden*
Sriram Karthik Badam, *University of Maryland, USA*
Karla Badillo-Urquiola, *University of Central Florida, USA*
Seok-Hyung Bae, *KAIST, Republic of Korea*
Per Bækgaard, *Technical University of Denmark, Denmark*
Naveen Bagalkot, *Srishti Institute of Art, Design, & Technology, India*
Anna Baglione, *University of Virginia, USA*
Paritosh Bahirat, *Clemson University, USA*
Wei Bai, *University of Maryland, College Park, USA*
Huidong Bai, *University of Auckland, New Zealand*
Zhen Bai, *Carnegie Mellon University, USA*
Jeremy Bailenson, *Stanford University, USA*
Brian P Bailey, *University of Illinois, USA*
Gavin Bailey, *Swansea University, UK*
Lynne Baillie, *Heriot-Watt University, UK*
Catherine M Baker, *Creighton University, USA*
Steven Baker, *The University of Melbourne, Australia*
Saskia Bakker, *Eindhoven University of Technology, Netherlands*
Madeline Balaam, *Royal Institute of Technology (KTH), Sweden*
Alexander Baldwin, *Deakin University, Australia*
Rebecca Balebako, *RAND Corporation, USA*
Elizabeth Bales, *Google, USA*

Reviewers (continued)

Martina Balestra, *New York University, USA*

Yuki Ban, *The University of Tokyo, Japan*

Arosha K. Bandara, *The Open University, UK*

Jayati Bandyopadhyay, *Conduent Labs, India, India*

Amartya Banerjee, *Northwestern University, USA*

Rahul Banerjee, *University of Washington, USA*

Amy Banic, *University of Wyoming, USA*

Nikola Banovic, *University of Michigan, USA*

Emilia I. Barakova, *Eindhoven University of technology, Netherlands*

Sabina Barakovic, *Little Mama Labs, Bosnia and Herzegovina*

Andrea Barbarin, *IBM Watson Health, USA*

Natā M Barbosa, *Syracuse University, USA*

Amit Barde, *University of Canterbury, New Zealand*

Shaowen Bardzell, *Indiana University School of Informatics, Computing, and Engineering, USA*

Jeffrey Bardzell, *Indiana University, USA*

Wolmet Barendregt, *University of Gothenburg, Sweden*

Titus Barik, *Microsoft, USA*

Lecia Barker, *University of Colorado, Boulder, USA*

Jordan B. Barlow, *University of St. Thomas, USA*

Roghayeh Leila Barmaki, *University of Delaware, USA*

Mary Barreto, *University of Madeira, Portugal*

Tom Bartindale, *Monash University, Australia*

Santosh Basapur, *Illinois Institute of Technology, USA*

Christine Bassem, *Wellesley College, USA*

Chiara Bassetti, *University of Trento, Italy*

John A. Bateman, *Bremen University, Germany*

Oliver Bates, *Lancaster University, UK*

Amna Batool, *Information Technology University, Pakistan*

Leilani Battle, *University of Maryland, USA*

Aaron Bauer, *University of Washington, USA*

Lujo Bauer, *Carnegie Mellon University, USA*

Sharon Bautista, *Mozilla, USA*

Nancy Baym, *Microsoft, USA*

Melissa Baysari, *Macquarie University, Australia*

Mehmet Aydin Baytaş, *Koç University, Turkey*

Jean-Charles Bazin, *KAIST, Republic of Korea*

Russell Beale, *University of Birmingham, UK*

Michael Bechinie, *USECON, Austria*

Jordan Beck, *Pennsylvania State University, USA*

Elke Beck, *OFFIS - Institute for Information Technology, Germany*

Abdelkareem Bedri, *Carnegie Mellon University, USA*

Jenay Beer, *University of Georgia, USA*

Andrew Begel, *Microsoft, USA*

Moritz Behrens, *UCL, UK*

Alexander Bejan, *Furtwangen University, Germany*

Marios Belk, *University of Central Lancashire (CY Campus), Cyprus*

Rosanna Bellini, *Newcastle University, UK*

Rosie Bellini, *Newcastle University, UK*

Andrea Bellucci, *Universidad Carlos III de Madrid, Spain*

Tony Belpaeme, *Plymouth University, UK*

Zinaida Benenson, *University of Erlangen-Nuremberg, Germany*

Erin Beneteau, *University of Washington, USA*

Steve Benford, *University of Nottingham, UK*

Hrvoje Benko, *Facebook, USA*

Cynthia L Bennett, *University of Washington, USA*

Sarah Bennett, *The University of Edinburgh, UK*

Daniel Bennett, *University of Bristol, UK*

Peter Bennett, *University of Bristol, UK*

Ayelet Ben-Sasson, *University of Haifa, Israel*

Laura Benton, *University College London, UK*

Arne Berger, *Chemnitz University of Technology, Germany*

Ofer Bergman, *Bar-Ilan University, Israel*

Larwan Berke, *Rochester Institute of Technology, USA*

Jasmin Bernotat, *CITEC, Bielefeld University, Germany*

Michael Bernstein, *Stanford University, USA*

Andrew Berry, *University of Washington, USA*

Marina Bers, *Tufts University, USA*

Andreas Berst, *Bauhaus-Universität Weimar, Germany*

Nadia Berthouze, *University College London, UK*

Stefan Berti, *Johannes Gutenberg University, Germany*

Joanna Berzowska, *Concordia University, Canada*

Lonni Besançon, *Linköpings universitet, Sweden*

Andrew Besmer, *Winthrop University, USA*

Chris Bevan, *University of Bristol, UK*

Karthik S. Bhat, *Georgia Institute of Technology, USA*

Arpita Bhattacharya, *University of Washington, USA*

Chiranjib Bhattacharyya, *Indian Institute of Science, India*

Tao Bi, *University College London, UK*

Melissa Bica, *University of Colorado Boulder, USA*

Bernd Bickel, *IST Austria, Austria*

Jacob Biehl, *EXPAL, USA*

Nicola Binetti, *University College London, UK*

Reuben Binns, *University of Oxford, UK*

Nataly Birbeck, *Newcastle University, UK*

Jon Bird, *University of Bristol, UK*

Max Valentin Birk, *Eindhoven University of Technology, Netherlands*

Jeremy Birnholtz, *Northwestern University, USA*

Reviewers (continued)

Walter Bischof, *University of British Columbia, Canada*

Staffan L Björk, *University of Gothenburg, Sweden*

- Elin A. Björling, *University of Washington, USA*
Pernille Bjørn, *University of Washington, USA*
Alison Black, *University of Reading, UK*
Rolf Black, *University of Dundee, UK*
Lindsay Blackwell, *University of Michigan, USA*
Alan F Blackwell, *University of Cambridge, UK*
Renaud Blanch, *Univ. Grenoble Alpes, France*
Ann Blandford, *University College London, UK*
Tanja Blascheck, *INRIA, France*
Pieter Blignaut, *University of the Free State, South Africa*
Paulo Blikstein, *Stanford university, USA*
Oliver Blunk, *Clausthal University of Technology, Germany*
Anna Bobak, *University of Stirling, UK*
Alexander Boden, *Fraunhofer Institute for Applied Information Technology FIT, Germany*
Laurens Boer, *IT University of Copenhagen, Denmark*
Cristian Bogdan, *KTH, Sweden*
Jennifer Boger, *University of Waterloo, Canada*
Thomas Boillat, *Lucerne University of Applied Sciences and Arts, Switzerland*
Davide Bolchini, *Indiana University, USA*
Costas Boletsis, *SINTEF Digital, Norway*
Joseph Bonneau, *New York University, USA*
Nicole Bonoff, *Facebook, USA*
Tracey Booth, *City, University of London, UK*
Chris Bopp, *University of Colorado Boulder, USA*
Julia Ayumi Bopp, *University of Basel, Switzerland*
Marcela Borge, *The Pennsylvania State University, USA*
Michelle A. Borkin, *Northeastern University, USA*
Felix Born, *University of Duisburg-Essen, Germany*
Marie Bornemann, *Bauhaus-Universität Weimar, Germany*
Alan Borning, *University of Washington, USA*
Jens Bornschein, *TU Dresden - Faculty of Computer Science, Germany*
Nigel Bosch, *University of Illinois at Urbana-Champaign, USA*
Claus Bossen, *Aarhus University, Denmark*
Melissa Boswell, *Stanford University, USA*
Dr Matt-Mouley Bouamrane, *University of Strathclyde, UK*
Andy Boucher, *Goldsmiths, University of London, UK*
Nadia Boukhelifa, *INRA, France*
Cecile Boulard, *NAVER LABS Europe, France*
Adrien Bousseau, *Inria, France*
V. Michael Bove, *Massachusetts Institute of Technology, USA*
Simon Bowen, *Newcastle University, UK*
John Bowers, *Newcastle University, UK*
Doug Bowman, *Virginia Tech, USA*
Alex Bowyer, *Newcastle University, UK*
Jeremy Boy, *United Nations, USA*
LouAnne Boyd, *University of California, Irvine, USA*
Kristy Elizabeth Boyer, *University of Florida, USA*
Linda Boyle, *University of Washington, USA*
Adam James Bradley, *University of Ontario Institute of Technology, Canada*
Katherine Brady, *Vanderbilt University, USA*
Jonathan Bragg, *University of Washington, USA*
Stefan Brandenburg, *Technische Universität Berlin, Germany*
Joel Brandt, *Snap, Inc., USA*
Rens Brankaert, *University of Technology Eindhoven, Netherlands*
Michael Braun, *BMW Group Research, New Technologies, Innovations, Germany*
Matthew Brehmer, *Microsoft Research, USA*
Corinne Brenner, *New York University, USA*
Margot Brereton, *QUT, Australia*
Stephen Brewster, *University of Glasgow, UK*
Julia Brich, *Ulm University, Germany*
Leah Bricker, *University of Michigan, USA*
Jonathan A Brier, *University of Maryland, USA*
Donald Brinkman, *Microsoft AI+R, USA*
Anke M. Brock, *University Toulouse, France*
Phillip Brooker, *University of Liverpool, UK*
Christopher Brooks, *University of Michigan, USA*
Jas Brooks Brooks, *University of Chicago, USA*
Ross Andrew Brown, *QUT, Australia*
Barry Brown, *Stockholm University, Sweden*
Scott Brown, *UNSW Sydney, Australia*
Jed R. Brubaker, *University of Colorado Boulder, USA*
Amy Bruckman, *Georgia Institute of Technology, USA*
Frederik Brudy, *University College London, UK*
Florian Brühlmann, *University of Basel, Switzerland*
Emeline Brûlé, *University of Sussex, UK*
Pat Brundell, *University of Nottingham, UK*
Anders Bruun, *Aalborg University, Denmark*
Chris Bryan, *Arizona State University, USA*
Nick Bryan-Kinns, *Queen Mary University of London, UK*
Paul Bucci, *University of British Columbia, Canada*
George Buchanan, *University of Melbourne, Australia*
Simon Buckingham Shum, *University of Technology Sydney, Australia*

Reviewers (continued)

- Erin Buehler, *Facebook, USA*
Elizabeth A Buie, *Sigma Consulting Solutions Ltd, UK*
Ivica Ico Bukvic, *Virginia Tech, USA*

- Sara Bunian, *Northeastern University, USA*
Paolo Burelli, *IT University of Copenhagen, Denmark*
Marissa Burgermaster, *Dell Medical School, USA*
Eleanor R. Burgess, *Northwestern University, USA*
Stefano Burigat, *University of Udine, Italy*
Moira Burke, *Facebook, USA*
Luke Burks, *University of Colorado Boulder, Aerospace Department, USA*
Andrew T Burks, *University of Illinois at Chicago, USA*
Margaret Burnett, *Oregon State University, USA*
Daniel Buschek, *LMU Munich, Germany*
Wolfgang Büschel, *Technische Universität Dresden, Germany*
Karoline Busse, *University of Bonn, Germany*
Adrian Bussone, *City, University of London, UK*
Simon Butscher, *University of Konstanz, Germany*
Andreas Butz, *LMU Munich, Germany*
Ayse G. Buyuktur, *University of Michigan, USA*
Zoya Bylinskii, *Massachusetts Institute of Technology, USA*
Richard Byrne, *RMassachusetts Institute of Technology University, Australia*
Michael Byrne, *Rice University, USA*
Diogo Cabral, *University of Madeira, Portugal*
Maria Eugenia Cabrera, *Purdue University, USA*
Francesco Cafaro, *Indiana University-Purdue University Indianapolis, USA*
Minjie Cai, *Hunan University, China*
Jie Cai, *New Jersey Institute of Technology, USA*
Paul Cairns, *University of York, UK*
Clara Caldeira, *UC Irvine, USA*
André Calero Valdez, *RWTH Aachen University, Germany*
Julia Cambre, *Carnegie Mellon University, USA*
Anil Çamci, *University of Michigan, USA*
Heloisa Candello, *IBM Research, Brazil*
Vikram Kamath Cannanure, *Carnegie Mellon University, USA*
Alessandro Canossa, *Ubisoft, Sweden*
Nan Cao, *Tongji College of Design and Innovation, China*
Xiang Cao, *Xiaoxiaoniu Creative Technologies, China*
Meng Cao, *University of Memphis, USA*
Baptiste Caramiaux, *CNRS - LRI, Univ. Paris-Sud, Inria, France*
Kristin Carlson, *Illinois State University, USA*
Davide Rua Carneiro, *Instituto Politécnico do Porto, Portugal*
Karina Caro, *Drexel University, USA*
Romina Carrasco, *The University of Melbourne, Australia*
John M. Carroll, *Pennsylvania State University, USA*
Elizabeth Jeanne Carter, *Carnegie Mellon University, USA*
- Marcus Carter, *The University of Sydney, Australia*
Scott Carter, *FX Palo Alto Laboratory, Inc., USA*
Samuel Carton, *University of Michigan, USA*
Mark Cartwright, *New York University, USA*
Paulo Carvalho, *Carnegie Mellon University, USA*
Justine Cassell, *Carnegie Mellon University, USA*
Brendan Cassidy, *University of Central Lancashire, UK*
Stefania Castellani, *NAVER LABS Europe, France*
Nico Castelli, *University of Siegen, Germany*
Steven Castellucci, *York University, Canada*
Jessica R. Cauchard, *IDC Herzliya, Israel*
Marta E. Cecchinato, *Northumbria University, UK*
Jessy Ceha, *University of Waterloo, Canada*
Katerina Cerna, *University of Gothenburg, Sweden*
Pablo Cesar, *CWI, Netherlands*
Elizabeth Cha, *University of Southern California, USA*
Perumal Varun Chadalavada, *University of Toronto, Canada*
Matthew Chalmers, *University of Glasgow, UK*
Alan Chamberlain, *University of Nottingham, UK*
Kaylea Champion, *University of Washington, USA*
Sonny Chan, *University of Calgary, Canada*
Stephen C. F. Chan, *The Hong Kong Polytechnic University, China*
Joel Chan, *University of Maryland, USA*
Liwei Chan, *National Chiao Tung University, Taiwan*
Stevie Chancellor, *Georgia Tech, USA*
Priyank Chandra, *University of Michigan, USA*
Senthil Chandrasegaran, *University of California, USA*
Eshwar Chandrasekharan, *Georgia Institute of Technology, USA*
Yung-Ju Chang, *National Chiao Tung University, Taiwan*
Minsuk Chang, *KAIST, Republic of Korea*
Joseph Chee Chang, *HCII and LTI, USA*
Jack Shen-Kuen Chang, *Pennsylvania State University, USA*
Remco Chang, *Tufts University, USA*
Clovis Chapman, *Fraunhofer Institute for Material Flow and Logistics, Germany*
Olivier Chapuis, *Univ. Paris-Sud, CNRS, Inria, Université Paris-Saclay, France*
Charles Weir Charles, *Lancaster University, UK*
David Chatting, *Goldsmiths, University of London, UK*
Bidisha Chaudhuri, *International Institute of Information Technology, Bangalore, India*
amy cheatle, *Cornell University, USA*
Reviewers (continued)
Garen Checkley, *Google, USA*
Salman Cheema, *Arizona State University, USA*

Daniel Kuan Yu Chen, *Shanghai Jiao Tong University, China*
Yiqiang Chen
Yang CHEN, *Fudan University, China*
Nicholas Chen, *Microsoft Research, UK*
Ying-Yu Chen, *University of Washington, USA*
Bing-Yu Chen, *National Taiwan University, Taiwan*
Fanglin Chen, *Carnegie Mellon University, USA*
Yi-Chao Chen, *Shanghai Jiao Tong University, China*
Hui-Fang Chen, *City University of Hong Kong, Hong Kong*
Taizhou Chen, *City University of Hong Kong, China*
Yan Chen, *University of Michigan, USA*
Xiuli Chen
Yunan Chen, *University of California Irvine, USA*
Zhengxing Chen, *Northeastern University, USA*
Nan-Chen Chen, *University of Washington, USA*
JIN Cheng, *Fudan University, China*
Jinghui Cheng, *Polytechnique Montreal, Canada*
shiwei cheng, *Zhejiang University of Technology, China*
Lung-Pan Cheng, *Hasso Plattner Institute, Germany*
Yu-Ting Cheng, *Future Everyday, Netherlands*
Justin Cheng, *Facebook, USA*
EunJeong Cheon, *Indiana University, USA*
Christopher K Chepken, *University of Nairobi, Kenya*
Mauro Cherubini, *Universite de Lausanne, Switzerland*
Shira Chess, *University of Georgia, USA*
Marshini Chetty, *Princeton University, USA*
Victor Cheung, *Carleton University, Canada*
Fanny Chevalier, *University of Toronto, Canada*
Keith Cheverst, *Lancaster University, UK*
Niyati Chhaya, *Adobe Research, India*
Chun-Wei Chiang, *West Virginia University, USA*
Sonia Chiasson, *Carleton University, Canada*
George "Hope" Chidziwisano, *Michigan State University, USA*
Mark Chignell, *University of Toronto, Canada*
Prerna Chikarsal, *Carnegie Mellon University, USA*
Sridhar Chimalakonda, *IIT Tirupati, India*
Padma Chirumamilla, *University of Michigan, USA*
Shruthi Sai Chivukula, *Purdue University, USA*
Yongwoo Cho, *Hanyang University, Republic of Korea*
Alexander Cho, *University of California Irvine, USA*
Inrak Choi, *Stanford University, USA*
Inkyung Choi, *Hanyang University, Republic of Korea*
Sung Won Choi, *University of Michigan, USA*
Kenny Tsu Wei Choo, *Singapore Management University, Singapore*
Jaegul Choo, *Korea University, Republic of Korea*
Yee-Yin Choong, *National Institute of Standards and Technology, USA*

