



# Lambert Conference on the Future of Human-Computer Interaction + Design

**OCTOBER 24 - 25, 2022**

The Hive, Ford Engineering Design Center  
Northwestern University's Evanston Campus

Presented by **The Lambert Family**,  
**Northwestern's School of Communication**,  
and **Northwestern Engineering**

Northwestern

CENTER FOR HUMAN-COMPUTER  
INTERACTION + DESIGN

# MONDAY, OCTOBER 24

**8:30–9 a.m.** Light breakfast

## WELCOMING REMARKS

**9–9:30 a.m.** Welcome from Deans **E. Patrick Johnson** and **Julio M. Ottino** with comments from Center co-directors **Liz Gerber**, **Bryan Pardo**, and **Darren Gergle**

## SESSION 1:

### Community- and Asset-Based Design

**9:30–11 a.m.** Introduction: **Darren Gergle**, John G. Searle Professor of Communication Studies and Computer Science (by courtesy); Co-director, Center for Human-Computer Interaction + Design, Northwestern University

**Sheena Erete**

Associate Professor, College of Information, University of Maryland, College Park; Founder and Director, Community Research and Design Collective

**Brooke Foucault Wells**

Associate Dean for Research, College of Art, Media, and Design, Northeastern University

**Matt Easterday**

Associate Professor, School of Education and Social Policy, Northwestern University

Discussion with Facilitator **Matt Easterday**

## BREAK

**11–11:30 a.m.** Break

## SESSION 2:

# Human-Centered Artificial Intelligence

**11:30 a.m.–1 p.m.** Introduction: **Darren Gergle**

### **James Landay**

Professor of Computer Science and the Anand Rajaraman and Venky Harinarayan Professor, School of Engineering, Stanford University; Co-founder and Vice-Director, Stanford Institute for Human-Centered Artificial Intelligence (HAI)

### **David Ayman Shamma**

Staff Research Scientist, Toyota Research Institute

### **Brent Hecht**

Associate Professor, Director of Applied Science in Microsoft's Experiences and Devices division, Northwestern University

Discussion with Facilitator **Brent Hecht**

## LUNCH AND POSTER SESSION

**1–2 p.m.** Lunch

## SESSION 3:

# Healthcare and Well-being

**2–3:30 p.m.** Introduction: **Kaylee Krusan**, Research Assistant Professor, Department of Preventive Medicine, Northwestern University

### **Elizabeth Mynatt**

Dean, Khoury College of Computer Sciences, Northeastern University

### **Sarah Helseth**

Assistant Professor, Psychiatry and Behavioral Sciences and Medical Social Sciences, Northwestern University

### **Maia Jacobs**

Lisa Wissner-Slivka and Benjamin Slivka Assistant Professor of Computer Science; Assistant Professor of Preventive Medicine, Northwestern University

Discussion with Facilitator **Andrea Graham**, Assistant Professor, Medical Social Sciences and Preventive Medicine, Northwestern University

## BREAK

**3:30–3:45 p.m.** Break

**SESSION 4:**  
**Work**

**3:45–5:15 p.m.**

Introduction: **Liz Gerber**, Professor of Mechanical Engineering and Communication Studies and (by courtesy) Learning Sciences and Computer Science; Co-director, Delta Lab; Co-director, Center for Human-Computer Interaction + Design, Northwestern University; Founder, Design for America

**Elizabeth Churchill**

Director of User Experience, Google; Executive Vice President, Association of Computing Machinery (ACM); Member, ACM's CHI Academy; ACM Distinguished Scientist and Distinguished Speaker

**Noshir Contractor**

Jane S. and William J. White Professor of Behavioral Sciences in Industrial Engineering & Management Sciences and (by courtesy) Computer Science; Professor of Communication Studies; Professor of Management and Organizations, Northwestern University

**Mike Massimi**

Senior Principal Researcher at Slack

Discussion with Facilitator **Liz Gerber**

**RECEPTION AND POSTER SESSION**

**5:30–8:00 p.m.**

The Great Room  
600 Haven Street  
Evanston, IL 60208-1001

Musical Entertainment by Mercedes Martinez

# TUESDAY, OCTOBER 25

8:30–9 a.m. Light breakfast

## SESSION 5: Creativity

9–10:30 a.m. Introduction: **Bryan Pardo**, Professor of Computer Science and Radio, Television, and Film; Co-director, Center for Human-Computer Interaction + Design, Northwestern University