Irene-Angelica Chounta, *University of Tartu, Estonia*
Kenny Chow, *The Hong Kong Polytechnic University, China*
Marc Christie, *IRISA, France*
Nicolas Christin, *Carnegie Mellon University, USA*
Sharon Lynn Chu, *University of Florida, USA*
Tania Chumaira, *Aalto University, Finland*
Rumi Chunara, *New York University, USA*
Marika Cifor, *Indiana University, USA*
Marika Cifor, *Indiana University, USA*
Nazli Cila, *Amsterdam University of Applied Sciences, Netherlands*
Luigina Ciolfi, *Sheffield Hallam University, UK*
Sandy Claes, *KU Leuven, Belgium*
Leigh Clark, *University College Dublin, Ireland*
Lorraine Clarke, *University of Dundee, UK*
Christopher Clarke, *Lancaster University, UK*
James Clawson, *Indiana University Bloomington, USA*
Mark Claypool, *WPI, USA*
Robyn Clay-Williams, *Macquarie University, Australia*
Tamara Clegg, *University of Maryland, USA*
Paul Clifton, *Georgia Institute of Technology, USA*
Sarah Clinch, *University of Manchester, UK*
Paul Clough, *University of Sheffield, UK*
Sue V.G. Cobb, *University of Nottingham, UK*
Karen Cochrane, *University of Sydney, Australia*
Andy Cockburn, *University of Canterbury, New Zealand*
Gilbert Cockton, *Northumbria University, UK*
Courtney D. Cogburn, *Columbia University, USA*
Gabe Cohn, *Microsoft, USA*
Lizzie Coles-Kemp, *Royal Holloway University of London, UK*
Ashley Colley, *University of Lapland, Finland*
Emily Collins, *University of Bath, UK*
Christopher Collins, *University of Ontario Institute of Technology, Canada*
Jessica Colnago, *Carnegie Mellon University, USA*
Rob Comber, *KTH Royal Institute of Technology, Sweden*
Rob Comber, *KTH Royal Institute of Technology, Sweden*
Cristina Conati, *UBC, Canada*
Shauna Concannon, *University of York, UK*
David Conroy, *Queensland University of Technology, Australia*
Mia Consalvo, *Concordia University, Canada*
Sunny Consolvo, *Google, USA*
Marios Constantinides, *University College London, UK*
Stéphane Conversy, *ENAC, France*
Reviewers (continued)
Mike Conway, *university of utah, USA*
Amy Cook, *Carnegie Mellon University, USA*

- Seth Cooper, *Northeastern University, USA*
Jeremy Cooperstock, *McGill University, Canada*
Sven Coppers, *Hasselt University - tUL - Flanders Make, Belgium*
Eric Corbett, *Georgia Institute of Technology, USA*
Maxime Cordeil, *Monash University, Australia*
Raymundo Cornejo, *UACH, Mexico*
Patricia I Cornelio Martinez, *University of Sussex, UK*
Ana Correia de Barros, *Fraunhofer Portugal AICOS, Portugal*
Michael Correll, *Tableau Software, USA*
Christian Corsten, *RWTH Aachen University, Germany*
Aykut Coşkun, *Koç University, Turkey*
Dan Cosley, *Cornell University, USA*
Jean Costa, *Cornell University, USA*
Enrico Costanza, *UCL Interaction Centre, UK*
Amanda C Cote, *University of Oregon, USA*
James Coughlan, *Smith-Kettlewell Eye Research Institute, USA*
Paul Coulton, *Lancaster University, UK*
Scott Counts, *Microsoft Research, USA*
Céline Coutrix, *CNRS, France*
Benjamin R. Cowan, *UCD, Ireland*
Michael Crabb, *University of Dundee, UK*
Claire Craig, *Sheffield Hallam University, UK*
Henriette Cramer, *Spotify, USA*
David Crandall, *Indiana University, USA*
Lorrie Cranor, *Carnegie Mellon University, USA*
Chris Creed, *Birmingham City University, UK*
Sarah Creem-Regehr, *University of Utah, USA*
Nicole Crenshaw, *University of California Irvine, USA*
Julia Crouse Waddell, *West Chester University, USA*
Kevin Crowston, *Syracuse University, USA*
Chris Csikszentmihalyi
Andrea Cuadra, *Cornell Tech, USA*
Mutlu Cukurova, *UCL Institute of Education, UK*
Heather Culbertson, *Stanford University, USA*
Charlie Cullen, *Dublin Institute of Technology, Ireland*
Clare Cullen, *University of Bristol, UK*
Rachel Cummings, *Georgia Institute of Technology, USA*
Dara Suzanne Cunningham, *DaVita, USA*
Andrew Cunningham, *University of South Australia, Australia*
Franco Curmi, *University of Malta, Malta*
Morgan Currie, *University of Edinburgh, UK*
Edward Cutrell, *Microsoft Research, USA*
Mary Czerwinski, *Microsoft Research, USA*
Dennis Rodrigo Da Cunha Silva, *Texas A&M University, USA*
Laura Dabbish, *Carnegie Mellon University, USA*
- Filip Dabek, *Walter Reed National Military Medical Center, USA*
Raimund Dachselt, *Technische Universität Dresden, Germany*
Zhengyan Dai, *School of Informatics and Computing- Indianapolis, USA*
Florian Daiber, *DFKI, Saarland Informatics Campus, Germany*
Dharma Dailey, *University of Washington, USA*
Lea Marleen Daling, *IMA der RWTH Aachen, Germany*
Peter Dalsgaard, *Aarhus University, Denmark*
Alexandru Dancu, *Singapore University of Design, Singapore*
Cristian Danescu-Niculescu-Mizil, *Cornell University, USA*
Sarah D'Angelo, *Northwestern University, USA*
Andreea Danilescu, *Arizona State University, USA*
Karin Danielsson, *Umeå University, Sweden*
Alireza Darvishy, *Zurich University of Applied Sciences, Switzerland*
Dimitrios Paris Darzentas, *University of Nottingham, UK*
Amitava Das, *Mahindra Ecole Centrale, India*
Amit Kumar Das, *East West University, Bangladesh*
Sanchari Das, *Indiana University Bloomington, USA*
Vedant Das Swain, *Georgia Institute of Technology, USA*
Aritra Dasgupta, *Pacific Northwest National Lab, USA*
Nediyana Daskalova, *Brown University, USA*
Hal Daumé III, *University of Maryland, USA*
Alan Davies, *University of Manchester, UK*
Josh Urban Davis, *Dartmouth College, USA*
Nicholas Davis, *UNC Charlotte, USA*
Hilary Davis, *La Trobe University, Australia*
Dan Davis, *TU Delft, Netherlands*
Adrian de Freitas
Anna De Liddo, *The Open University, UK*
Stefano De Paoli, *Abertay University, UK*
Luigi De Russis, *Politecnico di Torino, Italy*
Dick de Waard, *University of Groningen, Netherlands*
Jonathan Deber, *University of Toronto, Canada*
Martin Johannes Dechant, *University of Saskatchewan, Canada*
Joseph Defazio, *Indiana University, USA*
Martin Degeling, *Ruhr-University Bochum, Germany*
Donald Degræn, *Intel Visual Computing Institute (IVCI), Saarland Informatics Campus, Germany*
Frederic Dehais, *ISAE-SUPAERO, France*
Reviewers (continued)
Biplab Deka, *University of Illinois at Urbana Champaign, USA*
William Delamare, *Kochi University of Technology, Japan*

Robert DeLine, *Microsoft Research, USA*
Marta S delRio, *Universidad de Monterrey, Mexico*
Artem Dementyev, *Massachusetts Institute of Technology, USA*
Çağatay Demiralp, *Massachusetts Institute of Technology, USA*
Alena Denisova, *Swansea University, UK*
Paul Denny, *The University of Auckland, New Zealand*
Brian DeRenzi, *Dimagi, Inc., South Africa*
Dmitry Dereshev, *Northumbria University at Newcastle, UK*
Katie Derthick, *University of Washington, USA*
Ruta Desai, *Carnegie Mellon University, USA*
Giuseppe Desolda, *University of Bari Aldo Moro - Computer Science Department, Italy*
Oliver Deussen, *University of Konstanz, Germany*
Laura Devendorf, *University of Colorado Boulder, USA*
Kate Devlin, *King's College London, UK*
Kristin Dew, *University of Washington, USA*
Pierre Dewitte, *KU Leuven, Belgium*
Arindam Dey, *University of South Australia, Australia*
Balandino Di Donato, *Goldsmiths, University of London, UK*
Ines Di Loreto, *UTT- Université de Technologie de Troyes (UMR CNRS 6281), France*
Massimiliano Di Luca, *University of Birmingham, UK*
Nicholas Diakopoulos, *Northwestern University, USA*
Antonio Diaz Tula, *University of São Paulo, Brazil*
Victor C Dibia, *IBM Research, USA*
Michael Dickard, *Drexel University, USA*
Patrick Dickinson, *University of Lincoln, UK*
Kyle Diederich, *University of Iowa, USA*
Sarah Diefenbach, *Ludwig-Maximilians-University Munich, Germany*
Jana Diesner, *University of Illinois at Urbana-Champaign, USA*
Griffin Dietz, *Stanford University, USA*
Tomas Diez, *Fab Lab Barcelona, Spain*
Dominic DiFranzo, *Cornell University, USA*
Catherine D'Ignazio, *Massachusetts Institute of Technology Media Lab, USA*
Pierre Dillenbourg, *EPFL, Switzerland*
Nem Khan Dim, *University of Yangon, Myanmar*
Evanthia Dimara, *Sorbonne Université, CNRS, ISIR, France*
Daniele Dimitri, *Open University of The Netherlands, Netherlands*
Jill Dimond, *Sassafras Tech Collective, USA*
Christian Dindler, *Aarhus University, Denmark*
Jesse David Dinneen, *Victoria University of Wellington, New Zealand*

Anke Dittmar, *University of Rostock, Germany*
Stephen DiVerdi, *Adobe, USA*
Monica Divitini, *NTNU, Norway*
Alan Dix, *Swansea University, UK*
Hazel Anneke Dixon, *Newcastle University, UK*
Sidney D'Mello, *University of Colorado Boulder, USA*
Youngwook Do, *Georgia Institute of Technology, USA*
Chelsea Dobbins
Mili DoCampo Rama, *Philips, Netherlands*
Ralf Doerner, *RheinMain University of Applied Sciences, Germany*
Skye Doherty, *University of Queensland, Australia*
Kevin Doherty, *Trinity College Dublin, Ireland*
Lorin Dole, *Stanford University, USA*
Igor Dolgov, *New Mexico State University, USA*
Tanja Döring, *University of Bremen, Germany*
Marian Dörk, *University of Applied Sciences Potsdam, Germany*
Shayan Doroudi, *Carnegie Mellon University, USA*
Bryan Dosono, *Syracuse University, USA*
Wenwen Dou, *UNC Charlotte, USA*
Paul Dourish, *University of California, Irvine, USA*
Graham Dove, *New York University, USA*
Steven Dow, *University of California, San Diego, USA*
Liz Dowthwaite, *University of Nottingham, UK*
Julie Doyle, *Dundalk Institute of Technology, Ireland*
Heiko Drewes, *LMU Munich, Germany*
He Du, *Northwestern Polytechnical University, China*
Fan Du, *Adobe Research, USA*
Ruofei Du, *University of Maryland, College Park, USA*
Carlos Duarte, *Universidade de Lisboa, Portugal*
Emmanuel Dubois, *IRIT - Ellipse, France*
Andrew Duchowski, *Clemson University, USA*
Andreas Duenser, *CSIRO, Australia*
Tim Duente, *Leibniz University Hannover, Germany*
Casey Dugan, *IBM Research, USA*
Steve Duman, *University of Basel, Switzerland*
Mark Dunlop, *University of Strathclyde, UK*
Robert Andrew Dunn, *East Tennessee State University, USA*
Adam Dunn, *Macquarie University, Australia*
Cody Dunne, *Northeastern University, USA*
Abigail Durrant, *Northumbria University, UK*
Jared Duval, *University of California Santa Cruz, USA*
Tim Dwyer, *Monash University, Australia*
Thomas Dylan, *Northumbria University, UK*
Reviewers (continued)
Brianna Dym, *University of Colorado Boulder, USA*
Jane L E, *Stanford University, USA*
Alexander K Eady, *Carleton University, Canada*

- Rachel Eardley, *University of Bristol, UK*
William Berkley Easley, *University of Maryland, Baltimore County, USA*
Grace Eden, *Manchester Metropolitan University, UK*
Darren Edge, *Microsoft Research, UK*
Berry Eggen, *Eindhoven University of Technology, Netherlands*
Malin Eiband, *LMU Munich, Germany*
Elizabeth V. Eikey, *University of California, Irvine, USA*
Mahzar Eisapour, *University of Waterloo, Canada*
Abdallah El Ali, *Centrum Wiskunde & Informatica (CWI), Netherlands*
Houda El Mimouni, *Drexel University, USA*
Passant ElAgroudy, *University of Stuttgart, Germany*
Mennatallah El-Assady, *University of Konstanz, Germany*
Gunnar Ellingsen, *Norwegian centre for e-health research, Tromsø, Norway*
Chris Elsden, *Northumbria University, UK*
Mai ElSherief, *University of California, Santa Barbara, USA*
Carmine Elvezio, *Columbia University, USA*
Colleen Emmenegger, *University of California San Diego, USA*
Katharina Emmerich, *University of Duisburg-Essen, Germany*
Sophie Engle, *University of San Francisco, USA*
Hadas Erel, *The Interdisciplinary Center (IDC) Herzliya, Israel*
Sheena Erete, *DePaul University, USA*
Ingrid Erickson, *Syracuse University, USA*
Thomas Erickson, *USA*
Barbara Ericson, *University of Michigan, USA*
Eva Eriksson, *Aarhus University, Denmark*
Cumhur Erkut, *Aalborg University, Denmark*
Sindhu Kiranmai Ernala, *Georgia Institute of Technology, USA*
Begum Erten Uyumaz, *Eindhoven University of Technology, Netherlands*
Lizbeth Escobedo, *CETYS University, Mexico*
Parisa Eslambolchilar, *Cardiff University, UK*
Motahhare Eslami, *University of Illinois at Urbana-Champaign, USA*
Augusto Esteves, *Edinburgh Napier University, UK*
Ali Etemad, *Queen's University, Canada*
Sarah Amber Evans, *Texas Woman's University, USA*
Abigail Evans, *Northeastern University, USA*
Aluna Everitt, *Lancaster University, UK*
Anja Exler, *Karlsruhe Institute of Technology, Germany*
Sara Irina Fabrikant, *University of Zurich, Switzerland*
Jerry Alan Fails, *Boise State University, USA*
- Shamal Faily, *Bournemouth University, UK*
Cori Faklaris, *Carnegie Mellon University, USA*
Omid Fakourfar, *Versett Inc, Canada*
Xiangmin Fan, *Chinese Academy of Sciences, China*
Mingming Fan, *University of Toronto, Canada*
Matteo Farinella, *Columbia University, USA*
Rosta Farzan, *University of Pittsburgh, USA*
Anton Fedosov, *Università della Svizzera italiana, Switzerland*
Anna Maria Feit, *Aalto University, Finland*
Jean-Daniel Fekete, *Inria, France*
Cristian Felix, *New York University, USA*
Sidney S. Fels, *University of British Columbia, Canada*
Tom Feltwell, *Northumbria University, UK*
Andreas Rene Fender, *Aarhus University, Denmark*
Wenxin Feng, *Boston University, USA*
Mi Feng, *Worcester Polytechnic Institute, USA*
Chris Fennell, *Michigan State University, USA*
Hasan Shahid Ferdous, *University of Melbourne, Australia*
Piyum Fernando, *SANDS Group at the School of Arts, Media and Engineering, USA*
Ylva Ferneaus, *KTH Royal Institute of Technology, Sweden*
Pedro Ferreira, *IT University of Copenhagen, Denmark*
Denzil Ferreira, *University of Oulu, Finland*
Eija Ferreira, *University of Oulu, Finland*
Xavier Ferrer Aran, *King's College London, UK*
Gabriele Ferri, *Amsterdam University of Applied Sciences, Netherlands*
Tiare Feuchtner, *Aarhus University, Denmark*
Alexander J. Fiannaca, *Microsoft Research, USA*
Casey Fiesler, *University of Colorado, USA*
Fernando Figueira Filho, *UFRN, Brazil*
Tom Fikes, *Arizona State University, USA*
Genevieve Filippi, *EDF, France*
Leah Findlater, *University of Washington, USA*
Patrick Finn, *University of Calgary, Canada*
Daniel Joseph Finnegan, *University of Bath, UK*
Matthew David Fisher, *Adobe Systems, USA*
Danyel A Fisher, *Honeycomb, USA*
Josh Fisher, *Georgia Institute of Technology, USA*
Nathan W. Fisk, *University of South Florida, USA*
Dan Fitton, *University of Central Lancashire, UK*
Morten Fjeld, *Chalmers University of Technology, Sweden*
Ivan Flechais, *University of Oxford, UK*
Rowanne Fleck, *University of Birmingham, UK*
Stephanie FLECK, *Université de Lorraine, France*
- Reviewers (continued)**
- Scott Fleming, *University of Memphis, USA*
Cedric Fleury, *Univ. Paris-Sud, CNRS, Inria, Université Paris-Saclay, France*

- James Fogarty, *University of Washington, USA*
Sarah Foley, *University College Cork, Ireland*
Sarah Marie Foley, *Carnegie Mellon University, USA*
Eelke Folmer, *University of Nevada, USA*
Asbjørn Følstad, *SINTEF Digital, Norway*
Matthew Fong, *University of British Columbia, Canada*
Manuel J. Fonseca, *Universidade de Lisboa, Portugal*
Angus G. Forbes, *University of California, Santa Cruz, USA*
Colin Ford, *University of California, Irvine, USA*
Denae Ford, *North Carolina State University, USA*
Jodi Forlizzi, *Carnegie Mellon University, USA*
Andrea Forte, *Drexel University, USA*
Mary Ellen Foster, *University of Glasgow, UK*
Marcus Foth, *QUT, Australia*
Thomas Franke, *Universität zu Lübeck, Germany*
Juliano Franz, *Dalhousie University, Canada*
Mike Fraser, *University of Bristol, UK*
C. Ailie Fraser, *University of California, San Diego, USA*
Christopher Frauenberger, *TU Wien, Austria*
Marlena Fraune, *New Mexico State University, USA*
Diana Freed, *Cornell University, USA*
Guo Freeman, *Clemson University, USA*
Dustin Freeman, *Escape Character Inc., Canada*
Euan Freeman, *University of Glasgow, UK*
Georgina Freeman, *University of Calgary, Canada*
Joep Frens, *Eindhoven University of Technology, Netherlands*
John D Frens, *University of Washington, USA*
Jeremy Frey, *Ullo, France*
Adrian Friday, *Lancaster University, UK*
Batya Friedman, *University of Washington, USA*
Maximilian Achim Friehs, *University of Trier, Germany*
William Frier, *University of Sussex, UK*
Erin Friess, *University of North Texas, USA*
Alisa Frik, *University of California, Berkeley, USA*
Mathias Frisch, *MID GmbH, Germany*
Anna-Katharina Frison, *Technische Hochschule Ingolstadt, Germany*
Sebastian J Friston, *University College London, UK*
Jonas Fritsch, *IT University of Copenhagen, Denmark*
Thomas Fritz, *University of Zurich, Switzerland*
Jon Froehlich, *University of Washington, USA*
David M Frohlich, *University of Surrey, UK*
Julian Frommel, *Ulm University, Germany*
Maite Frutos-Pascual, *Birmingham City University, UK*
Siwei Fu, *The Hong Kong University of Science and Technology, China*
Hongbo Fu, *City University of Hong Kong, Hong Kong*
Vittorio Fuccella, *University of Salerno, Italy*
Johannes Fuchs, *University of Konstanz, Germany*
Carolina Fuentes, *University of Nottingham, UK*
Wolfgang Fuhl, *Wilhelm Schickard Institut, Germany*
Nobuko Fujita, *University of Windsor, Canada*
Masaaki Fukumoto, *Microsoft Research, China*
David Furió, *CNRS, France*
Dominic Furniss, *University College London, UK*
Silvia Gabrielli, *Fondazione Bruno Kessler, Italy*
Catherine Gach, *University of Colorado, Boulder, USA*
Ujwal Gadiraju, *Leibniz University of Hannover, Germany*
Wei Gai, *Shandong University, China*
Neil S. Gaikwad, *Massachusetts Institute of Technology, USA*
Sarah Gallacher, *Arup, UK*
Nalin Asanka Gamagedara Arachchilage, *University of New South Wales (UNSW Canberra), Australia*
Andrew Gambino, *The Pennsylvania State University, USA*
Enrico Gandolfi, *Kent State University, USA*
Andrew Garbett, *Newcastle University, UK*
Patricia Garcia, *University of Michigan, USA*
Jeremie Garcia, *ENAC, France*
Simson L Garfinkel, *US Census Bureau, USA*
Kiran Garimella, *EPFL, Switzerland*
Tom A Garner, *University of Portsmouth, UK*
Isabela Gasparini, *UDESC, Brazil*
Elia Gatti, *Oculus Research, USA*
Thomas Gayler, *Lancaster University, UK*
Christoph Gebhardt, *ETH Zurich, Switzerland*
Nurcan Gecer Ulu, *Carnegie Mellon University, USA*
David Geerts, *KU Leuven, Belgium*
Nils Gehlenborg, *Harvard Medical School, USA*
Lukas Gehrke, *TU Berlin, Germany*
Stefan Geisler, *Hochschule Ruhr West University of Applied Sciences, Germany*
Hans Gellersen, *Lancaster University, UK*
Mirko Gelsomini, *Politecnico di Milano, Italy*
Vivian Genaro Motti, *George Mason University, USA*
Sandeep Zechariah George, *University of Calgary, Canada*
Jennifer George, *Anglia Ruskin University, UK*
Nina Gerber, *Karlsruhe Institute of Technology, Germany*
Elizabeth Gerber, *Northwestern University, USA*
Marc Gerbracht, *University of Siegen, Germany*
Darren Gergle, *Northwestern University, USA*
Reviewers (continued)
Jens Gerken, *Westphalian University of Applied Sciences, Germany*
Marco Aurelio Gerosa, *Northern Arizona University, USA*
David Brent Gerritsen, *Carnegie Mellon University, USA*

Christopher Getschmann, *Bauhaus-Universität Weimar, Germany*
Eva Geurts, *Hasselt University - tUL - imec, Belgium*
Luc Geurts, *KU Leuven, Belgium*
Maliheh Ghajargar, *Amsterdam University of Applied Sciences, Netherlands*
Asma Ghandeharioun, *Massachusetts Institute of Technology, USA*
Masitah Ghazali, *Universiti Teknologi Malaysia, Malaysia*
Ishita Ghosh, *UC Berkeley, USA*
Debjyoti Ghosh, *National University of Singapore, Singapore*
Arup Kumar Ghosh, *University of Central Florida, USA*
Elisa Giaccardi, *Delft University of Technology, Netherlands*
Michail Giannakos, *Norwegian University of Science and Technology, Norway*
Janet Gibbs, *Goldsmiths, University of London, UK*
Grant Gibson, *University of Stirling, UK*
Toby Gifford, *Monash University, Australia*
Emilie Giles, *The Open University, UK*
Marco Gillies, *Goldsmiths, University of London, UK*
Connor Gilroy, *University of Washington, USA*
Audrey Girouard, *Carleton University, Canada*
Hristijan Gjoreski, *University of Sussex, UK*
Elena Glassman, *Harvard, USA*
Christiane Glatz, *Max Planck Institute for Biological Cybernetics, Germany*
Cole Gleason, *Carnegie Mellon University, USA*
Michael Gleicher, *University of Wisconsin - Madison, USA*
Maria Glenski, *University of Notre Dame, USA*
Mareike Glöss, *Halmstad University, Sweden*
Michael Glueck, *Autodesk Research, Canada*
Alex Godwin, *American University, USA*
Mayank Goel, *Carnegie Mellon University, USA*
Sharad Goel, *Stanford University, USA*
Sean Goggins, *Missouri State University, USA*
Alix Goguey, *Swansea University, UK*
Joslin Goh, *University of Waterloo, Canada*
Michael Golembewski
Shyamnath Gollakota, *university of Washington, USA*
Richard C Gomer, *University of Southampton, UK*
Jorge Goncalves, *The University of Melbourne, Australia*
Jun Gong, *Dartmouth College, USA*
Jun Gong, *Dartmouth College, USA*
Carina S. Gonzalez, *Universidad de la Laguna, Spain*
Mar Gonzalez-Franco, *Microsoft Research, USA*
Judith Good, *University of Sussex, UK*
Sarah Goodwin, *Monash University, Australia*
Mitchell L Gordon, *Stanford University, USA*

Goren Gordon, *Tel Aviv University, Israel*
Julien Gori, *Telecom ParisTech, France*
Katerina Gorkovenko, *University of Dundee, UK*
Benjamin Millar Gorman, *University of Dundee, UK*
Jamie Gorson, *Northwestern University, USA*
David Gotz, *University of North Carolina, USA*
Liang Gou, *VISA, USA*
Sandy J. J. Gould, *University of Birmingham, UK*
Sai Gouravajhala, *University of Michigan, USA*
Pauline Gourlet, *Université Paris 8, France*
Rúben Gouveia, *Madeira Interactive Technologies Institute, Portugal*
Jeremy Gow, *Queen Mary University of London, UK*
Erhardt Graeff, *Massachusetts Institute of Technology, USA*
Nicholas Graham, *Queen's University, Canada*
Corrado Grappiolo, *TNO, Netherlands*
Antonietta Maria Grasso, *Naver Labs Europe, France*
Saul Greenberg, *University of Calgary, Canada*
Derek Greene, *University College Dublin, Ireland*
Chris Greenhalgh, *The University of Nottingham, UK*
Scott Greenwald, *Massachusetts Institute of Technology Media Lab, USA*
Miriam Greis, *University of Stuttgart, Germany*
Rebecca E. Grinter, *Georgia Institute of Technology, USA*
Laurent Grisoni, *University of Lille 1- Science and Technology, CNRS, INRIA Lille, France*
Laurent Grisoni, *university of lille, France*
Daniel Groeger, *Saarland University, Saarland Informatics Campus, Germany*
Kaj Grønbæk, *Aarhus University, Denmark*
Jens Emil Grønbæk, *Aarhus University, Denmark*
Tobias Grosse-Puppeldahl, *Porsche, Germany*
Jens Grossklags, *Technical University of Munich, Germany*
Tovi Grossman, *University of Toronto, Canada*
Ted Grover, *University of California, Irvine, USA*
Jonathan Grudin, *Microsoft, USA*
Uwe Gruenefeld, *University of Oldenburg, Germany*
Tobias Grundgeiger, *Julius-Maximilians_Universität Würzburg, Germany*
Jianzhe Gu, *Carnegie Mellon University, USA*
Jiseong Gu, *KAIST, Republic of Korea*
Youssef Guedira, *CNRS, France*
João Guerreiro, *Carnegie Mellon University, USA*
Reviewers (continued)
Jan Gugenheimer, *Ulm University, Germany*
Shion Guha, *Marquette University, USA*
Mona Leigh Guha, *University of Maryland, USA*
Xinning Gui, *University of California, Irvine, USA*

- Yves Guiard, *CNRS, France*
Francois Guimbretiere, *Cornell University, USA*
Darren Guinness, *University of Colorado Boulder, USA*
Emrecan Gulay, *Aalto University, Finland*
Florian Güldenpfennig, *TU Wien, Austria*
Rebecca Gulotta, *Google, USA*
Sebastian Günther, *TU Darmstadt, Germany*
Hua Guo, *Twitter Inc., USA*
Cheng Guo, *Clemson University, USA*
Anhong Guo, *Carnegie Mellon University, USA*
Ankit Gupta, *University of Washington, USA*
Cathal Gurrin, *Dublin City University, Ireland*
Marisela Gutierrez Lopez, *City, University of London, UK*
Robert S Gutzwiler, *Ira A. Fulton Schools of Engineering, The Polytechnic School, USA*
Matthew Guzdial, *Georgia Tech, USA*
Mark Guzdial, *University of Michigan, USA*
Gahgene Gweon, *Seoul National University, Republic of Korea*
Hana Habib, *Carnegie Mellon University, USA*
Martin Hachet, *Inria, France*
Reza Hadi Mogavi, *Hong Kong University of Science and Technology, China*
Renate Haeuslschmid, *University of Munich (LMU), Germany*
Pegah Hafiz, *Technical University of Denmark, Denmark*
Nathan Hahn, *Carnegie Mellon University, USA*
Julia Katherine Haines, *Google, USA*
Maria Håkansson, *RISE Research Institutes of Sweden, Sweden*
Jonna Häkkilä, *University of Lapland, Finland*
Hassan Halawa, *University of British Columbia, Canada*
Shefali Haldar, *University of Washington, USA*
Aaron Halfaker, *Wikimedia Foundation, USA*
Brian D. Hall, *University of Michigan, USA*
Martin Halvey, *University of Strathclyde, UK*
Perttu Hämäläinen, *Aalto University, Finland*
Nur Al-huda Hamdan, *RWTH Aachen University, Germany*
Foad Hamidi, *University of Maryland, Baltimore County, USA*
Peter Hamilton, *University of Toronto, Canada*
Jessica Hammer, *Carnegie Mellon University, USA*
Zachary Hammond, *Stanford University, USA*
Teng Han, *University of Manitoba, Canada*
Jinda Han, *University of Illinois at Urbana Champaign, USA*
Kyungsik Han, *Ajou University, Republic of Korea*
Mark Hancock, *University of Waterloo, Canada*
Sten Hanke, *AIT Austrian Institute of Technology GmbH, Austria*
Margot Hanley
Barbara Hanratty, *Newcastle University, UK*
Derek L Hansen, *Brigham Young University, USA*
Nicolai Brodersen Hansen, *Eindhoven University of Technology, Netherlands*
Christian Hansen, *Otto von Guericke University, Germany*
Md Munirul Haque, *Regenstrief Center for Healthcare Engineering, USA*
Farshid Harandi, *Spekel, Sweden*
Marian Harbach, *Audi AG, Germany*
Gunnar Harboe, *Fortum, Norway*
Jean Hardy, *University of Michigan, USA*
Hamza Harkous, *Ecole Polytechnique Fédérale de Lausanne, Switzerland*
Ellie Harmon, *Portland State University, USA*
Patrick Harms, *University of Goettingen, Germany*
Richard Harper, *Lancaster University, UK*
F. Maxwell Harper, *University of Minnesota, USA*
Maria C. R. Harrington, *University of Central Florida, USA*
Steve Harrison, *Virginia Tech, USA*
Chris Harrison, *Carnegie Mellon University, USA*
Lane Harrison, *Worcester Polytechnic Institute, USA*
Casper Harteveld, *Northeastern University, USA*
Casper Harteveld, *Northeastern University, USA*
Heidi Hartikainen, *University of Oulu, Finland*
Kate Hartman, *OCAD University, Canada*
Bjoern Hartmann, *UC Berkeley, USA*
Khalad Hasan, *University of British Columbia - Okanagan, Canada*
Kamrul Hasan, *University of Rochester, USA*
Naeemul Hassan, *The University of Mississippi, USA*
Kaveh Hassani, *Autodesk, USA*
Marc Hassenzahl, *University of Siegen, Germany*
Sabrina Hauser, *University of British Columbia, Canada*
Ari Hautasaari, *The University of Tokyo, Japan*
Mike Hazas, *Lancaster University, UK*
adrian hazzard, *University of Nottingham, UK*
Liang He, *University of Maryland, USA*
Liang He, *University of Washington, USA*
Zhenyi He, *New York University, USA*
Yurong He, *University of Washington, USA*
Katie Headrick Taylor, *University of Washington, USA*
Jeffrey Heer, *University of Washington, USA*
Reviewers (continued)
Carrie Heeter, *Michigan State University, USA*
Neil T Heffernan, *Worcester Polytechnic Institute, USA*
Kayla Heffernan, *The University of Melbourne, Australia*

- Dorothee Hefner, *Hanover University of Music, Drama and Media, Germany*
- Päivi Heikkilä, *VTT Technical Research Centre of Finland Ltd., Finland*
- Kurtis Heimerl, *University of Washington, USA*
- Matthias Heintz, *University of Leicester, UK*
- Sara Heitlinger, *City, University of London, UK*
- Florian Heller, *Hasselt University, Belgium*
- Karey Helms, *KTH Royal Institute of Technology, Sweden*
- Fabian Hemmert, *Industrial Design, Germany*
- Tristan Henderson, *University of St Andrews, UK*
- Urs Hengartner, *University of Waterloo, Canada*
- Bart Hengeveld, *Eindhoven University of Technology, Netherlands*
- Zachary Henkel, *Mississippi State University, USA*
- Austin Henley, *University of Tennessee, USA*
- Rorik Henrikson, *University of Toronto, Canada*
- Susanne Hensely-Schinkinger, *Vienna University of Technology (TU Wien), Austria*
- Oliver Herbort, *University of Würzburg, Germany*
- James D. Herbsleb, *Carnegie Mellon University, USA*
- Philipp Herholz, *TU Berlin, Germany*
- Javier Hernandez, *Massachusetts Institute of Technology, USA*
- Michael Heron, *Robert Gordon University, UK*
- Marc Herrlich, *Serious Games Engineering, Germany*
- Melanie Rosemarie Herrmann, *UCL, UK*
- Daniel Herron, *University Of Dundee, UK*
- Anneli Hershman, *Massachusetts Institute of Technology, USA*
- Garnet Hertz, *Emily Carr University of Art and Design, Canada*
- Yasamin Heshmat, *Simon Fraser University, Canada*
- Philip Heslop, *Newcastle University, UK*
- Wilko Heuten, *OFFIS - Institute for Information Technology, Germany*
- Kieran Hicks, *University of Lincoln, UK*
- Diego Hidalgo-Mazzei, *IMIM Hospital del Mar, Spain*
- Keita Higuchi, *The University of Tokyo, Japan*
- Benjamin Mako Hill, *University of Washington, USA*
- Otmar Hilliges, *ETH Zurich, Switzerland*
- Serena Hillman, *SMART Technologies, USA*
- Ken Hinckley, *Microsoft Research, USA*
- Alexis Hiniker, *University of Washington, USA*
- Annika Hinze, *University of Waikato, New Zealand*
- Shana Hirsch, *University of Washington, USA*
- Tad Hirsch, *Northeastern University, USA*
- Jeffrey C. F. Ho, *Hong Kong Polytechnic University, Hong Kong*
- Ti Hoang, *Massachusetts Institute of Technology University, Australia*
- Thuong Hoang, *Deakin University, Australia*
- Philipp Hock, *Ulm University, Germany*
- James Hodge, *Newcastle University, UK*
- Daniel L. Hoffman, *University of Hawaii at Manoa, USA*
- Sven Hoffmann, *University of Siegen, Germany*
- Jane Hoffswell, *University of Washington, USA*
- Megan Hofmann, *Carnegie Mellon University, USA*
- Lija Hogan, *University of Michigan, USA*
- Fred Hohman, *Georgia Institute of Technology, USA*
- Jess Holbrook, *Google, USA*
- Richard Holden, *Indiana University, USA*
- Isaac Holeman, *Medic Mobile, USA*
- Simon Holland, *The Open University, UK*
- Tobias Höllerer, *University of California, Santa Barbara, USA*
- Victoria Hollis, *UCSC, USA*
- Catherine Holloway, *University College London, UK*
- David Holman, *Tactual Labs, Canada*
- Lars Erik Holmquist, *Northumbria University, UK*
- Jussi Holopainen, *University of Lincoln, UK*
- Kenneth Holstein, *Carnegie Mellon University, USA*
- Sarah Homewood, *IT University of Copenhagen, Denmark*
- Mahsa Honary, *Lancaster University, UK*
- Jason I. Hong, *Carnegie Mellon University, USA*
- Ray Hong, *University of Washington, USA*
- Jonggi Hong, *University of Maryland, College Park, USA*
- Hanneke Hooft van Huysduynen, *Technische Universiteit Eindhoven, Netherlands*
- Jonathan Hook, *University of York, UK*
- Amy Hoover, *New Jersey Institute of Technology, USA*
- Alexis Hope, *Massachusetts Institute of Technology, USA*
- Mike Horn, *Northwestern University, USA*
- Kasper Hornbæk, *University of Copenhagen, Denmark*
- Eva Hornecker, *Bauhaus-Universität Weimar, Germany*
- Simo Hosio, *University of Oulu, Finland*
- Steven Houben, *Lancaster University, UK*
- Lara Houston, *Goldsmiths, University of London, UK*
- Thomas Howard, *CNRS, France*
- Noura Howell, *University of California, USA*
- Andrew Howes, *University of Birmingham, UK*
- Kate Howland, *University of Sussex, UK*
- Roberto Hoyle, *Oberlin College, USA*
- Joey Chiao-Yin Hsiao, *University of Michigan, USA*
- Gary Hsieh, *University of Washington, USA*
- Yen-Chia Hsu, *Carnegie Mellon University, USA*
- Reviewers (continued)**
- Jun Hu, *Eindhoven University of Technology, Netherlands*
- Gang Hu, *State University of New York at Fredonia, USA*

- Siyo Hu, *University of Pennsylvania, USA*
Tianran Hu, *University of Rochester, USA*
Chung-Ching Huang, *National Taiwan University, Taiwan*
Michael Xuelin Huang, *Saarland Informatics Campus, Germany*
Jeff Huang, *Brown University, USA*
Ting-Hao Kenneth Huang, *Pennsylvania State University, USA*
Chuan-Che Huang, *University of Michigan, USA*
Weidong Huang, *Swinburne University of Technology, Australia*
Yi-Ching Huang, *KAIST, Republic of Korea*
Jin Huang, *Chinese Academy of Sciences, China*
Da-Yuan Huang, *National Chiao Tung University, Taiwan*
Da-Yuan Huang, *National Chiao Tung University, Taiwan*
Bernd Huber, *Harvard University, USA*
Stephan Huber, *Julius-Maximilians-Universität, Germany*
Bjorn Hubert-Wallander, *Uber Technologies, Inc., USA*
Sebastian Hueber, *RWTH Aachen University, Germany*
Matt Huenerfauth, *Rochester Institute of Technology, USA*
Jun Ho Huh, *Samsung Electronics, Republic of Korea*
Srihari Hulikal Muralidhar, *Aarhus University, Denmark*
Carmen Hull, *University of Calgary, Canada*
Shah Rukh Humayoun, *Tufts University, USA*
Andrew Hunsucker, *Indiana University, USA*
Ke Huo, *Purdue University, USA*
Stephane Huot, *Inria, France*
Samuel Huron, *Télécom Paristech, Université Paris-Saclay, France*
Amy Hurst, *University of Maryland, Baltimore County, USA*
Christophe Hurter, *Ecole National de l'Aviation Civile, France*
Jörn Hurtienne, *Julius-Maximilians-Universität, Germany*
Maria Husmann, *ETH Zurich, Switzerland*
Heinrich Hussmann, *LMU Munich, Germany*
Patrick Hutchings, *Monash University, Australia*
Euijin Hwang, *Newcastle University, UK*
Inwook Hwang, *Electronics and Telecommunications Research Institute, Republic of Korea*
Faustina Hwang, *University of Reading, UK*
Kyung Hoon Hyun, *Hanyang University, Republic of Korea*
Samia Ibtasam, *University of Washington, USA*
Yuki Igarashi, *Meiji University, Japan*
Takeo Igarashi, *The University of Tokyo, Japan*
Jun Iio, *Chuo University, Japan*
Netta Iivari, *University of Oulu, Finland*
Mikko Illi, *Aalto University, Finland*
- Nanna Inie, *Aarhus University, Denmark*
Kori Inkpen, *Microsoft, USA*
Sarah Catherine Inman, *University of Washington, USA*
Victoria Interrante, *University of Minnesota, USA*
Iulia Ion, *Google, USA*
Pourang Irani, *University of Manitoba, Canada*
Farnaz Irandejad Bisafar, *Northeastern University, USA*
Muhammad Nazrul Islam, *Military Institute of Science and Technology, Bangladesh*
Azra Ismail, *Georgia Institute of Technology, USA*
Poika Isokoski, *University of Tampere, Finland*
Aarti Israni, *University of Michigan, USA*
Ali Israr, *Facebook, Inc., USA*
Takayuki Itoh, *Ochanomizu University, Japan*
Melody Moore Jackson, *Georgia Institute of Technology, USA*
G. Tanner Jackson, *Educational Testing Service, USA*
Robert J.K Jacob, *Tufts University, USA*
Jennifer Jacobs, *Stanford, USA*
Jason T. Jacques, *University of Cambridge, UK*
Richard Jacques, *Microsoft, USA*
Nassim Jafarinaini, *Georgia Institute of Technology, USA*
Ajit Jain, *Texas A&M University, USA*
Mohit Jain, *IBM Research, India*
Timo Jakobi, *University of Siegen, Germany*
Matt Jamieson, *University of Strathclyde, UK*
Jinkyu Jang, *Advanced Institutes of Convergence Technology, Republic of Korea*
Monique Janneck, *Luebeck University of Applied Sciences, Germany*
Christian P. Janssen, *Utrecht University, Netherlands*
Andres Arwestrom Jansson, *Uppsala University, Sweden*
Nicole Jardine, *Northwestern University, USA*
Juliane Jarke, *Institute for Information Management, Germany*
Pradethana Jarusriboonchai, *Newcastle University, UK*
Robert S. Jarvis, *RMassachusetts Institute of Technology, Australia*
Florian Jasche, *University of Siegen, Germany*
Caroline Jay, *The University of Manchester, UK*
Seungwoo Je, *KAIST, Republic of Korea*
Ben Jelen, *Indiana University, USA*
Chaima Jemmalni, *Northeastern University, USA*
Seokhee Jeon, *Kyung Hee University, Republic of Korea*
Yunwoo Jeong, *KAIST, Republic of Korea*
Steven Jeuris, *Technical University of Denmark, Denmark*
Shagun Jhaver, *Georgia Institute of Technology, USA*
- Reviewers (continued)**
- Haiyan Jia, *Lehigh University, USA*
Shan Jiang, *Northeastern University, USA*