### **Jodi Forlizzi**

Herbert A. Simon Professor in Computer Science and Human-Computer Interaction and Associate Dean for Diversity, Equity, and Inclusion, School of Computer Science, Carnegie Mellon University

### **Emőke-Ágnes Horvát**

Assistant Professor, Communication Studies, Northwestern University

### **Duri Long**

Assistant Professor, Communication Studies, Northwestern University

Discussion with Facilitator **Bryan Pardo**

## SESSION 6: Data Visualization

10:30–11:45 a.m. Introduction: **Bryan Pardo**

### **Vidya Setlur**

Director of Research, Tableau/Salesforce

### **Matthew Kay**

Assistant Professor of Computer Science, McCormick School of Engineering, Northwestern University

Discussion with Facilitator **Matthew Kay**

## CLOSING REMARKS

11:45 a.m.–12 p.m. Comments from Center co-directors **Liz Gerber**, **Bryan Pardo**, and **Darren Gergle**

12 p.m. Grab-and-Go Box Lunches

# ABOUT THE SPEAKERS

## FEATURED SPEAKERS



### **Elizabeth Churchill**

**Director of User Experience, Google; Executive Vice President, Association of Computing Machinery (ACM); Member, ACM's CHI Academy; ACM Distinguished Scientist and Distinguished Speaker**

Dr. Churchill is a Director of UX at Google and Co-Chair of Google's UX Leadership Council. With a background in psychology, Artificial Intelligence and Cognitive Science, she draws on social, computer, engineering, and data sciences to create innovative end-user applications and services. She has built research teams at Google, eBay, Yahoo, PARC and FujiXerox. Her current focus is on the design of effective designer and developer tooling for a new operating system, Fuchsia.

Dr. Churchill holds a PhD from the University of Cambridge and honorary doctorates from the University of Sussex and the University of Stockholm. She is a member of the Association for Computer Machinery's (ACM) CHI Academy, is an ACM Fellow, and an ACM Distinguished Speaker. She served as the ACM's Vice President for 2 years, from 2018-2020. In 2016 she received a Citris-Banatao Institute Athena Award for Women in Technology for her Executive Leadership. She has been named one of the top women leaders in UX over the last several years.



### **Sheena Erete**

**Associate Professor, College of Information, University of Maryland, College Park; Founder and Director, Community Research and Design Collective**

Dr. Erete is a researcher, educator, designer, and community advocate, whose research focuses on co-designing socio-cultural technologies, practices, and policies with community residents to amplify their local efforts in addressing issues such as violence, education, civic engagement and health. The objective of her work is to create more just and equitable outcomes and futures for those who have historically and who currently face structural oppression. Her research has won several best paper awards in top venues such as ACM CHI, CSCW, and SIGCSE as well a diversity and inclusion award for her collaborative work dissecting oppression that exists in the field of computing, HCI, and design. Her work has been supported by the National Science Foundation, Illinois Criminal Justice Information Authority, and several philanthropic foundations including the Polk Bros. Foundation, Pritzker Pucker Family Foundation, and McCormick Foundation. She is currently an associate professor in the College of Information at the University of Maryland College Park, where she founded the Community Research and Design Collective. Dr. Erete received bachelor of science degrees in mathematics and Computer Science from Spelman College. She received a master's in computer science from Georgia Tech and a PhD in Technology & Social Behavior from Northwestern University.



## **Jodi Forlizzi**

**Herbert A. Simon Professor in Computer Science and Human-Computer Interaction and Associate Dean for Diversity, Equity, and Inclusion, School of Computer Science, Carnegie Mellon University**

Dr. Forlizzi is the Herbert A. Simon Professor of Computer Science and Human-Computer Interaction in the School of Computer Science at Carnegie Mellon University. She is also the Diversity, Equity, and Inclusion Lead in the School of Computer Science. She is responsible for establishing design research as a legitimate form of research in HCI that is different from, but equally as important as, scientific and human science research. Dr. Forlizzi has advocated for design research in all forms, mentoring peers, colleagues, and students in its structure and execution, and today it is an important part of the HCI community. Her current research interests include designing human-robot interaction as a service and human-AI collaboration in the domains of eldercare, accessibility, human assistance, and overall wellbeing.