- Hao Jiang, *Zhejiang University, China*
Lucy Jiang, *University of Michigan, USA*
Haojian Jin, *Carnegie Mellon University, USA*
Haojian Jin, *Carnegie Mellon University, USA*
Jaemin Jo, *Seoul National University, Republic of Korea*
Bonnie John, *Bloomberg L.P., USA*
Mishel Johns, *Stanford University, USA*
Kate A Johnson, *Western university, Canada*
Andrew E Johnson, *University of Illinois at Chicago, USA*
Isaac Johnson, *Northwestern University, USA*
Aditya Johri, *George Mason University, USA*
Tero Jokela, *Nokia Technologies, Finland*
Jussi Jokinen, *Aalto University, Finland*
Anne E Jonas, *University of California, Berkeley, USA*
Matt Jones, *Swansea University, UK*
Jasmine Jones, *University of Michigan, USA*
Ridley Jones, *University of Washington, USA*
Brennan Jones, *University of Calgary, Canada*
Mark W. Jones, *Swansea University, UK*
Martin Jonsson, *Södertörn University, Sweden*
Barry Joseph, *American Museum of Natural History, USA*
Anirudha Joshi, *IIT Bombay, India*
Manjiri Joshi, *IIT Bombay, India*
Ricardo Jota, *Tactual Labs, Canada*
Anne Joutsenvirta, *USA*
Eunice Jun, *University of Washington, USA*
Hyunggu Jung, *Kyung Hee University, Republic of Korea*
Vishav Jyoti, *IIT Gandhinagar, India*
Eija Kaasinen, *VTT Technical Research Centre of Finland Ltd., Finland*
Minsuk Kahng, *Georgia Tech, USA*
Hiroyuki Kajimoto, *The University of Electro-Communications, Japan*
Hiroyuki Kajimoto
Yasuaki Kakehi, *The University of Tokyo, Japan*
Denis Kalkofen, *Graz University of Technology, Austria*
Vaishnav Kameswaran, *University of Michigan, USA*
Eser Kandogan, *IBM, USA*
Laewoo Kang, *Cornell University, USA*
Dahyun Kang, *Ewha womans university, Republic of Korea*
Ruogu Kang, *Facebook, USA*
Runchang Kang, *Carnegie Mellon University, USA*
Gopinaath Kannabiran, *Aarhus University, Denmark*
Dominic Kao, *Purdue University, USA*
Cindy Hsin-Liu Kao, *Cornell University, USA*
Maximus D. Kaos, *Aalto University, Finland*
Dennis L. Kappen, *Humber College of Technology and Advanced Learning, Canada*
Karrie Karahalios, *University of Illinois, USA*
Elvin Karana, *Delft University of Technology, Netherlands*
yamini karanam, *Indiana University, USA*
Evangelos Karapanos, *Cyprus University of Technology, Cyprus*
Ravi Karkar, *University of Washington, USA*
Petter Karlstrom, *Stockholm University, Sweden*
Abhijit Karnik, *Lancaster University, UK*
Jakob Karolus, *LMU Munich, Germany*
Kasun karunanayaka, *Imagineering Institute, Malaysia*
Naveena Karusala, *University of Washington, USA*
Hannu Karvonen, *VTT, Finland*
Maria Karyda, *Aalto University, Finland*
Shunichi Kasahara, *Sony CSL, Japan*
Akrivi Katifori, *University of Athens, Greece*
Jun Kato, *National Institute of Advanced Industrial Science and Technology (AIST), Japan*
Christos Katsanos, *Aristotle University of Thessaloniki, Greece*
Christina Katsini, *University of Patras, Greece*
Keiko Katsuragawa, *University of Waterloo, Canada*
Markus Kattenbeck, *University Regensburg, Germany*
David Kauchak, *Pomona College, USA*
Marc-Andre Kaufhold, *University of Siegen, Germany*
Geoff Kaufman, *Carnegie Mellon University, USA*
Oliver Beren Kaul, *Leibniz University Hannover, Germany*
Tomi Kauppinen, *Aalto University, Finland*
Harmanpreet Kaur, *University of Michigan, USA*
Andrea Kavanaugh, *Virginia Tech, USA*
Yoshihiro Kawahara, *The university of Tokyo, Japan*
Saba Kawas, *University of Washington, USA*
Matthew Kay, *University of Michigan, USA*
Judy Kay, *University of Sydney, Australia*
Jofish Kaye, *Mozilla, USA*
Rubaiat Habib Kazi, *Adobe Research, USA*
Daniel F. Keefe, *University of Minnesota, USA*
Roeland HP Kegel, *University of Twente, Netherlands*
Saskia Kelders, *University of Twente, Netherlands*
Caitlin Kelleher, *Washington University in St. Louis, USA*
Ryan M. Kelly, *The University of Melbourne, Australia*
Dagmar Kern, *GESIS - Leibniz-Institute for the Social Science, Germany*
Tobie Kerridge, *Goldsmiths, University of London, UK*
Finola Kerrigan, *University of Birmingham, UK*
Os Keyes, *University of Washington, USA*
Negar Khojasteh, *Cornell University, USA*
Vera Khovanskaya, *Cornell University, USA*
Rushil Khurana, *Carnegie Mellon University, USA*
Reviewers (continued)
Emre Kiciman, *Microsoft Research, USA*
Peter Kiefer, *ETH Zurich, Switzerland*

- Julie A. Kientz, *University of Washington, USA*
Johannes Kiesel, *Bauhaus-Universität Weimar, Germany*
Johan Kildal, *IK4-TEKNIKER, Spain*
Hyunyoung Kim, *Université Grenoble Alpes, France*
Hyoungshick Kim, *Sungkyunkwan University, Republic of Korea*
Hyung-il Kim, *KAIST, Republic of Korea*
Han-Jong Kim, *KAIST, Republic of Korea*
Sunjun Kim, *Aalto University, Finland*
Joy O Kim, *Adobe Research, USA*
Nam Wook Kim, *Harvard University, USA*
Dae Hyun Kim, *Stanford University, USA*
Jeeeon Kim, *University of Colorado Boulder, USA*
Young-Ho Kim, *Seoul National University, Republic of Korea*
Taewook Kim, *Hong Kong University of Science and Technology, Hong Kong*
Auk Kim, *KAIST, Republic of Korea*
Hyungil Kim, *Virginia Tech, USA*
Seungjun Kim, *Gwangju Institute of Science and Technology, Republic of Korea*
Sunyoung Kim, *Rutgers University, USA*
SeongKi Kim, *Keimyung University, Republic of Korea*
Jennifer G Kim, *University of Illinois at Urbana-Champaign, USA*
Jennifer King, *Berkeley School of Information, USA*
Marianne Kinnula, *University of Oulu, Finland*
Jurek Kirakowski, *User Experience Solutions, Ireland*
Jasmin Kirchhübel, *University of Siegen, Germany*
Reuben Kirkham, *Newcastle University, UK*
Ben Kirman, *University of York, UK*
Koichi Kise, *Osaka Prefecture University, Japan*
Francisco Kiss, *University of Stuttgart, Germany*
Lorraine Kisselburgh, *Purdue University, USA*
Yoshifumi Kitamura, *Tohoku University, Japan*
Agnieszka Kitkowska, *Karlstad University, Sweden*
Alexandra J Kitson, *Simon Fraser University, Canada*
Jesper Kjeldskov, *Aalborg University, Denmark*
Madison Klarkowski, *Queensland University of Technology, Australia*
Predrag Klasnja, *University of Michigan, USA*
Roberta L. Klatzky, *Carnegie Mellon University, USA*
Rebecca Kleinberger, *Massachusetts Institute of Technology, USA*
Andrea Kleinsmith, *University of Maryland Baltimore County, USA*
Scott Klemmer, *University of California, San Diego, USA*
Clemens Nylandsted Klokmose, *Aarhus University, Denmark*
Kristina Knaving, *Gothenburg University, Sweden*
Tiffany Kneare, *Pennsylvania State University, USA*
Pascal Knierim, *LMU Munich, Germany*
Bart Knijnenburg, *Clemson University, USA*
Megan Knittel, *Michigan State University, USA*
Espen Knoop, *Disney Research, Switzerland*
Søren Knudsen, *University of Calgary, Canada*
Sungahn Ko, *UNIST, Republic of Korea*
Eun-Young Ko, *KAIST, Republic of Korea*
Andrew J. Ko, *University of Washington, USA*
Masatomo Kobayashi, *IBM Research, Japan*
Baki Ahmet Kocaballi, *Australian Institute of Health Innovation, Australia*
Janin Koch, *Aalto University, Finland*
Rafal Kocielnik, *University of Washington, USA*
Ken Koedinger, *Carnegie Mellon University, USA*
Marion Koelle, *University of Oldenburg, Germany*
Kyungwon Koh, *University of Illinois, USA*
Naoya Koizumi, *JST, Japan*
Boriana Koleva, *School of Computer Science, University of Nottingham, UK*
Takanori Komatsu, *Meiji University, Japan*
Oleg Komogortsev, *Michigan State University, USA*
Ha Kyung Kong, *University of Illinois Urbana-Champaign, USA*
Joseph A. Konstan, *University of Minnesota, USA*
Bastian Kordyaka, *University of Siegen, Germany*
Matthias Korn, *University of Siegen, Germany*
Henrik Korsgaard, *Aarhus University, Denmark*
Jana Korunovska, *Vienna University of Economics and Business, Austria*
Mandy Korzetz, *Software Technology Group, Germany*
Robert Kosara, *Tableau Research, USA*
Thomas Kosch, *LMU Munich, Germany*
Tomasz Kosinski, *Chalmers University of Technology, Sweden*
Ilpo Koskinen, *University of Twente, Netherlands*
Felix Kossmalla, *German Research Center for Artificial Intelligence (DFKI GmbH), Germany*
Vijay Kothari, *Dartmouth College, USA*
Yasmine Kotturi, *Carnegie Mellon University, USA*
Robert Kovacs, *Hasso Plattner Institute, Germany*
Geza Kovacs, *Stanford University, USA*
Yuki Koyama, *National Institute of Advanced Industrial Science and Technology (AIST), Japan*
Sandjar Kozubaev, *Georgia Institute of Technology, USA*
Peter Krafft, *Massachusetts Institute of Technology, USA*
Sven Kratz
Reviewers (continued)
Robert E. Kraut, *Carnegie Mellon University, USA*
Christian Kray, *University of Münster, Germany*

- Sarah Krein, *University of Michigan Medical School, USA*
Krzysztof Krejtz, *SWPS University of Social Sciences and Humanities, Poland*
- Andrey Krekhov, *University of Duisburg-Essen, Germany*
Ranjay Krishna, *Stanford University, USA*
Per Ola Kristensson, *University of Cambridge, UK*
Mareike Kritzler, *Siemens Corporation, USA*
Katharina Krombholz, *Saarland Informatics Campus, Germany*
Sven Krome, *RMassachusetts Institute of Technology University, Australia*
- Jess Kropczynski, *University of Cincinnati, USA*
Rebecca Krosnick, *University of Michigan, USA*
Jens Krueger, *University of Duisburg-Essen, Germany*
Ravi Kuber, *UMBC, USA*
Katherine J. Kuchenbecker, *Max Planck Institute for Intelligent Systems, Germany*
Alex Kuhn, *Elastic Focus, USA*
Eric Kuhn, *VA Palo Alto Health Care System, USA*
Romina Kühn, *Software Technology Group, Germany*
Lenneke Kuijer, *Eindhoven University of Technology, Netherlands*
Tuomo Kujala, *University of Jyväskylä, Finland*
Sari Kujala, *Aalto University, Finland*
Kit Kuksenok, *jobpal Ltd., Germany*
Alexander Kulik, *Bauhaus-Universität Weimar, Germany*
Leah Kulp, *Drexel University, USA*
Arun K Kulshreshth, *University of Louisiana at Lafayette, USA*
Ranjitha Kumar, *University of Illinois at Urbana-Champaign, USA*
Chandan Kumar, *University of Koblenz, Germany*
Priya C. Kumar, *University of Maryland, USA*
Andreas Kunz, *ETH Zurich, Switzerland*
Kai Kunze, *Keio University, Japan*
Alexander Kunze, *Loughborough University, UK*
Kai Kunze, *Keio University Graduate School of Media Design, Japan*
Pei-Yi Kuo, *National Tsing Hua University, Taiwan*
Pei-Yi (Patricia) Kuo, *University of Michigan, USA*
Kuno Kurzhals, *University of Stuttgart, Germany*
Raja Kushalnagar, *Gallaudet University, USA*
Sandeep Kaur Kuttal, *University of Tulsa, USA*
Kristi Kuusk, *Estonian Academy of Arts, Estonia*
Anastasia Kuzminykh, *University of Waterloo, Canada*
Stacey Kuznetsov, *Arizona State University, USA*
Hideaki Kuzuoka, *University of Tsukuba, Japan*
Kin Chung Kwan, *City University of Hong Kong, Hong Kong*
Trevor Kwok, *Imperial College London, UK*
- Hyosun Kwon, *Loughborough University, UK*
Heejung Kwon, *Yonsei University, Republic of Korea*
Charalampos Kyfonidis, *University of Strathclyde, UK*
Mikko Kytö, *Aalto University, Finland*
Joseph Nathan La Delfa, *RMassachusetts Institute of Technology, Australia*
Jarmo Laaksolahti, *MID, Sweden*
Salla-Maaria Laaksonen, *University of Helsinki, Finland*
Florian Lachner, *LMU Munich, Germany*
Ben Lafreniere, *Autodesk Research, Canada*
Udaya Lakshmi, *Georgia Institute of Technology, USA*
Carine Lallemand, *University of Luxembourg, Luxembourg*
Heidi Lam, *Google Inc., USA*
Maarten H Lamers, *Leiden University, Netherlands*
Valerie Lamontagne, *Amsterdam University of Applied Sciences, Netherlands*
Airi Lampinen, *Stockholm University, Sweden*
Arto Lanamäki, *University of Oulu, Finland*
James A. Landay, *Stanford University, USA*
Christian Lander, *Saarland Informatics Campus, Germany*
Hanna Landin, *University of Borås, Sweden*
Marc Langheinrich, *Università della Svizzera italiana, Switzerland*
Tobias Langlotz, *University of Otago, New Zealand*
Joel Lanir, *The University of Haifa, Israel*
Michael Lankes, *University of Applied Sciences Upper Austria, Austria*
Robert S. Laramee, *Swansea University, UK*
Ida Larsen-Ledet, *Aarhus University, Denmark*
Marta Kristin Larusdottir, *Reykjavík University, Iceland*
Thomas D. LaToza, *George Mason University, USA*
Manfred Lau, *City University of Hong Kong, China*
Joseph LaViola, *University of Central Florida, USA*
Elise Lavoué, *Université Jean Moulin Lyon 3, France*
Glyn Lawson, *University of Nottingham, UK*
Jonathan Lazar, *University of Maryland, USA*
Huy Viet Le, *University of Stuttgart, Germany*
Christopher A Le Dantec, *Georgia Institute of Technology, USA*
Mathieu Le Goc, *Stanford University, USA*
Eric Lecolinet, *Université Paris Saclay, France*
David Ledo, *University of Calgary, Canada*
Geehyuk Lee, *School of Computing, KAIST, Republic of Korea*
Victor Lee, *Utah State University, USA*
Reviewers (continued)
Kyungho Lee, *University of Illinois at Urbana-Champaign, USA*
Matthew L Lee, *FX Palo Alto Laboratory, Inc., USA*

Kyung-Ryong Lee, *UNIST, Republic of Korea*
David Lee, *UC Santa Cruz, USA*
Jaeyeon Lee, *KAIST, Republic of Korea*
Sang Won Lee, *Virginia Tech, USA*
Moon-Hwan Lee, *Korea Polytechnic University, Republic of Korea*
Austin S. Lee, *Microsoft, USA*
Joon Hyub Lee, *KAIST, Republic of Korea*
Sangsu Lee, *KAIST, Republic of Korea*
Joon Suk Lee, *Virginia State University, USA*
Je Seok Lee, *University of California, Irvine, USA*
Bongshin Lee, *Microsoft Research, USA*
Bokyung Lee, *KAIST, Republic of Korea*
Gun Lee, *University of South Australia, Australia*
Danny Leen, *KULeuven, Belgium*
Sang-won Leigh, *Massachusetts Institute of Technology, USA*
Alex P Leith, *Michigan State University, USA*
Germán Leiva, *Univ. Paris-Sud, CNRS, Inria, Université Paris-Saclay, France*
Luis Leiva, *Aalto University, Finland*
Oscar Lemus, *Indiana University-Bloomington, USA*
Nicola Leonardi, *CNR-ISTI, Italy*
Hong Va Leong, *The Hong Kong Polytechnic University, Hong Kong*
Zeina Leong
Tuck Leong, *UTS, Australia*
Joanne Leong, *Massachusetts Institute of Technology, USA*
Ada Lerner, *Wellesley College, USA*
Annemarie Lesage, *HEC-Montreal, Canada*
Catherine Letondal, *University of Toulouse - ENAC, France*
Vincent Levesque, *École de technologie supérieure, Canada*
Laura Levy, *Georgia Institute of Technology, USA*
Blaine Lewis, *University of Waterloo, Canada*
James R. Lewis, *IBM, USA*
Dongsheng LI, *IBM Research - China, China*
Wenzhong Li, *Nanjing University, China*

Reviewers (continued)

Jingyi Li, *Stanford, USA*
Wilmot Li, *Adobe, USA*
Wei Li, *Huawei Technologies, Canada*
Xiang Li, *China Agricultural University, China*
Xiangdong LI, *Zhejiang University, China*
Yang Li, *Kochi University of Technology, Japan*
Toby Jia-Jun Li, *Carnegie Mellon University, USA*
Quan Li, *Hong Kong University of Science and Technology, Hong Kong*
Dingzeyu Li, *Adobe Research, USA*

Yao Li, *University of California, Irvine, USA*
Benjamin Li, *Nanyang Technological University, Singapore*
Wei Li, *Eindhoven University of Technology, Netherlands*
Frank Li, *University of California, Berkeley, USA*
Tianyi Li, *Virginia Tech, USA*
Dongsheng LI, *Fudan University, China*
Richard Li, *Georgia Institute of Technology, USA*
Tianxing Li, *Dartmouth College, USA*
Qingyang Li
Ah Lian, *Leeds Beckett University, UK*
Rong-Hao Liang, *Eindhoven University of Technology, Netherlands*
Yunji Liang
Yi-Chi Liao, *Aalto University, Finland*
Daniel J Liebling, *Google AI, USA*
Cynthia C. S. Liem, *Delft University of Technology, Netherlands*
Ann Light, *University of Sussex, UK*
Klemen Lilija, *University of Copenhagen, Denmark*
Hajin Lim, *Cornell University, USA*
Angelica Lim, *Simon Fraser University, Canada*
Catherine Y Lim, *Kaiser Permanente Washington Health Research Institute, USA*
Yi-Chin Lin, *Hofstra University, USA*
Siyuan Lin, *Zhejiang University, China*
Jianyu Lin, *Intuitive Surgical Inc., USA*
Shih-Chieh Lin, *University of Michigan, USA*
Shih-Yin Lin, *University of Washington, USA*
Weijane Lin, *National Taiwan University, Taiwan*
Allen Lin, *Northwestern University, USA*
Thomas Lind, *Uppsala University, Sweden*
Rhema Linder, *Texas A&M, USA*
Robb Lindgren, *University of Illinois at Urbana-Champaign, USA*
Joseph Lindley, *Lancaster University, UK*
Siân Lindley, *Microsoft Research, UK*
Conor Linehan, *University College Cork, Ireland*
Heather Richter Lipford, *UNC Charlotte, USA*
Lars Lischke, *Eindhoven University of Technology, Netherlands*
Joshua S. Littenberg-Tobias, *Massachusetts Institute of Technology, USA*
Zhicheng Liu, *Adobe Research, USA*
Fannie Liu, *Carnegie Mellon University, USA*
Xiaotong Liu, *IBM Research - Almaden, USA*

Reviewers (continued)

Mengchen Liu, *Microsoft, China*
Jen Liu, *Cornell University, USA*
Szu-Yu (Cyn) Liu, *Indiana University, USA*

- Leslie Liu, *Indiana University, USA*
Jen-Shuo Liu, *Columbia University, USA*
Mengchen Liu, *Microsoft, China*
Markus Löchtefeld, *Aalborg University, Denmark*
Dan Lockton, *Carnegie Mellon University, USA*
Lian Loke, *University of Sydney, Australia*
Dastyni Loksa, *University of Washington, USA*
Derek Lomas, *Industrial Design Engineering, Netherlands*
Duri Long, *Georgia Institute of Technology, USA*
Arminda Guerra Lopes, *Polytechnic Institute of Castelo Branco & Madeira Interactive Technologies Institute, Portugal*
Daniel S Lopes, *Universidade de Lisboa, Portugal*
Claudia Lopez, *UTFSM, Chile*
Fabien Lotte, *Inria Bordeaux Sud-Ouest, France*
Yanni Alexander Loukissas, *Georgia Institute of Technology, USA*
Julia Loup, *University of Alabama, USA*
Marti Louw, *Carnegie Mellon University, USA*
Anders Sundnes Løvlie, *IT University of Copenhagen, Denmark*
Byron Lowens, *Clemson University, USA*
Yuan Lu, *University of Technology Eindhoven, Netherlands*
Zhicong Lu, *University of Toronto, Canada*
Xi Lu, *Indiana University Bloomington, USA*
Yichen Lu, *Aalto University, Finland*
Yiqin Lu, *Tsinghua University, China*
Nichola Lubold, *Arizona State University, USA*
Gale Lucas, *University of Southern California, USA*
Markus Luczak-Roesch, *Victoria University of Wellington, New Zealand*
Jean-Luc Lugrin, *University of Würzburg, Germany*
Kai Lukoff, *University of Washington, USA*
Stephan Lukosch, *Delft University of Technology, Netherlands*
Paul Lukowicz, *DFKI, Germany*
Alan Lundgard, *Massachusetts Institute of Technology, USA*
Anders Lundström, *KTH, Sweden*
Yuhan Luo, *University of Maryland, USA*
Maria Luce Lupetti, *Delft University of Technology, Netherlands*
Nic Lupfer, *Texas A&M University, USA*
Lucia Lupi, *Politecnico and University of Turin, Italy*
Caitlin Lustig, *University of California Irvine, USA*
Kurt Luther, *Virginia Tech, USA*
Christof Lutteroth, *University of Bath, UK*
Kris Luyten, *Hasselt University - tUL - Flanders Make, Belgium*
Sus Lyckvi, *Chalmers University of Technology, Sweden*
David A Lyell, *Macquarie University, Australia*
Peter Lyle, *Madeira Interactive Technologies Institute, Portugal*
Jani Lylykangas, *University of Tampere, Finland*
Collin Lynch, *North Carolina State University, USA*
Kent Lyons, *Tesla, USA*
Leilah Lyons, *New York Hall of Science, USA*
Ning F. Ma, *Penn State University, USA*
Wenjuan Ma, *Michigan State University, USA*
Jasmine Y. Ma, *New York University, USA*
Xiao Ma, *Cornell Tech, USA*
Shuai Ma, *Chinese Academy of Sciences, China*
John MacCallum, *India/CNRS/Paris-Sud, Paris Saclay, France*
Doon MacDonald, *Swansea University, UK*
Craig M. MacDonald, *Pratt Institute, USA*
Craig Macdonald, *University of Glasgow, UK*
Erin MacDonald, *Stanford University, USA*
Lindsay MacDonald Vermeulen, *Aarhus University, Denmark*
John MacDuffie Woodburn, *Sage Bionetworks, USA*
Tonja-Katrin Machulla, *LMU Munich, Germany*
Blair MacIntyre, *Georgia Institute of Technology, USA*
Scott MacKenzie, *York University, Canada*
Christopher MacLellan, *SoarTech, USA*
Andrew Macvean, *Google, USA*
Michael Madaio, *Carnegie Mellon University, USA*
Galina Madjaroff, *University of Maryland, Baltimore County, USA*
Pattie Maes, *Massachusetts Institute of Technology Media Lab, USA*
Juan F. Maestre, *Indiana University Bloomington, USA*
Walid Magdy, *University of Edinburgh, UK*
Emanuela Maggioni, *SCHI Lab, University of Sussex, UK*
Charlotte Magnusson, *Lund University, Sweden*
Karthik Mahadevan, *University of Calgary, Canada*
Raju Maharjan, *Technical University of Denmark, Denmark*
Mary Lou Maher, *University of North Carolina at Charlotte, USA*
Narges Mahyar, *University of Massachusetts Amherst, USA*
Christian Mai, *University of Munich (LMU), Germany*
Neil Maiden, *City, University of London, UK*
Scott David Mainwaring, *University of Washington, USA*
Horia Alexandru Maior, *University of Nottingham, UK*
Reviewers (continued)
Carleen Maitland, *Pennsylvania State University, USA*
Ville Mäkelä, *University of Tampere, Finland*
Yasutoshi Makino, *The University of Tokyo, Japan*

- Taj Makki, *Michigan State University, USA*
Sylvain Malacria, *Inria, France*
Rita Maldonado Branco, *Research Institute for Design, Media and Culture, Portugal*
Leesha V Maliakal, *Northwestern University, USA*
Laura Malinverni, *University of Barcelona, Spain*
Alessio Malizia, *University of Hertfordshire, UK*
Nathan Malkin, *University of California, Berkeley, USA*
Bertram F. Malle, *Brown University, USA*
Joseph Malloch, *Dalhousie University, Canada*
Lena Mamykina, *Columbia University, USA*
Areti Manataki, *University of Edinburgh, UK*
Travis Mandel, *University of Hawai'i, USA*
Regan Mandryk, *University of Saskatchewan, Canada*
Arthi K. Manohar, *Brunel University London, UK*
Sana Maqsood, *Carleton University, Canada*
Megh Marathe, *University of Michigan, USA*
Maud Marchal, *IRISA/INSA, France*
Gabriela Marcu, *University of Michigan, USA*
Diako Mardanbegi, *Lancaster University, UK*
Alex Timothy Mariakakis, *University of Washington, USA*
Adrian Marinescu, *University of Nottingham, UK*
Gloria Mark, *University of California, Irvine, USA*
Panos Markopoulos, *Eindhoven University of Technology, Netherlands*
Eric Markvicka, *Carnegie Mellon University, USA*
Karola Marky, *Technische Universität Darmstadt, Germany*
Diogo Marques, *Universidade de Lisboa, Portugal*
Rita Marques, *Universidade de Lisboa, Portugal*
Kim Marriott, *Monash University, Australia*
Nicola Marsden, *Heilbronn University, Germany*
Paul Marshall, *University of Bristol, UK*
Chris Marshall, *University of York, UK*
Hannah R Marston, *The Open University, UK*
Jean-Bernard Martens, *Eindhoven University of Technology, Netherlands*
Vincent Martin, *Georgia Institute of Technology, USA*
Sarah E Martindale, *University of Nottingham, UK*
Diego Martinez-Plasencia, *University of Sussex, UK*
Anna Lisa Martin-Niedecken, *Zurich University of the Arts, Switzerland*
Sebastian Marwecki, *Hasso Plattner Institute, Germany*
Sergio Mascetti, *Università degli Studi di Milano, Italy*
Mikhil Masli, *IBM, USA*
Jon Mason, *Charles Darwin University, Australia*
Paolo Masulli, *DTU Technical University of Denmark, Denmark*
Akhil Mathur, *Nokia Bell Labs, UK*
Tuuli Mattelmäki, *Aalto University, Finland*
Mark Matthews, *Cornell University, USA*
Tara Matthews, *Independent, USA*
Fabrice Matulic, *Preferred Networks Inc., Japan*
Henrique Matulis, *OCAD, Canada*
Andrii Matviienko, *OFFIS - Institute for Information Technology, Germany*
Michael Mauderer, *University of Dundee, UK*
Nolwenn Maudet, *Tokyo University, Japan*
Bernhard Maurer, *University of Salzburg, Austria*
Matthew Louis Mauriello, *Stanford University, USA*
Laura Maye, *University College Cork, Ireland*
Elijah Mayfield, *Carnegie Mellon University, USA*
Michelle Mazurek, *University of Maryland, USA*
Domenico Mazza, *Monash University, Australia*
Christine Wanjiru Mburu, *University of Cape Town, South Africa*
Victoria McArthur, *University of Toronto, Canada*
Louis McCallum, *Goldsmiths, University of London, UK*
James Lewis McCann, *Carnegie Mellon University, USA*
Lisa McCann, *University of Strathclyde, UK*
John McCarthy, *University College Cork, Ireland*
Caitlyn M. McColeman, *Northwestern University, USA*
Scott McCrickard, *Virginia Tech, USA*
Troy McDaniel, *Arizona State University, USA*
David W. McDonald, *University of Washington, USA*
Samantha McDonald, *University of California, Irvine, USA*
Nora McDonald, *Drexel University, USA*
Daniel McDuff, *Microsoft, USA*
Mitchell McEwan, *QUT, Australia*
Rhonda McEwen, *University of Toronto Mississauga, Canada*
Fintan McGee, *Luxembourg Institute of Science and Technology(LöIST), Luxembourg*
Mark McGill, *University of Glasgow, UK*
David McGookin, *Aalto University, Finland*
Susan E McGregor, *Columbia Journalism School, USA*
Moira McGregor, *Stockholm University, Sweden*
Joanna McGrenere, *University of British Columbia, Canada*
Michael McGuffin, *ETS, Canada*
Brian James McInnis, *Cornell University, USA*
Jess McIntosh, *University of Copenhagen, Denmark*
Lesley J. McIntyre, *Northumbria University, UK*
Dana McKay, *University of Melbourne, Australia*
Elgin Skye McLaren, *Simon Fraser University, Canada*
Meghan C. McLean, *Rutgers University, USA*
Reviewers (continued)
Donald McMillan, *Stockholm University, Sweden*
Roisin McNaney, *University of Bristol, UK*
Andrew McNeill, *Northumbria University, UK*

- Andrew P. McPherson, *Queen Mary University of London, UK*
Mick McQuaid, *Rochester Institute of Technology, USA*
Sarah Ann McRoberts, *University of Minnesota, USA*
Andrew McStay, *Bangor University, UK*
Joshua McVeigh-Schultz, *University of California Santa Cuz, USA*
Indrani Medhi Thies, *Microsoft Research, India*
Janis Meissner, *Newcastle University, UK*
Gianluca Memoli, *University of Sussex, UK*
Eleonora Mencarini, *Fondazione Bruno Kessler, Italy*
Daniel Mendes, *INESC-ID Lisboa, Portugal*
Gonzalo Mendez, *University of St Andrews, UK*
Thomas Meneweger, *University of Salzburg, Austria*
Amanda Meng, *Georgia Institute of Technology, USA*
Amanda Menking, *University of Washington, USA*
Natasha Merat, *University of Leeds, UK*
Timothy Merritt, *Aalborg University, Denmark*
Alexander Meschtscherjakov, *University of Salzburg, Austria*
Johnnatan Messias, *Max Planck Institute for Software Systems, Germany*
Johanna Meurer, *University Siegen, Germany*
Haipeng Mi, *Tsinghua University, China*
Luana Micallef, *University of Copenhagen, Denmark*
Florian Michahelles, *Siemens Corporate Technology, USA*
Lisa Mikesell, *Rutgers University, USA*
Jussi V Mikkonen, *Syddansk Universitet, Denmark*
Mateusz Mikusz, *Lancaster University, UK*
Karen Milchus, *Georgia Institute of Technology, USA*
David Miller, *Stanford University, USA*
Robert Miller, *Massachusetts Institute of Technology, USA*
Craig Miller, *DePaul University, USA*
Tim Miller, *University of Melbourne, Australia*
Hannah Miller Hillberg, *University of Minnesota, USA*
Lauren R. Milne, *University of Washington, USA*
Aehong Min, *Indiana University Bloomington, USA*
Yao Ming, *Hong Kong University of Science and Technology, China*
Yao Ming, *Hong Kong University of Science and Technology, China*
Aliaksei Miniukovich, *University of Trento, Italy*
Darakshan J. Mir, *Bucknell University, USA*
Alexander G. Mirnig, *University of Salzburg, Austria*
Pejman Mirza-Babaei, *University of Ontario Institute of Technology, Canada*
Sonali R Mishra, *University of Washington, USA*
Gaurav Misra, *Carnegie Mellon University, USA*
Teruhisa Misu, *Honda Research Institute USA, Inc., USA*
Alex Mitchell, *National University of Singapore, Singapore*
Samantha Mitchell Finnigan, *Newcastle University, UK*
Tanushree Mitra, *Virginia Tech, USA*
Takashi Miyaki, *The University of Tokyo, Japan*
Homei Miyashita, *Meiji University, Japan*
Jelena Mladenovic, *Inria, France*
Tom Moher, *University of Illinois at Chicago, USA*
Betty Mohler, *Max Planck Institute for Intelligent Systems, Germany*
Naja L. Holten Møller, *University of Copenhagen, Denmark*
Mainack Mondal, *University of Chicago, USA*
Andrés Monroy-Hernández, *Snap Inc., USA*
Alessandro Montanari, *Nokia Bell Labs, UK*
Roberto Antonio Montano Murillo, *University of sussex, UK*
Dylan James Moore, *Stanford University, USA*
Emily Moore, *University of Colorado Boulder, USA*
Simone Mora, *Massachusetts Institute of Technology, USA*
Alejandro Moreno, *Saxion University of Applied Sciences, Netherlands*
Dafne Zuleima Morgado Ramirez, *University College London, UK*
Jonathan T Morgan, *Wikimedia Foundation, USA*
Carlos H Morimoto, *University of São Paulo, Brazil*
Dominik Moritz, *University of Washington, USA*
Roxana Morosanu Firth, *University of Cambridge, UK*
Fabio Morreale, *Queen Mary University of London, UK*
Alistair Morrison, *University of Glasgow, UK*
Cecily Morrison, *Microsoft Research Cambridge, UK*
Gaia Mosconi, *University of Siegen, Germany*
Carol Moser, *University of Michigan, USA*
Aske Mottelson, *University of Copenhagen, Denmark*
Jens Mueller, *University of Konstanz, Germany*
Thomas Muender, *University of Bremen, Germany*
Max Mühlhäuser, *TU Darmstadt, Germany*
Muzayun Mukhtar, *Google, India*
Florian Müller, *TU Darmstadt, Germany*
Philipp Matthias Müller, *Saarland Informatics Campus, Germany*
Jörg Müller, *University of Bayreuth, Germany*
Claudia Müller, *University of Siegen, Germany*
John Mundoz
Tamara Munzner, *University of British Columbia, Canada*
Yumiko Murai, *Massachusetts Institute of Technology, USA*
Martin Murer, *University of Salzburg, Austria*
Reviewers (continued)
Elizabeth Murnane, *Stanford University, USA*
Dave Murray-Rust, *University of Edinburgh, UK*
Roderick Murray-Smith, *University of Glasgow, UK*

Pradeep Murukannaiah, *Rochester Institute of Technology, USA*
Mirco Musolesi, *University College London, UK*
Maryam Mustafa, *Information Technology University, Pakistan*
Bilge Mutlu, *University of Wisconsin-Madison, USA*
Chelsea M. Myers, *Drexel University, USA*
Brad Myers, *Carnegie Mellon University, USA*
Mor Naaman, *Cornell Tech, USA*
Sara Nabil, *Newcastle University, UK*
Miguel Nacenta, *University of St Andrews, UK*
Troy Nachtigall, *Eindhoven University of Technology, Netherlands*
Lennart E. Nacke, *University of Waterloo, Canada*
Alena Naiakshina, *University of Bonn, Germany*
Hedieh Najafi, *University of Toronto, Canada*
Ken Nakagaki, *Massachusetts Institute of Technology Media Lab, USA*
Hideyuki Nakanishi, *Osaka University, Japan*
Drashko Nakikj, *Columbia University, USA*
Mathieu Nancel, *Inria Lille - Nord Europe, France*
Khushnoor Z. Naqshbandi, *University of Sydney, Australia*
Pratik Narang, *BITS Pilani, India*
Bonnie Nardi, *UCI, USA*
Koya Narumi, *The University of Tokyo, Japan*
Mustafa Naseem, *University of Michigan Ann Arbor, USA*
Callum James Nash, *Northumbria University, UK*
Lisa Nathan, *University of British Columbia, Canada*
Frederik Naujoks, *BMW, Germany*
Nicole Naurath, *Google, USA*
Angela Nazarian, *University of California, Davis, USA*
Gregory Mason Neiswander, *Google, USA*
David Nemer, *University of Kentucky, USA*
Eric Nersesian, *New Jersey Institute of Technology, USA*
Carman Neustaedter, *Simon Fraser University, Canada*
Nikki Newhouse, *University College London, UK*
Joshua Newn, *The University of Melbourne, Australia*
Tricia J. Ngoon, *University of California, San Diego, USA*
Cuong Nguyen, *Adobe Research, USA*
Toan Nguyen, *New York University, USA*
Amy D Nguyen, *Macquarie University, Australia*
Truong-Huy D. Nguyen, *Fordham University, USA*
Hoang D. Nguyen, *University of Glasgow Singapore, Singapore*
Iohanna Nicenboim, *Delft University of Technology, Netherlands*
James Nicholson, *Northumbria University, UK*
Andreea Niculescu, *Institute for Infocomm Research, Singapore*