## **James Landay**

**Professor of Computer Science and the Anand Rajaraman and Venky Harinarayan Professor, School of Engineering, Stanford University; Co-founder and Vice-Director, Stanford Institute for Human-Centered Artificial Intelligence (HAI)**

Dr. Landay is a Professor of Computer Science at Stanford University, specializing in human-computer interaction (HCI). Previously, Dr. Landay was a Professor of Information Science at Cornell Tech in New York City and prior to that a Professor of Computer Science & Engineering at the University of Washington. His current research interests include Technology to Support Behavior Change, Demonstrational Interfaces, Mobile & Ubiquitous Computing, and User Interface Design Tools. He is the founder and co-director of the World Lab, a joint research and educational effort with Tsinghua University in Beijing.



## Elizabeth Mynatt

Dean, Khoury College of Computer Sciences, Northeastern University

Dr. Mynatt is the Dean of Khoury College of Computer Sciences following a 23-year career at Georgia Institute of Technology where she most recently served as a Regents' Professor in the School of Interactive Computing and executive director of the Institute of People and Technology. Dr. Mynatt is an internationally recognized expert in the areas of ubiquitous computing, human-centered computing, health informatics, and assistive technologies. Currently she is co-PI for the NSF AI-CARING Institute and Emory University's Cognitive Empowerment Program, both with the goal to create longitudinal, interactive AI technologies to empower older adults and their care networks.

In 2015 she became a Fellow of the Association of Computing Machinery (ACM) for contributions to human-centered computing and the development of health information technologies. She has been recognized as a member of the ACM SIGCHI Academy, and an AAAS, Sloan, and Kavli research fellow. Dr. Mynatt has published more than 100 scientific papers, led grants from the NSF and NIH, and chaired the CHI 2010 conference, the premier international conference in human-computer interaction.



## Vidya Setlur

Director of Research, Tableau/Salesforce

Dr. Setlur is the director of Tableau Research. She leads an interdisciplinary team of research scientists in areas including data visualization, multimodal interaction, statistics, applied ML, and NLP. She earned her doctorate in Computer Graphics in 2005 at Northwestern University. Prior to joining Tableau, she worked as a principal research scientist at the Nokia Research Center for seven years. Her personal research interests lie at the intersection of natural language processing and computer graphics to better understand data semantics and user intent to inform the meaningful visual depiction of data. She recently co-authored a book titled *Functional Aesthetics for Data Visualization*.



## SPEAKERS



### **Noshir Contractor**

Jane S. and William J. White Professor of Behavioral Sciences in Industrial Engineering & Management Sciences and (by courtesy) Computer Science; Professor of Communication Studies; Professor of Management and Organizations, Northwestern University

Dr. Contractor is the Jane S. & William J. White Professor of Behavioral Sciences in the McCormick School of Engineering & Applied Science, the School of Communication and the Kellogg School of Management and Director of the Science of Networks in Communities (SONIC) Research Group at Northwestern University. He is also the President-Elect-Select of the International Communication Association (ICA).



### **Matt Easterday**

Associate Professor, School of Education and Social Policy, Northwestern University

Dr. Easterday is an associate professor in the School of Education and Social Policy at Northwestern University. He received his PhD in 2010 from the Human-Computer Interaction Institute at Carnegie Mellon University, where he was a fellow in the Institute for Educational Science's Program for Interdisciplinary Educational Research and a Siebel Scholar. He is a Northwestern Center for Civic Engagement Faculty Fellow, a Northwestern Searle Center for Teaching Excellence Fellow, and winner of the 2015 Northwestern Ver Steeg Graduate Advising Award.



### **Brooke Foucault Wells**

Associate Dean for Research, College of Art, Media, and Design, Northeastern University

Dr. Foucault Welles is an Associate Professor in the Department of Communication Studies and a core faculty member of the Network Science Institute at Northeastern University.

Combining the methods of computational social science and network science with the theories of communication studies, Dr. Foucault Welles studies how online communication networks enable and constrain behavior, with particular emphasis on how these networks enable the pursuit of individual, team, and collective goals.