Lene Nielsen, *IT University of Copenhagen, Denmark*
Jasmin Niess, *LMU Munich, Germany*
Laurence Nigay, *Université Grenoble Alpes, France*
Niels Christian Nilsson, *Aalborg University, Denmark*
Christena Nippert-Eng, *Indiana University, USA*
Jun Nishida, *University of Tsukuba, Japan*
Bettina Nissen, *University of Edinburgh, UK*
Michael Nitsche, *Georgia Institute of Technology, USA*
Aditya Shekhar Nittala, *Saarland Informatics Campus, Germany*
Chris North, *Virginia Tech, USA*
Stephen North, *Infovisible, USA*
Chris Norval, *University of Cambridge, UK*
Elena Not, *Fondazione Bruno Kessler, Italy*
Midas Nouwens, *Aarhus University, Denmark*
Oded Nov, *New York University, USA*
Alamir Novin, *UBC, Canada*
Eilidh Clare Noyes, *University of Huddersfield, UK*
Maria Ntinda, *University of Namibia, Namibia*
Benjamin Nuernberger, *Jet Propulsion Laboratory, USA*
Petteri Nurmi, *School of Computing & Communication, UK*
Nora O'Murchú, *University of Limerick, Ireland*
Maggie Oates, *Carnegie Mellon University, USA*
Marianna Obrist, *University of Sussex, UK*
Yoichi Ochiai, *University of Tsukuba, Japan*
Sergio F. Ochoa, *University of Chile, Chile*
Judeth Oden Choi, *Carnegie Mellon University, USA*
Peter O'Donovan, *Adobe Systems, Inc., USA*
Soo Youn Oh, *Stanford University, USA*
Uran Oh, *Ewha womans university, Republic of Korea*
Kenton O'Hara, *Microsoft Research, UK*
Fabian Okeke, *Cornell Tech, USA*
Tadashi Okoshi, *Keio University, Japan*
Patrick Olivier, *Monash University, Australia*
Andrew Olney, *University of Memphis, USA*
Jennifer Olsen, *Ecole Polytechnique Fédérale de Lausanne, Switzerland*
Thomas Olsson, *University of Tampere, Finland*
Temitayo Olugbade, *University College London, UK*
Alex Olwal, *Google, USA*
Sile O'Modhrain, *University of Michigan, USA*
Ethel Ong, *De La Salle University, Philippines*
Mei-Sing Ong, *Harvard Medical School & Harvard Pilgrim Health Care Institute, USA*
Linda Onnasch, *Humboldt-Universität zu Berlin, Germany*
Reviewers (continued)
Doenja Oogjes, *Simon Fraser University, Canada*
Doenja Oogjes, *Simon Fraser University, Canada*
Jonas Oppenlaender, *University of Oulu, Finland*
Leif Oppermann, *Fraunhofer FIT, Germany*

- Rita Orji, *Dalhousie University, Canada*
Valeria Orso, *University of Padova, Italy*
Hirotaka Osawa, *University of Tsukuba, Japan*
Anna Ostberg, *Synaptics, USA*
Kazuhiro Otsuka, *NTT, Japan*
Mai Otsuki, *University of Tsukuba, Japan*
Alvitta Ottley, *Washington University in St. Louis, USA*
Jifei Ou, *Massachusetts Institute of Technology, USA*
Antti Oulasvirta, *Aalto University, Finland*
Elif Ozkaya, *California State Polytechnic University, Pomona, USA*
Janne Paavilainen, *University of Tampere, Finland*
Stefano Padilla, *Heriot-Watt University, UK*
Xinru Page, *Bentley University, USA*
Yun Suen Pai, *Keio University Graduate School of Media Design, Japan*
Minna Anneli Pakanen, *Aarhus University, Denmark*
Philippe Palanque, *University Toulouse III, France*
Leysia Palen, *University of Colorado Boulder, USA*
Carolyn Pang, *McGill University, Canada*
Gabriele Paolacci, *Erasmus University Rotterdam, Netherlands*
Sofia Papavlasopoulou, *NTNU, Norway*
Luc Paquette, *University of Illinois at Urbana-Champaign, USA*
Joe Paradiso, *Massachusetts Institute of Technology Media Lab, USA*
Natalie Parde, *University of Illinois at Chicago, USA*
Zachary A Pardos, *UC Berkeley, USA*
Tapan Parikh, *Cornell Tech, USA*
Taiwoo Park, *Seattle Pacific University, USA*
Sangkeun Park, *KAIST, Republic of Korea*
Deokgun Park, *University of Texas, USA*
Minsu Park, *Cornell University, USA*
Seonwook Park, *ETH Zurich, Switzerland*
Jaehyuk Park, *Indiana University, USA*
Chunjong Park, *University of Washington, USA*
Miranda Parker, *Georgia Institute of Technology, USA*
Andrea Parker, *Northeastern University, USA*
Simon Parkin, *University College London, UK*
Paul Parsons, *Purdue University, USA*
Max Pascher, *Westphalian University of Applied Sciences, Germany*
Philippe Pasquier, *Simon Fraser University, Canada*
Cale Passmore, *University of Saskatchewan, Canada*
Jessica Pater, *Georgia Tech, USA*
Fabio Paternò, *CNR-ISTI, Italy*
Rakesh Patibanda, *RMassachusetts Institute of Technology University, Australia*
Bhagyashree Patil, *University of Bath, UK*
- Joseph Pato, *Massachusetts Institute of Technology Computer Science & Artificial Intelligence Lab, USA*
Andrew Patrick, *Prisus Research, Canada*
Bronwin L Patrickson, *University of Dundee, UK*
Pradip Paudyal, *University of Roma TRE, Italy*
John Paulin Hansen, *Technical University of Denmark, Denmark*
Eric Paulos, *University of California, Berkeley, USA*
Amy Pavel, *University of California, Berkeley, USA*
Anastasia Pavlidou, *Max Planck Institute for Biological Cybernetics, Germany*
Ralph Pawling, *LJMU, UK*
Stephen J Payne, *University of Bath, UK*
Sean Peacock, *Newcastle University, UK*
Evan Peck, *Bucknell University, USA*
Nadya Peek, *University of Washington, USA*
Eyal Peer, *Hebrew University of Jerusalem, Israel*
S. Tejaswi Peesapati, *Google, USA*
Jeroen Peeters, *Rise Interactive, Sweden*
Roshan L Peiris, *Keio University Graduate School of Media Design, Japan*
Anthony J. Pellicone, *New York University: Steinhardt, USA*
Diane Pennington, *University of Strathclyde, UK*
Maria Soledad Pera, *Boise State University, USA*
Adam Perer, *Carnegie Mellon University, USA*
Manuel A. Perez-Quinones, *UNC at Charlotte, USA*
Charles Perin, *University of Victoria, Canada*
Mark Perry, *Brunel University London, UK*
Olga Perski, *University College London, UK*
Florian Perteneder, *University of Applied Sciences Upper Austria, Austria*
Helen Petrie, *University of York, UK*
Tamara Peyton, *Harrisburg University, USA*
Nicola Pezzotti, *Delft University of Technology, Netherlands*
Hanspeter Pfister, *Harvard University, USA*
Phuong Pham, *University of Pittsburgh, USA*
Nate Phillips, *Mississippi State University, USA*
Cody Phillips, *Queensland University of Technology, Australia*
Chris Piech, *Stanford University, USA*
Martin Pielot, *Telefonica Research, Spain*
James Pierce, *University of California, Berkeley, USA*
Casey Pierce, *University of Michigan, USA*
- Reviewers (continued)**
- James Pierce, *University of California Berkeley, USA*
Emmanuel Pietriga, *INRIA, France*
Krzysztof Pietroszek, *American University, USA*
Thomas Pietrzak, *University of Lille, France*

- maria da graca c pimentel, *university of sao paulo, Brazil*
charlie pinder, *University of Birmingham, UK*
Anne Marie Piper, *Northwestern University, USA*
Enrico Maria Piras, *Fondazione Bruno Kessler, Italy*
Harald Piringer, *VRVis Research Center, Austria*
Caroline Pitt, *University of Washington, USA*
Dario Pittera, *School of Engeneering and Informatics, University of Sussex, UK*
Thammathip Piumsomboon, *University of South Australia, Australia*
Catherine Plaisant, *University of Maryland, USA*
Jan Plass, *New York University, USA*
Cheryl Platz, *Ideaplatz, USA*
Bernd Ploderer, *Queensland University of Technology, Australia*
Thomas Ploetz, *Georgia Institute of Technology, USA*
Alexander Plopski, *Nara Institute of Science and Technology, Japan*
Linda Plotnick, *Lafayette College, USA*
Jorge Poco, *Getulio Vargas Foundation, Brazil*
Romina Poguntke, *VIS, University of Stuttgart, Germany*
Margit Pohl, *Vienna University of Technology, Austria*
Anna Elisabeth Pohlmeyer, *Delft Intsitute of Positive Design, Netherlands*
Ari Pollack, *Seattle Children's Hospital, USA*
Fabrizio Augusto Poltronieri, *De Montfort University, UK*
Heather Pon-Barry, *Mount Holyoke College, USA*
Lesandro Ponciano, *Pontifical Catholic University of Minas Gerais, Brazil*
Suporn Pongnumkul, *University of Washington, USA*
Taciana Pontual Falcão, *UFRPE, Brazil*
Nathaniel Poor, *Underwood Institute, USA*
G Michael Poor, *Baylor University, USA*
Voicu Popescu, *Purdue University, USA*
Erik Poppe, *Queensland University of Technology, Australia*
Martin Porcheron, *University of Nottingham, UK*
Irene Posch, *TU Wien, Austria*
Alisha Pradhan, *University of Maryland, USA*
Catia Prandi, *M-ITI; ARDITI, Portugal*
James Prather, *Abilene Christian University, USA*
Soeren Preibusch, *Google Inc., USA*
Chris Preist, *University of Bristol, UK*
Peter Presti, *Georgia Institute of Technology, USA*
anne preston, *Kingston University, UK*
Nathan Prestopnik, *Ithaca College, USA*
Thomas Price, *North Carolina State University, USA*
Blaine Price, *The Open University, UK*
Reid Priedhorsky, *Los Alamos National Laboratory, USA*
Michael Prilla, *Informatics, Germany*
Enamul Hoque Prince, *York University, Canada*
Gary Pritchard, *Cambridge University, UK*
Kathrin Probst, *University of Applied Sciences Upper Austria, Austria*
Monika Pröbster, *Heilbronn University, Germany*
Sebastian Prost, *Newcastle University, UK*
Michael Proulx, *University of Bath, UK*
Arnaud Prouzeau, *Monash University, Australia*
Cynthia Putnam, *DePaul University, USA*
Handityo Aulia Putra, *Keimyung University, Republic of Korea*
Felix Putze, *University of Bremen, Germany*
Aare Puussaar, *Newcastle University, UK*
Isabel P. S. Qamar, *University of Bristol, UK*
Yedan Qian, *BMW Group Designworks, Germany*
Long Qian, *Johns Hopkins University, USA*
Xiangang Qin, *Beijing University of Posts and Telecommunications, China*
Huamin Qu, *The Hong Kong University of Science and Technology, China*
John Quarles, *University of Texas at San Antonio, USA*
Katie Quehl, *Yahoo/Oath, USA*
Alexander J. Quinn, *Purdue University, USA*
Philip Quinn, *Google, USA*
Chris Quintana, *University of Michigan, USA*
Mashfiqui Rabbi, *Harvard University, USA*
Emilee Rader, *Michigan State University, USA*
Rafael Radkowski, *Iowa State University, USA*
Iulian Radu, *Harvard University, USA*
Valentin Radu, *University of Edinburgh, UK*
Irene Rae, *Google, USA*
William L Raffe, *University of Technology Sydney, Australia*
Eric Ragan, *University of Florida, USA*
Barath Raghavan, *University of Southern California, USA*
Roope Raisamo, *University of Tampere, Finland*
Shriti Raj, *University of Michigan, USA*
Mikko Rajanen, *University of Oulu, Finland*
Vijay Rajanna, *Texas A&M University, USA*
Paulina Rajkowska, *Uppsala University, Sweden*
Daniel Rakita, *University of Wisconsin-Madison, USA*
Paul Ralph, *University of Auckland, New Zealand*
IV Ramakrishnan, *Stony Brook University, USA*
Karthik Ramani, *Purdue University, USA*
Julian Ramos Rojas, *Carnegie Mellon University, USA*
Reviewers (continued)
Nimesha Ranasinghe, *University of Maine, USA*
Champika Ranasinghe, *Institute for Geoinformatics, Germany*
Dave Randall, *University of Siegen, Germany*

- Yolanda A. Rankin, *Florida State University, USA*
Amon Rapp, *University of Torino, Italy*
George E. Raptis, *University of Patras, Greece*
Dimitrios Raptis, *Aalborg University, Denmark*
Majken Kirkegaard Rasmussen, *Aarhus University, Denmark*
Matt Ratto, *University of Toronto, Canada*
Pei-Luen Patrick Rau, *Tsinghua University, China*
Maria Rauschenberger, *Universitat Pompeu Fabra, Spain*
Noopur Raval, *University of California, Irvine, USA*
Ruth Ravichandran, *University of Washington, USA*
Reza Rawassizadeh, *University of Rochester, USA*
Soumya Ray, *National Tsing Hua University, Taiwan*
Daniel J. Rea, *University of Manitoba, Canada*
Janet Read, *ChiCI Lab, University of Central Lancashire, UK*
Anuradha Venugopal Reddy, *Malmö University, Sweden*
Madhu Reddy, *Northwestern University, USA*
Brady Redfearn, *Brigham Young University, USA*
Elissa M Redmiles, *University of Maryland, USA*
Rob Reeder, *Google, USA*
Byron Reeves, *Stanford University, USA*
Georg Regal, *AIT Austrian Institute of Technology GmbH, Austria*
Holger Regenbrecht, *University of Otago, New Zealand*
Delphine Reinhardt, *Georg-August-Universität Göttingen, Germany*
Anke Verena Reinschluessel, *University of Bremen, Germany*
Bianca C. Reisdorf, *UNC Charlotte, USA*
Harald Reiterer, *University of Konstanz, Germany*
Thomas Reitmaier, *Swansea University, UK*
Yosra Rekik, *Université Polytechnique Hauts-de-France, France*
Jun Rekimoto, *The University of Tokyo, Japan*
Karen Renaud, *Abertay University, UK*
Patrick Renner, *CITEC, Germany*
Stefan Rennick-Egglestone, *University of Nottingham, UK*
Gabby Resch, *University of Toronto, Canada*
Christian Reuter, *Technische Universität Darmstadt, Germany*
Gabriel Reyes, *Georgia Institute of Technology, USA*
Sofia Reznikova, *Innopolis University, Russian Federation*
Minjin Rheu
Eugenia Ha Rim Rho, *University of California, Irvine, USA*
Zahra Riahisamani
Claudia Sevivas Ribeiro, *BlackBox Project, Faculdade de Ciências Sociais e Humanas Universidade de Lisboa, Portugal*
David Ribes, *University of Washington, USA*
Mark Rice, *Institute for Infocomm Research, Singapore*
Natalie Richardson, *Lehrstuhl für Fahrzeugtechnik, Technische Universität München, Germany*
Steven R Rick, *University of California, San Diego, USA*
Bernhard E. Riecke, *Simon Fraser University, Canada*
Ingmar Riedel-Kruse, *Stanford University, USA*
Jan Riemann, *TU Darmstadt, Germany*
Andreas Riener, *Technische Hochschule Ingolstadt, Germany*
Michael Rietzler, *Ulm University, Germany*
Mohammad Rashidujjaman Rifat, *University of Toronto, Canada*
Jacob M. Rigby, *University College London, UK*
Michal Rinott, *Shenkar, Israel*
Sean Rintel, *Microsoft Research, UK*
Juan Sebastian Rios, *New Jersey Institute of Technology, USA*
Markus Rittenbruch, *QUT, Australia*
Michael L Rivera, *Carnegie Mellon University, USA*
Sheikh Radiah Rahim Rivu, *Bundeswehr University Munich, Germany*
Paola Rizzo, *Northeastern University, USA*
David A Robb, *Heriot-Watt University, UK*
Lionel Peter Robert, *University of Michigan, USA*
Mike Roberts, *Stanford University, USA*
Ronald E Robertson, *Northeastern University, USA*
Judy Robertson, *The University of Edinburgh, UK*
Paul Robinette, *Massachusetts Institute of Technology, USA*
Miss Charlotte L Robinson, *Universiy of sussex, UK*
Jennifer Rode, *University College London, UK*
Kathrin Röderer, *Austrian Institute of Technology, Austria*
Sunil Rodger, *Newcastle University, UK*
Inês Rodolfo, *Faculdade de Ciências e Tecnologia da Universidade Nova de Lisboa, Portugal*
André Rodrigues, *Universidade de Lisboa, Portugal*
Iyubanit Rodríguez, *Pontificia Universidad Católica de Chile, Chile*
Franziska Roesner, *University of Washington, USA*
Katja Rogers, *Ulm University, Germany*
Yvonne Rogers, *UCL Interaction Centre, UK*
Melissa J. Rogerson, *The University of Melbourne, Australia*
Bernice Rogowitz
Reviewers (continued)
Darius Adam Rohani, *Technical University of Denmark, Denmark*
Andrzej Romanowski, *Lodz University of Technology, Poland*
Hugo Romat, *TecKnowMetrix, France*