## **Liz Gerber**

**Professor of Mechanical Engineering and Communication Studies and (by courtesy) Learning Sciences and Computer Science; Co-director, Delta Lab; Co-director, Center for Human-Computer Interaction + Design, Northwestern University; Founder, Design for America**

Dr. Gerber helps organizations design and implement new technologies to effectively collaborate. She is particularly interested in how new social technologies enable new ways to share and create new information with diverse stakeholders; how the new sources of information change work routines and how the shifts in the work change the role of the organization. Her work on these topics cuts across social computing, organizational studies, and design.



## **Darren Gergle**

**John G. Searle Professor of Communication Studies and Computer Science (by courtesy); Co-director, Center for Human-Computer Interaction + Design, Northwestern University**

Dr. Gergle's interests are broadly defined by the fields of Human-Computer Interaction (HCI), Computer Supported Cooperative Work (CSCW) and Social Computing. He is interested in furthering our theoretical understanding of the impact technology has on communication, and applying this to the design, development, and evaluation of novel collaboration technologies. His current projects examine the design and development of collaborative systems for diverse-ability teams, and tools and systems to better support more reflective human-centered machine learning and data science practices.



## **Andrea Graham**

**Assistant Professor, Medical Social Sciences and Preventive Medicine, Northwestern University**

Dr. Graham's program of research focuses on designing, optimizing, and implementing digital health interventions. She also is interested in understanding issues such as the costs of treatment that impact adoption of interventions in practice, and in training clinicians to deliver evidence-based interventions for mental and behavioral health problems.



## **Brent Hecht**

**Associate Professor, Director of Applied Science in Microsoft's Experiences and Devices division, Northwestern University**

Dr. Hecht is an associate professor at Northwestern University and Director of Applied Science in Microsoft's Experiences and Devices division. At Northwestern, Dr. Hecht leads the People, Space and Algorithms (PSA) Research Group, whose mission is to "identify and address societal problems that are created or exacerbated by advances in computer science." Dr. Hecht is particularly interested in understanding and mitigating the cultural, geographic, and economic biases that are reflected and reinforced by artificial intelligence systems and other computing technologies.



## **Sarah Helseth**

**Assistant Professor, Psychiatry and Behavioral Sciences and Medical Social Sciences, Northwestern University**

Dr. Helseth is a health services researcher and licensed clinical psychologist. Her research aims to reduce the impact of behavioral health problems through the development and dissemination of effective behavioral and technology-based interventions. She is an Assistant Professor of Psychiatry and Behavioral Sciences in the Center for Dissemination and Implementation Science. Dr. Helseth is also an Adjunct Assistant Professor of Research at the Brown University School of Public Health.



## **Emőke-Ágnes Horvát**

**Assistant Professor, Communication Studies, Northwestern University**

Dr. Horvát is an Assistant Professor in the Department of Communication at Northwestern University and (by courtesy) the Computer Science Department of the McCormick School of Engineering. Her research lies at the intersection of computational social science, social computing, and communication. Using interdisciplinary approaches from network and data science, her research group, the Lab on Innovation, Networks, and Knowledge (LINK), investigates how networks induce biased information production, sharing, and processing on digital platforms.



## **Maia Jacobs**

**Lisa Wissner-Slivka and Benjamin Slivka Assistant Professor of Computer Science; Assistant Professor of Preventive Medicine, Northwestern University**

Dr. Jacobs' work incorporates human-computer interaction (HCI), machine learning, and medicine to design AI interfaces that are usable and useful in real-world clinical workflows.



## **Matthew Kay**

**Assistant Professor of Computer Science, McCormick School of Engineering, Northwestern University**

Dr. Kay works in human-computer interaction and information visualization, specifically communicating uncertainty, usable statistics, and personal informatics. He tackles problems using a multi-faceted approach, including qualitative and quantitative analysis of behavior, building and evaluating interactive systems, and designing and testing visualization techniques. He co-directs the Midwest Uncertainty Collective (MU collective). He holds appointments in Communication Studies and Computer Science. Previously, he was faculty at the University of Michigan School of Information.