- Mario Romero, *KTH Royal Institute of Technology, Sweden*
- Daniel Romero, *University of Michigan, USA*
- Damien Constantine Rompapas, *Nara Institute of Science and Technology, Japan*
- Juha Röning, *University of Oulu, Finland*
- Joan Sol Roo, *Inria, Germany*
- Maki Rooksby, *University of Glasgow, UK*
- Kaitlyn M. Roose, *Michigan Technological University, USA*
- Timo Ropinski, *Ulm University, Germany*
- Jeremy Roschelle, *Digital Promise, USA*
- Rod D. Roscoe, *Arizona State University, USA*
- Anne Spencer Ross, *University of Washington, USA*
- Chiara Rossitto, *Stockholm University, Sweden*
- Asreen Rostami, *Stockholm University, Sweden*
- Daniel Roth, *University of Würzburg, Germany*
- Sylvia Rothe, *LMU Munich University, Germany*
- Thijs Jan Roumen, *Hasso Plattner Institute, Germany*
- Maria Roussou, *University of Athens, Greece*
- Quentin Roy, *University of Waterloo, Canada*
- Nirupam Roy, *University of Illinois at Urbana-Champaign, USA*
- Sherry Ruan, *Stanford University, USA*
- Elisa Rubegni, *University of Lincoln, UK*
- Bonnie Ruberg, *University of California, Irvine, USA*
- Sabirat Rubyra, *University of Minnesota, USA*
- Roy Ruddle, *x, Ukraine*
- José A. Ruipérez-Valiente, *Massachusetts Institute of Technology, USA*
- Enrico Rukzio, *University of Ulm, Germany*
- Adam Rule, *University of California, San Diego, USA*
- Alyssa Rumsey, *Georgia Institute of Technology, USA*
- Scott Ruoti, *University of Tennessee, USA*
- Silvia Rus, *Fraunhofer Institute for Computer Graphics Research IGD, Germany*
- Vasile Rus, *The University of Memphis, USA*
- Teomara Rutherford, *North Carolina State University, USA*
- Kimiko Ryokai, *University of California, Berkeley, USA*
- Rufat Rzayev, *University of Stuttgart, Germany*
- Jeffrey M Rzeszotarski, *Cornell University, USA*
- Karthika S., *SSN, India*
- Elham Saadatian, *Thinkific labs, Canada*
- daniel saakes, *KAIST, Republic of Korea*
- Selma Sabanovic, *Indiana University, USA*
- Dina Sabie, *University of Toronto, Canada*
- Amalia Sabiescu, *Loughborough University London, UK*
- Shelly Sachdeva, *National Institute of Technology, India*
- Marco Sachi, *Dyne, Netherlands*
- Shadan Sadeghian, *Fraunhofer Institute, Germany*
- Shadan Sadeghian Borojeni, *Fraunhofer Institute, Germany*
- Ofir Sadka, *Interdisciplinary Center (IDC), Israel*
- Koustuv Saha, *Georgia Institute of Technology, USA*
- Deepak Sahoo, *Swansea University, UK*
- Houssem Saidi, *Université Toulouse 3 - Paul Sabatier, France*
- Sahar Sajadieh, *University of California, Santa Barbara, USA*
- Pejman Sajjadi, *Bielefeld University, Germany*
- Yumiko Sakamoto, *University of Manitoba, Canada*
- Herman Saksono, *Northeastern University, USA*
- Niloufar Salehi, *Stanford University, USA*
- Kavous Salehzadeh Niksirat, *Kochi University of Technology, Japan*
- Katie Salen, *University of California, Irvine, USA*
- Joni Salminen, *Qatar Computing Research Institute, Qatar*
- Mikko Salminen, *Aalto University School of Business, Finland*
- Anastasia M Salter, *University of Central Florida, USA*
- Samiha Samrose, *University of Rochester, USA*
- Jose San pedro, *Schibsted, Spain*
- Anahita Sanandaji, *Oregon State University, USA*
- Frode Eika Sandnes, *HiOA, Norway*
- Eduardo B. Sandoval, *UNSW, Australia*
- Christian Sandvig, *University of Michigan, USA*
- Shruti Sannon, *Cornell University, USA*
- Scott Saponas, *Microsoft Research, USA*
- Nazmus Saquib, *Massachusetts Institute of Technology, USA*
- Sayan Sarcar, *Kochi University of Technology, Japan*
- Aleksandra Sarcevic, *Drexel University, USA*
- Harpreet Sareen, *Parsons School of Design, USA*
- Alper Sarikaya, *Microsoft Corporation, USA*
- Zhanna Sarsenbayeva, *The University of Melbourne, Australia*
- Angela Sasse, *University College London, UK*
- Daisuke Sato, *IBM Research - Tokyo, Japan*
- Arvind Satyanarayan, *Massachusetts Institute of Technology, USA*
- Oliver Saunders Wilder, *Massachusetts Institute of Technology, USA*
- Valkyrie Savage, *Savage Internet, Canada*
- Reviewers (continued)**
- Saiph Savage, *West Virginia University, USA*
- Sergio Sayago, *Universitat de Barcelona, Spain*
- Mike Schaekermann, *University of Waterloo, Canada*
- Thomas Scharf, *Newcastle University, UK*

- Clemens Schartmüller, *Technische Hochschule Ingolstadt, Germany*
Raimund Schatz, *AIT Austrian Institute of Technology GmbH, Austria*
Markus Schedl, *Johannes Kepler University Linz, Austria*
Laura Scheepmaker, *TU Wien -- Human Computer Interaction, Austria*
Carlos Scheidegger, *University of Arizona, USA*
Daniel Schien, *University of Bristol, UK*
Jonas Schild, *Hochschule Bonn-Rhein-Sieg, Germany*
Steven Schirra
Steven Schirra, *Twitch, USA*
Jonas Schjerlund, *University of Copenhagen, Denmark*
Ari Schlesinger, *Georgia Tech, USA*
Sara Schley, *Rochester Institute of Technology, USA*
Karen Schloss, *University of Wisconsin - Madison, USA*
Chris Schmandt, *Massachusetts Institute of Technology, USA*
Albrecht Schmidt, *LMU Munich, Germany*
Martin Schmitz, *TU Darmstadt, Germany*
Holger Schnädelbach, *The University of Nottingham, UK*
Christina Schneegass, *LMU Munich, Germany*
Bertrand Schneider, *Harvard University, USA*
Sarita Schoenebeck, *University of Michigan, USA*
Tom Schofield, *Newcastle University, UK*
Guy Peter Schofield, *University of York, UK*
Philipp M. Scholl, *University of Freiburg, Germany*
Johannes Schöning, *University of Bremen, Germany*
Eldon Schoop, *University of California, Berkeley, USA*
Marén Schorch, *University of Siegen, Germany*
Dylan Gerard Michel Schouten, *Northeastern University, USA*
m.c. schraefel, *University of Southampton, UK*
Jessica Schroeder, *University of Washington, USA*
Ronald Schroeter, *QUT, Australia*
Stephen M. Schueller, *Northwestern University, USA*
Britta Schulte, *University College London, UK*
Hans-Jörg Schulz, *Aarhus University, Denmark*
Gerhard Schwabe, *University of Zurich, Switzerland*
Valentin Schwind, *University of Stuttgart, Germany*
Alex Sciuto, *Carnegie Mellon University, USA*
Stacey D. Scott, *University of Guelph, Canada*
Kent Seamons, *Brigham Young University, USA*
Robbie Sedgewick, *Apple, USA*
Michael Sedlmair, *University of Stuttgart, Germany*
Joseph Seering, *Carnegie Mellon University, USA*
Caitlyn Seim, *Georgia Institute of Technology, USA*
Sofia Seinfeld, *University of Bayreuth, Germany*
Tobias Seitz, *LMU Munich, Germany*
André Sekulla, *University of Siegen, Germany*
James Andrew Self, *Ulsan National Institute of Science & Technology, UK*
Ted Selker, *Selker design research, USA*
Nathan Arthur Semertzidis, *RMassachusetts Institute of Technology University, Australia*
Rob Semmens, *Naval Postgraduate School, USA*
Phoebe Sengers, *Cornell University, USA*
Kyoungwon Seo, *Hanyang University, Republic of Korea*
Stefania Serafin, *Aalborg University, Denmark*
Bariş Serim, *University of Helsinki, Finland*
Marcos Serrano, *IRIT - Elipse, France*
Aaditeshwar Seth, *Indian Institute of Technology Delhi, India*
Ricky J. Sethi, *Fitchburg State University, USA*
Vidya Setlur, *Tableau Research, USA*
Teddy Seyed, *University of Calgary, Canada*
William Seymour, *University of Oxford, UK*
Orit Shaer, *Wellesley College, USA*
Neil Shah, *Snap Inc., USA*
Dafna Shahaf, *The Hebrew University of Jerusalem, Israel*
Muhammad Shahzad, *North Carolina State University, USA*
Samira Shaikh, *UNC - Charlotte, USA*
Hanieh Shakeri, *University of British Columbia, Canada*
N. Sadat Shami, *IBM, USA*
David A. Shamma, *FX Palo Alto Laboratory, Inc., USA*
Ladan Shams, *University of California, Los Angeles, USA*
Wei Shao, *RMassachusetts Institute of Technology, Australia*
Ben Rydal Shapiro, *Georgia Institute of Technology, USA*
Adwait Sharma, *Saarland University, Saarland Informatics Campus, Germany*
Nikhil Sharma, *Google, USA*
Sarah Sharples, *University of Nottingham, UK*
Herbert Shea, *EPFL, Switzerland*
Hong Shen, *Carnegie Mellon University, USA*
Imani N Sherman, *University of Florida, USA*
Micah Sherr, *Georgetown University, USA*
Andrew M Sherrill, *Emory University, USA*
Yilei Shi, *Auckland Bioengineering Institute, the University of Auckland, New Zealand*
Weinan Shi, *Tsinghua University, China*
Lei Shi, *Cornell University, USA*
Antonette Shibani, *University of Technology Sydney, Australia*
Reviewers (continued)
Frederick Shic, *Seattle Children's Research Institute, USA*
Patrick C. Shih, *Indiana University Bloomington, USA*
Roy Shilkrot, *Stony Brook University, USA*
Katie Shilton, *University of Maryland, College Park, USA*

- Youngbo Aram Shim, *KAIST, Republic of Korea*
Choonsung Shin, *KETI, Republic of Korea*
Hijung Valentina Shin, *Adobe Research, USA*
Brent N Shiver, *IBM, USA*
Buntarou Shizuki, *University of Tsukuba, Japan*
Michal Shmueli-Scheuer, *IBM Research AI, Israel*
Samantha Shorey, *University of Washington, USA*
Patel Shwetak, *University of Washington, USA*
Pao Siangliulue, *B12, USA*
Janet Siegmund, *University of Passau, Germany*
Tomi Silander, *NAVER LABS Europe, France*
M. Six Silberman, *IG Metall, Germany*
Elizabeth Sillence, *Northumbria University, UK*
Chaklam Silpasuwanchai, *Stamford International University, Thailand*
Miguel Silva, *University of Manchester, UK*
Johanna Maria Silvennoinen, *University of Jyvaskyla, Finland*
Max Silverman, *Oath (Formerly Yahoo), USA*
Will Simm, *Lancaster University, UK*
Elena Simperl, *University of Southampton, UK*
Emma Simpson, *Newcastle University, UK*
Mike Sinclair, *Microsoft, USA*
Priyanka Singh, *Dartmouth College, USA*
Ranjit Singh, *Cornell University, USA*
Panote Siriaritya, *Kyoto Sangyo University, Japan*
David Sirkin, *Stanford University, USA*
Max Sjöblom, *Gamification Group, Finland*
Sophie Skach, *Queen Mary University of London, UK*
Mel Slater, *University of Barcelona, Spain*
Manya Sleeper, *Google, USA*
Karin Slegers, *Tilburg University, Netherlands*
Geertje Slingerland, *Delft University of Technology, Netherlands*
Jacek Sliwinski, *University of the Sunshine Coast, Australia*
Jan David Smeddinck, *Newcastle University, UK*
Dorothé Smit, *University of Salzburg, Austria*
Matthew Smith, *University of Bonn, Germany*
Wally Smith, *The University of Melbourne, Australia*
Joshua Smith, *University of Washington, USA*
Catherine Arnott Smith, *University of Wisconsin-Madison, USA*
C. Estelle Smith, *University of Minnesota, USA*
Brian Smith, *Columbia University, USA*
Matthew Smith, *University of Oxford, UK*
Alison Marie Smith-Renner, *University of Maryland, College Park, USA*
Jaime Snyder, *University of Washington, USA*
Kiley Sobel, *University of Washington, USA*
- Mohammad Soleymani, *USC, USA*
Amber Solomon, *Georgia Institute of Technology, USA*
Jacob Solomon, *athenahealth, USA*
Erin Solovey, *Worcester Polytechnic Institute, USA*
Sowmya Somanath, *OCAD University, Canada*
Jean Y. Song, *University of Michigan, USA*
Alessandro Soro, *Queensland University of Technology, Australia*
Gábor Sörös, *ETH Zurich, Switzerland*
Alvaro Soto, *Pontificia Universidad Católica de Chile, Chile*
Maurício Sousa, *INESC-ID Lisboa, Portugal*
Caleb Southern, *Georgia Institute of Technology, USA*
Oleg Spakov, *University of Tampere, Finland*
Chris Speed, *University of Edinburgh, UK*
Marco Speicher, *DFKI, Saarland Informatics Campus, Germany*
Jocelyn Spence, *University of Nottingham, UK*
Katta Spiel, *TU Wien, Austria*
Daniel Spikol, *Malmö University, Sweden*
Brendan Spillane, *Trinity College Dublin, Ireland*
Emma S. Spiro, *University of Washington, USA*
Anna Squicciarini, *Pennsylvania State University, USA*
Kurt Squire, *University of California, Irvine, USA*
Misha Sra, *Massachusetts Institute of Technology, USA*
Priyashri Kamlesh Sridhar, *Singapore University of Technology and Design, Singapore*
Jessica Staddon
Anna Ståhl, *RISE, Research Institutes of Sweden, Sweden*
Abigale Stangl, *ATLAS Institute, USA*
Kay Stanney, *Design Interactive, Inc., USA*
Luke Stark, *New York University, USA*
John Stasko, *Georgia Institute of Technology, USA*
Ralf Stauber, *Technical University of Munich, Germany*
Katarzyna Stawarz, *University of Bristol, UK*
Lee Stearns, *University of Maryland, College Park, USA*
Anthony Steed, *University College London, UK*
Cameron Steer, *Swansea University, UK*
Julian Steil, *Max Planck Institute for Informatics, Germany*
Manuel Stein, *University of Konstanz, Germany*
Frank Steinicke, *Universität Hamburg, Germany*
Sophie Stellmach, *Microsoft, USA*
Ekaterina R Stepanova, *Simon Fraser University, Canada*
Michael Stewart, *James Madison University, USA*
Rebecca Stewart, *Queen Mary University of London, UK*
- Reviewers (continued)**
- Holger Stitz, *Johannes Kepler University, Austria*
Tony Stockman, *Queen Mary University of London, UK*
Brett Stoll, *Cornell University, USA*
Erik Stolterman, *Indiana University Bloomington, USA*

- Megan Strait, *The University of Texas Rio Grande Valley, USA*
Evan Strasnick, *Stanford University, USA*
Yolande AA Strengers, *RMassachusetts Institute of Technology University, Australia*
Stephan Streuber, *Ecole Polytechnique Fédérale de Lausanne, Switzerland*
Hendrik Strobelt, *IBM Research AI, USA*
Sarah Strohkorb Sebo, *Yale University, USA*
Angelika Strohmayer, *Newcastle University, UK*
Paul Strohmeier, *University of Copenhagen, Denmark*
Carol Strong, *National Cheng Kung University, Taiwan*
Simone Stumpf, *City, University of London, UK*
Miriam Sturdee, *University of Calgary, Canada*
Christian Sturm, *Hamm-Lippstadt University of Applied Sciences, Germany*
Yusuke Sugano, *Osaka University, Japan*
Yuta Sugiura, *Keio University, Japan*
Jina Suh, *Microsoft Research, USA*
Bongwon Suh, *Seoul National University, Republic of Korea*
Minhyang (Mia) Suh, *University of Washington, USA*
Anne Sullivan, *Georgia Institute of Technology, USA*
Sharifa Sultana, *Cornell University, USA*
Ke Sun, *Tsinghua University, China*
Na Sun, *Pennsylvania State University, USA*
Maoyuan Sun, *University of Massachusetts Dartmouth, USA*
Zhida Sun, *Hong Kong University of Science and Technology, China*
Mingfei Sun, *Hong Kong University of Science and Technology, Hong Kong*
Hailong Sun, *Beihang University, China*
S. Shyam Sundar, *The Pennsylvania State University, USA*
Mankyu Sung
Luiza Superti Pantoja, *University of Iowa, USA*
Hemant Bhaskar Surale, *University of Waterloo, Canada*
Daniel Susser, *The Pennsylvania State University, USA*
Selina Jeanne Sutton, *Northumbria University, UK*
Keisuke Suzuki, *Sackler Centre for Consciousness Science, UK*
Ryo Suzuki, *University of Colorado Boulder, USA*
Dag Svanes, *NTNU, Norway*
Michael Kvist Svangren, *Aalborg University, Denmark*
Saiganesh Swaminathan, *Carnegie Mellon University, USA*
Amanda Swearngin, *University of Washington, USA*
Sarit Szpiro
Olivier Szymanezyk, *University of Lincoln, UK*
Peggy Szymanski
- Shanmugapriya T, *SSNCE, India*
Tung D. Ta, *The University of Tokyo, Japan*
Aurélien Tabard, *Université de Lyon, France*
Benjamin Tag, *Keio University, Japan*
Ana Tajadura-Jiménez, *Universidad Carlos III de Madrid / University College London, Spain*
Hironobu Takagi, *IBM Research - Tokyo, Japan*
Shin Takahashi, *University of Tsukuba, Japan*
Kazuki Takashima, *Tohoku University, Japan*
Leila Takayama, *University of California, Santa Cruz, USA*
Reem Talhouk, *Newcastle University, UK*
Jerry O. Talton, *Carta, Inc., USA*
Haodan Tan, *Indiana University Bloomington, USA*
Karen Tanenbaum, *University of California-Irvine, USA*
Joshua Tanenbaum, *University of California: Irvine, USA*
Yan Tang, *Hohai University, China*
Charlotte Tang, *University of Michigan Flint, USA*
Ying Tang, *Youngstown State University, USA*
Md Iftekhar Tanveer, *University of Rochester, USA*
Aneesh P. Tarun, *Ryerson University, Canada*
Ivan J. Tashev, *Microsoft Corporation, USA*
Jennyfer Taylor, *QUT, Australia*
Alex S Taylor, *City, University of London, UK*
Robert J Teather, *Carleton University, Canada*
Nathan TeBlunthuis, *University of Washington, USA*
Carlos Tejada, *University of Copenhagen, Denmark*
Maurizio Teli, *Madeira Interactive Technologies Institute, Portugal*
Hilda Tellioglu, *TU Wien, Austria*
Paul Tennent, *University of Nottingham, UK*
Monica Tentori, *CICESE, Mexico*
Jacques Terken, *Technische Universiteit Eindhoven, Netherlands*
Loren Terveen, *The University of Minnesota, USA*
David Tewksbury, *University of Illinois at Urbana-Champaign, USA*
Jacob Thebault-Spieker, *Virginia Tech, USA*
Mary Theofanos, *National Institute of Standards and Technology, USA*
Lauren Thevin, *Inria Bordeaux, France*
Sarah-Kristin Thiel, *Aarhus University, Denmark*
Meinald Thielsch, *University of Münster, Germany*
William Thies, *Microsoft Research, USA*
- Reviewers (continued)**
- Hannah Thinyane, *United Nations University, Institute on Computing and Society, Macao*
Jakob Tholander, *Stockholm University, Sweden*
Lisa Thomas, *Northumbria University, UK*
John C. Thomas, *PSI!, USA*