## **Kaylee Kruzan**

**Research Assistant Professor, Department of Preventive Medicine, Northwestern University**

Dr. Kruzan is a mixed-methods researcher focused on the design and evaluation of digital mental health technologies. Dr. Kruzan's research aims to leverage ubiquitous technologies to design theory-informed, accessible, and scalable digital mental health interventions (DMHI) to improve mental health outcomes for young people who are not treatment-engaged and who are under-represented in traditional treatment settings. She has a primary interest in working clinically with, and designing for, adolescents and young adults with a history of self-injurious thoughts and behaviors.



## **Duri Long**

**Assistant Professor, Communication Studies, Northwestern University**

Dr. Long is a human-centered AI researcher interested in issues surrounding AI literacy and human-AI interaction. Dr. Long's research looks at how humans interact and learn as a way of informing the design of public AI literacy interventions as well as the development of AI that can interact naturally and improvise creatively with people in complex social environments. She employs a variety of methodologies and theoretical frameworks in her research, drawing on the learning sciences, design research, and cognitive science. She has experience working with artists and museums around the country to develop co-creative, embodied exhibits and art installations involving AI and technology. Dr. Long holds a PhD in Human Centered Computing from Georgia Tech and degrees in Computer Science and Dramatic Art from the University of North Carolina at Chapel Hill.



## **Mike Massimi**

**Senior Principal Researcher at Slack**

Dr. Massimi is a Senior Principal Researcher at Slack. He works as part of the Future Forum — a consortium of academics, practitioners, and business executives focused on building digital-first and people-centric ways to work. His research interests include computer-supported collaborative work and human-computer interaction. He earned his PhD in computer science from the University of Toronto.



## **Bryan Pardo**

**Professor of Computer Science and Radio, Television, and Film;  
Co-director, Center for Human-Computer Interaction + Design,  
Northwestern University**

Dr. Pardo is head of Northwestern University's Interactive Audio Lab and co-director of Northwestern's Center for Human-Computer Interaction + Design. Dr. Pardo has appointments in in the Department of Computer Science and Department of Radio, Television and Film. He received a M. Mus. in Jazz Studies in 2001 and a PhD in Computer Science in 2005, both from the University of Michigan. He has authored over 130 peer-reviewed publications. He has developed speech analysis software for the Speech and Hearing department of the Ohio State University, statistical software for SPSS and worked as a machine learning researcher for General Dynamics. His patented technologies have been acquired by companies like Bose, Adobe and Ear Machine. While finishing his doctorate, he taught in the Music Department of Madonna University. When he is not teaching or researching, he performs on saxophone and clarinet with the bands Son Monarcas and The East Loop.



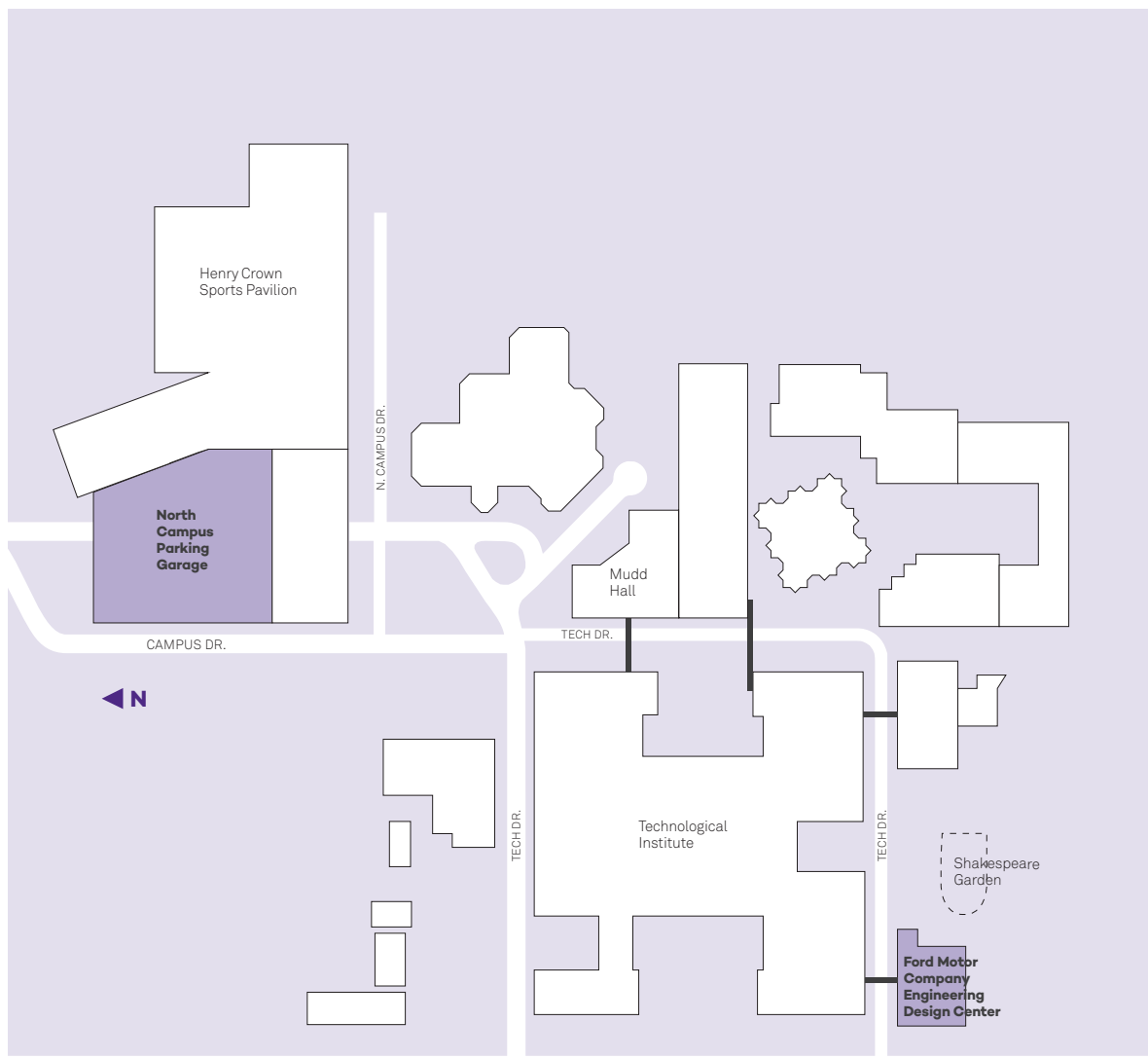
## **David Ayman Shamma**

**Staff Research Scientist, Toyota Research Institute**

Dr. Shamma is a distinguished industry scientist researching people, media experiences, and artificial intelligence. At Toyota Research Institute, his work is focused on understanding drivers to improve carbon literacy through interactive experiences. He has worked on Edge AI, cameras, and future of work at FX Palo Alto Laboratory, AI sensors for wearable fashion at Centrum Wiskunde & Informatica (CWI), HCI + AI as a director of research at Yahoo Labs/Flickr, and UXR for remote knowledge sharing at NASA's Center for Mars Exploration. He is a Distinguished Member of the ACM, is a Senior Member of IEEE, and holds over 25 patents. He recently was a Technical Program Chair for the ACM CHI 2022 conference and previously was a VP on the ACM SIGCHI Executive Committee. Ayman holds a PhD in Computer Science from Northwestern University and completed his MS/BS at the IHMC at UWF.

## About the Center

Northwestern's Center for Human-Computer Interaction + Design (HCI+D) is a hub for human-centered computing research and interaction design within Northwestern. The Center includes 30 faculty from across multiple schools and departments, including Communication Studies, Computer Science, Mechanical Engineering, Learning Sciences, and Medical Social Sciences. HCI+D research programs include Social Computing, Collaborative Computing, Design Research, Inclusive Computing, Human-Centered Artificial Intelligence, Health and Mental Health, and Data Visualization. HCI+D supports training for undergraduate and graduate students and postdoctoral fellows through programs including Technology and Social Behavior; Media, Technology and Society; Computer Science and Learning Sciences; Computer Science, and the undergraduate HCI Certificate. For more information, please visit [hci.northwestern.edu](http://hci.northwestern.edu) and follow the Center on Twitter @nu\_hci. Join the conference conversation with #futureofHCI.



**North Campus Parking Garage**  
2311 N. Campus Drive

**Ford Motor Company Engineering Design Center**  
2133 Sheridan Road

**The Great Room**  
600 Haven Street