- Paul Thomas, *Microsoft, Australia*
Meredith Thompson, *Massachusetts Institute of Technology, USA*
Julie Thorpe, *University of Ontario Institute of Technology, Canada*
Alice Thudt, *University of Calgary, Canada*
Rundong Tian, *University of California, Berkeley, USA*
Myrthe Lotte Tielman, *Delft University of Technology, Netherlands*
Subrata Tikadar, *Indian Institute of Technology Guwahati, India*
Karine Lan Hing Ting, *UTT- Université de Technologie de Troyes (UMR CNRS 6281), France*
Devayani Tirthali, *Independent Researcher, India*
Mike Tissenbaum, *University of Illinois at Urbana Champaign, USA*
Matthieu Tixier, *Troyes University of Technology, France*
Kashyap Todi, *Aalto University, Finland*
Yutaka Tokuda, *University of Sussex, UK*
Konrad Tollmar, *The Royal Institute of Technology (KTH), Sweden*
Peter David Tolmie, *Universitat Siegen, Germany*
Catalina Toma, *University of Wisconsin-Madison, USA*
Oscar Tomico, *Elisava, Spain*
Christian Tominski, *University of Rostock, Germany*
Brianna J. Tomlinson, *Georgia Institute of Technology, USA*
Bill Tomlinson, *University of California, Irvine, USA*
Gustavo F. Tondello, *University of Waterloo, Canada*
Linda Tonolli, *University of Trento, Italy*
Cesar Torres, *University of California, Berkeley, USA*
Ruth Torres Castillo, *New Mexico State University, USA*
Melanie Tory, *Tableau Research, USA*
Kentaro Toyama, *University of Michigan, USA*
Christoph Trattner, *University of Bergen, Norway*
Cathy Treadaway, *Cardiff Metropolitan University, UK*
Stefano Triberti, *University of Milan, Italy*
Penny Trieu, *University of Michigan, USA*
Johanne Trippas, *RMassachusetts Institute of Technology University, Australia*
Sandra Trösterer, *University of Salzburg, Austria*
Anh Truong, *Adobe Research, USA*
Khiet P. Truong, *University of Twente, Netherlands*
Janice Tsai, *Mozilla, USA*
Wenn-Chieh Tsai, *National Taiwan University, Taiwan*
Yun-Ta Tsai, *Google Inc., USA*
Huawei Tu, *Nanjing University of Aeronautics and Astronautics, China*
William D. Tucker, *University of the Western Cape, South Africa*
- Outi Tuisku, *Lappeenranta University of Technology, Finland*
Yu-Chih Tung, *Facebook, USA*
Fang-Wu Tung, *National University of Science and Technology, Taiwan*
Sanna Kristiin Tuomela, *University of Oulu, Finland*
Matthew Turk, *University of California, Santa Barbara, USA*
Cagatay Turkay, *City, University of London, UK*
Laia Turmo Vidal, *Uppsala University, Sweden*
Anna Turner, *Google, USA*
April Tyack, *Queensland University of Technology (QUT), Australia*
Judith Odili Uchidiuno, *Carnegie Mellon University, USA*
Md. Sami Uddin, *University of Saskatchewan, Canada*
Antti Ukkonen, *University of Helsinki, Finland*
Daniel Ullrich, *Ludwig-Maximilians-University Munich, Germany*
Selcuk Uluagac, *Florida International University, USA*
David Unbehaun, *University of Siegen, Germany*
Ovidiu-Ciprian Ungurean, *University Stefan cel Mare of Suceava, Romania*
Blase Ur, *University of Chicago, USA*
Stephen Uzor, *University of Cambridge, UK*
Stephen Miles Uzzo, *New York Hall of Science, USA*
Kaisa Väänänen, *Tampere University of Technology, Finland*
Rajan Vaish, *Snap Inc., USA*
Dimitar Valkov, *University of Münster, Germany*
Thomas S. Valley, *University of Michigan, USA*
Michel Valstar, *University of Nottingham, UK*
Niels van Berkel, *The University of Melbourne, Australia*
Judy Van Biljon, *University of South Africa, South Africa*
Thomas van de Werff, *Eindhoven University of Technology, Netherlands*
Remo van der Heiden, *Utrecht University, Netherlands*
Janet van der Linden, *The Open University, UK*
Erik van der Spek, *Eindhoven University of Technology, Netherlands*
Tim van der Zee, *Leiden University, Netherlands*
René van Egmond, *Delft University of Technology, Netherlands*
- Reviewers (continued)**
- Domenique van Gennip, *University of Technology Sydney, Australia*
Max Van Kleek, *University of Oxford, UK*
Paul van Schauk, *Teesside University, UK*
Koen van Turnhout, *HAN University of Applied Sciences, Netherlands*

- Davy Vanacken, *Hasselt University - tUL - Flanders Make, Belgium*
- Anthony Vance, *Temple University, USA*
- Andrew Vande Moere, *KU Leuven, Belgium*
- Vero Vanden Abeele, *KU Leuven, Belgium*
- Bert Vandenbergh, *KU Leuven, Belgium*
- Dirk Vanderlinden, *University of Bristol, UK*
- Asimina Vasalou, *University College London, UK*
- Aditya Vashistha, *University of Washington, USA*
- Deepak Vasisht, *Massachusetts Institute of Technology, USA*
- Daryoush Daniel Vaziri, *University of Applied Sciences, Germany*
- Michael Veale, *University College London, UK*
- Velko Vechev, *ETH Zurich, Switzerland*
- Rajesh Veeraraghavan, *Georgetown University, USA*
- Julio Vega, *University of Manchester, UK*
- Kellie Vella, *Queensland University of Technology (QUT), Australia*
- Sukrit Venkatagiri, *Virginia Tech, USA*
- Krishna Venkatasubramanian, *Worcester Polytechnic Institute, USA*
- Shriram Venkatraman, *Indraprastha Institute of Information Technology, New Delhi, India*
- Nitya Verma, *Indiana University, USA*
- Himanshu Verma, *University of Fribourg, Switzerland*
- Jo Vermeulen, *Aarhus University, Denmark*
- Maarten Floris Versteeg, *Technical University Eindhoven, Netherlands*
- Roel Vertegaal, *Queen's University, Canada*
- Janet Vertesi, *Princeton University, USA*
- David Verweij, *Northumbria University, UK*
- Markel Vigo, *University of Manchester, UK*
- Nicholas Vincent, *Northwestern University, USA*
- Aditya Vishwanath, *Stanford University, USA*
- Jessica Vitak, *University of Maryland, USA*
- Francesco Vitale, *University of British Columbia, Canada*
- Vasilis Vlachokyriakos, *Newcastle University, UK*
- Dong-Bach Vo, *University of Glasgow, UK*
- Christian Vogler, *Gallaudet University, USA*
- Alexandra Voit, *VIS, Germany*
- Melanie Volkamer, *SECUSO, Karlsruhe Institute of Technology, Germany*
- Sarah Theres Völkel, *LMU Munich, Germany*
- Eric S. Vorm, *Indiana University Purdue University Indianapolis, USA*
- Mihaela Vorvoreanu, *Microsoft Research, USA*
- Steven Vos, *Eindhoven University of Technology, Netherlands*
- Daniel J Votipka, *University of Maryland, USA*
- Alla Vovk, *Oxford Brookes University, UK*
- Alexandra Vtyurina, *University of Waterloo, Canada*
- Romain Vuillemot, *Ecole Centrale de Lyon, France*
- Dhaval Vyas, *Queensland University of Technology, Australia*
- Chat Wacharamanotham, *University of Zurich, Switzerland*
- Greg Wadley, *The University of Melbourne, Australia*
- Alan Wagner, *Pennsylvania State University, USA*
- Jo Wake, *Uni Research AS, Norway*
- Ron Wakay, *Simon Fraser University, Canada*
- Marcel Walch, *Ulm University, Germany*
- Manuela Waldner, *TU Wien, Austria*
- Michael Walker, *University of Colorado Boulder, USA*
- Julie Walker, *Stanford University, USA*
- Emily Wall, *Georgia Tech, USA*
- James R Wallace, *University of Waterloo, Canada*
- Torben Wallbaum, *OFFIS - Institute for Information Technology, Germany*
- Christian Wallraven, *Korea University, Republic of Korea*
- Jagoda Walny, *University of Calgary, Canada*
- Greg Walsh, *University of Baltimore, USA*
- Thomas Waltemate, *Bielefeld University, Germany*
- Robert Walter, *rwalter.de, Germany*
- Na Wang, *Samsung Research America, USA*
- Kai Wang, *CloudMinds Technologies, China*
- Xiying Wang, *Pennsylvania State University, USA*
- Yunlong Wang, *University of Konstanz, Germany*
- Lin Wang, *U.S. Census Bureau, USA*
- Dangxiao Wang, *Beihang University, China*
- Jindong Wang, *Chinese Academy of Sciences, China*
- Guanyun Wang, *Carnegie Mellon University, USA*
- Edward Jay Wang, *University of Washington, USA*
- Yun Wang, *The Hong Kong University of Science and Technology, China*
- Yong Wang, *The Hong Kong University of Science and Technology, China*
- Xiyue Wang, *Tohoku University, Japan*
- Xiting Wang, *Dartmouth College, USA*
- Yi-Chia Wang, *Uber Technologies Inc., USA*
- Guan Wang, *City University of Hong Kong, China*
- Xinyi Wang, *University of Minnesota, USA*
- Yang Wang, *Uber Technologies, Inc., USA*
- Reviewers (continued)**
- Rui Wang, *Dartmouth College, USA*
- Yi Wang, *Rochester Institute of Technology, USA*
- Nicholas Ward, *University of Limerick, Ireland*
- Tomas E Ward, *Dublin City University, Ireland*
- Harald Warmelink, *Breda University of Applied Sciences, Netherlands*

- Mark Warner, *University College London, UK*
Peter Washington, *Stanford University, USA*
Stephanie I. Wassenburg, *Carnegie Mellon University, USA*
Joe A Wasserman, *West Virginia University, USA*
Jason Watson, *University of North Alabama, USA*
Diane Watson, *University of Waterloo, Canada*
Jenny Waycott, *The University of Melbourne, Australia*
Chris Weaver, *University of Oklahoma, USA*
John Webb, *University of Limerick, Ireland*
Andrew M. Webb, *Inria, France*
Helena Webb, *University of Oxford, UK*
Sarah Webber, *University of Melbourne, Australia*
Gerald Weber, *The University of Auckland, New Zealand*
Steven Weber, *University of California, Berkeley, USA*
Dominik Weber, *University of Stuttgart, Germany*
Rina R. Wehbe, *University of Waterloo, Canada*
Huaxin Wei, *The Hong Kong Polytechnic University, Hong Kong*
Li-yi Wei, *Adobe Research, USA*
Nadir Weibel, *University of California, San Diego, USA*
Anne Weibert, *University of Siegen, Germany*
Martin Weigel, *Honda Research Institute Europe, Germany*
Klemens Weigl, *Technische Hochschule Ingolstadt, Germany*
Jennifer Weiler, *Arizona State University, USA*
David Weintrop, *University of Maryland, USA*
Anna Weisling, *Georgia Institute of Technology, USA*
Tim Weissker, *Bauhaus-Universität Weimar, Germany*
Justin D. Weisz, *IBM Research, USA*
Daniel Welsh, *Newcastle University, UK*
Nina Wenig, *University of Bremen, Germany*
Stephan Wensveen, *Eindhoven University of Technology, Netherlands*
Jens Weppner, *German Research Center for Artificial Intelligence (DFKI GmbH), Germany*
Daniel Wessel, *University of Luebeck, Germany*
Michael Wessely, *Inria, France*
Richard Wetzel, *Lucerne University of Applied Sciences and Arts, Switzerland*
Earnest Wheeler, *University of Michigan, USA*
Brooke White, *Oath, USA*
Mark E. Whiting, *Stanford, USA*
Daniel J. Wigdor, *University of Toronto, Canada*
Sanjaya Wijeratne, *Wright State University, USA*
Primal Wijesekera, *University of California, USA*
Lauren Wilcox, *Georgia Institute of Technology, USA*
Danielle Wilde, *University of Southern Denmark, Denmark*
Daricia Wilkinson, *Clemson University, USA*
Jutta Willamowski, *NAVER LABS Europe, France*
Wesley Willett, *University of Calgary, Canada*
Kaiton Williams, *Impact America Fund, USA*
Kristin Williams, *Carnegie Mellon University, USA*
Alex C. Williams, *University of Waterloo, Canada*
Michele Williams, *Pearson, USA*
Ian Williams, *Birmingham City University, UK*
Cara Wilson, *Queensland University of Technology, Australia*
Raphael Wimmer, *University of Regensburg, Germany*
Charles Windlin, *KTH Royal Institute of Technology, Sweden*
Olivia Alicea Winn, *Columbia University, USA*
Pinata Winoto, *Wenzhou-Kean University, China*
Philipp Wintersberger, *Technische Hochschule Ingolstadt, Germany*
Hanna Elina Wirman, *The Hong Kong Polytechnic University, Hong Kong*
Manuela Witt, *BMW Group, Germany*
Jacob O. Wobbrock, *University of Washington, USA*
Jill Palzkill Woelfer, *Google, USA*
Christine Wolf, *IBM Research, USA*
Katrín Wolf, *Hamburg University of Applied Sciences, Germany*
Annika Wolff, *LUT University, Finland*
Josephine Wolff, *Rochester Institute of Technology, USA*
Christian Wolff, *University of Regensburg, Germany*
Andrea Stevenson Won, *Cornell University, USA*
Kanit Wongsuphasawat, *University of Washington, USA*
Marisol Wong-Villacres, *Georgia Institute of Technology, USA*
Jong-bum Woo, *Samsung, Republic of Korea*
Matthew Wood, *Newcastle University, UK*
Gavin Wood, *Northumbria University, UK*
Julia Woodward, *University of Florida, USA*
Sandra I Woolley, *Keele University, UK*
Paul Worgan, *University College London, UK*
Marcelo Worsley, *Northwestern University, USA*
Niels Wouters, *University of Melbourne, Australia*
Peter Wright, *Newcastle University, UK*
Yanhong Wu, *Visa Research, USA*
Reviewers (continued)
Ziming Wu, *Hong Kong University of Science and Technology, Hong Kong*
Eugene Wu, *Columbia University, USA*
Shaomei Wu, *Facebook, USA*
Te-Yen Wu, *National Taiwan University, Taiwan*
Yu Wu, *University of Illinois at Urbana-Champaign, USA*

- Burkhard Wuensche, *University of Auckland, New Zealand*
- Volker Wulf, *Institute of Information Systems and New Media, Germany*
- Daniela Wurhofer, *AIT Austrian Institute of Technology GmbH, Austria*
- Susan Wyche, *Michigan State University, USA*
- Anna Xambó, *Norwegian University of Science and Technolog, Norway*
- Gus Xia, *NYU, China*
- Meng Xia, *the Hong Kong University of Science and Technology, China*
- Lu Xiao, *Syracuse University, USA*
- Xiang Xiao, *Google, USA*
- Cindy Xiong, *Northwestern University, USA*
- Bin Xu, *Facebook, USA*
- Yan Xu, *Magic Leap, USA*
- Cheng Xu, *1x1 design, USA*
- Panpan Xu, *Bosch Research, USA*
- Seiji Yamada, *National Institute of Informatics, Japan*
- Shota Yamanaka, *Yahoo Japan Corporation, Japan*
- Junichi Yamaoka, *The University of Tokyo, Japan*
- Naomi Yamashita, *NTT, Japan*
- Yukang Yan, *Tsinghua University, China*
- Jie Yang, *Florida State University, USA*
- Yalong Yang, *Monash University, Australia*
- Diyi Yang, *Carnegie Mellon University, USA*
- Longqi Yang, *Cornell University, USA*
- Chi-Lan Yang, *National Tsing Hua University, Taiwan*
- Qian Yang, *Carnegie Mellon University, USA*
- Jackie (Junrui) Yang, *Stanford University, USA*
- Rayoung Yang, *UCL Interaction Centre, UK*
- Georgios Yannakakis, *L-Università ta' Malta, Malta*
- Asim Evren Yantac, *Koç University, Turkey*
- Yaxing Yao, *Syracuse University, USA*
- Zheng Yao, *Carnegie Mellon University, USA*
- Svetlana Yarosh, *University of Minnesota, USA*
- Joyce Yee, *Northumbria University, UK*
- Tom Yeh, *University of Colorado Boulder, USA*
- Hui-Shyong Yeo, *University of St Andrews, UK*
- Xin Yi, *Tsinghua University, China*
- Kathleen Yin, *Macquarie University, Australia*
- Ming Yin, *Purdue University, USA*
- Hezheng Yin, *University of California, Berkeley, USA*
- Jason Yip, *University of Washinton, USA*
- Ryo Yonetani, *The University of Tokyo, Japan*
- Daisy Yoo, *Aarhus University, Denmark*
- Sang Ho Yoon, *Microsoft, USA*
- Shigeo Yoshida, *The University of Tokyo, Japan*
- Chuang-Wen You, *National Taiwan University, Taiwan*
- James E. Young, *University of Manitoba, Canada*
- Alyson L. Young, *Indiana University-Purdue University Indianapolis, USA*
- Lisa Yu, *Bosch, USA*
- Bin Yu, *Eindhoven University of Technology, Netherlands*
- Dian Yu, *Massachusetts Institute of Technology, USA*
- Neng-Hao Yu, *National Taiwan University of Science and Technology, Taiwan*
- Chen-Hsiang (Jones) Yu, *Wentworth Institute of Technology, USA*
- Chien Wen (Tina) Yuan, *Fu Jen University, Taiwan*
- Nicola Yuill, *University of Sussex, UK*
- Ulrich Zadow, *Technische Universität Dresden, Germany*
- Octavia Zahrt, *Stanford University, USA*
- Loutfouz Zaman, *University of Ontario Institute of Technology, Canada*
- Massimo Zancanaro, *FBK, Italy*
- Thorsten O. Zander, *Zander Laboratories, Germany*
- Michael Zbyszynski, *Goldsmiths, University of London, UK*
- Patrycja Zdziarska, *Indiana University, USA*
- Kehkashan Zeb, *Swansea University, UK*
- Ellen Zegura, *Georgia Tech, USA*
- André Zenner, *German Research Center for Artificial Intelligence (DFKI), Saarland Informatics Campus, Germany*
- Ephrem Zewdie, *University of Calgary, Canada*
- Emanuel Zgraggen, *Brown University, USA*
- Amy Zhang, *Massachusetts Institute of Technology, USA*
- Yan Zhang, *The University of Texas at Austin, USA*
- Cheng Zhang, *Cornell, USA*
- Haoqi Zhang, *Northwestern University, USA*
- Dingtian Zhang, *Georgia Tech, USA*
- Xiaolong (Luke) Zhang, *Penn State, USA*
- Yunfeng Zhang, *IBM T. J. Watson Research Center, USA*
- Xucong Zhang, *Saarland Informatics Campus, Germany*
- Yanxia Zhang, *FX Palo Alto Laboratory, USA*
- Mingrui Ray Zhang, *University of Washington, USA*
- Yang Zhang, *Carnegie Mellon University, USA*
- Xiao Zhang, *Tsinghua University, China*
- Xinyi Zhang, *University of California, Santa Barbara, USA*
- Xiaoyi Zhang, *University of Washington, USA*
- Reviewers (continued)**
- Jun Zhao, *University of Oxford, UK*
- Xuejiao Zhao, *Nanyang Technological University, Singapore*
- Ye Zhao, *Kent State University, USA*
- Shengdong Zhao, *National University of Singapore, Singapore*

Yuhang Zhao, *Cornell University, USA*
Siyan Zhao, *Carnegie Mellon University, USA*
Zhenjie Zhao, *Hong Kong University of Science and Technology, Hong Kong*
Zhi Zheng, *University of Wisconsin-Milwaukee, USA*
Clement Zheng, *National University of Singapore, Singapore*
Jingjie Zheng, *Google, Canada*
Yu Zhong, *Google Inc., USA*
Xiaomu Zhou, *Northeastern University, USA*
Rui Zhou, *Georgia Institute of Technology, USA*
Jianlong Zhou, *University of Technology Sydney, Australia*
Yunzhan Zhou, *Zhejiang University, China*
Haining Zhu, *Penn State University, USA*
Jürgen Ziegler, *University Siegen, Germany*

Björn Zimmer, *University of Applied Sciences Upper Austria, Austria*
John Zimmerman, *Carnegie Mellon University, USA*
Philippe Zimmermann, *University of Bern, Switzerland*
Annuska Zolyomi, *University of Washington, USA*
Alexander Zook, *Blizzard Entertainment, USA*
Amit Zoran, *Hebrew University, Israel*
Han Zou, *University of California, Berkeley, USA*
Steven Zucker, *Yale University, USA*
Ethan Zuckerman, *Massachusetts Institute of Technology, USA*
Mary Ellen Zurko, *Massachusetts Institute of Technology, USA*
Douglas Zytko, *Oakland University, USA*
Douglas Zytko, *Oakland University, USA*
Purnendu, *University of Colorado, Boulder, USA*