

Noura Howell

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▷ EDUCATION

School of Information, University of California, Berkeley

Ph.D., May 2020 (est.) in Information Systems with Designated Emphasis in New Media.
Physical computing, critical making, design research, qualitative research methods.

Olin College of Engineering

B.S., 2012, in Engineering with Computing. Human centered design, software engineering.

Mississippi State University

Gap year, 2007-2008, in pure math just for fun. Graph theory, group theory, topology.

▷ EXPERIENCE

Augmented Human Lab

Visiting Researcher with Suranga Nanayakkara at
Singapore University of Technology & Design, 2017

Project Jacquard at Google ATAP

Color-changing fabric real time data display, 2016

Intel Labs

Galileo IoT programming kit UI design and code, multi
client sync protocol, 2014

Microsoft

Program Manager Intern for Windows 8, 2011

MIT Media Lab - Fluid Interfaces

Research Assistant with Seth Hunter. User studies,
software development for WaaZam!, a networked
video system for full-body Kinect play, 2013

The Echo Nest & SiriusXM

Software Developer. Data viz, full stack web,
parallelization, and a dashboard for 50K+ dynamic
music objects for SiriusXM, 2012 - 2013

Army Corps of Engineers

Parallelized a 10K+ line FORTRAN coastal water flow
simulation with OpenMP directives, 2007

▷ PUBLICATIONS

Teachable Machine: Approachable Web-Based Tool for Exploring Machine Learning Classification. Michelle Carney, Barron Webster, Irene Alvarado, Kyle Phillips, Noura Howell, Jordan Griffith, Jonas Jongejan, Amit Pitaru, Alexander Chen. 2020. *Extended Abstracts of Human Factors in Computing Systems*. (forthcoming)

Expanding Modes of Reflection in Design Futuring. Sandjar Kozubaev, Chris Elsdén, Noura Howell, Marie Louise Juul Søndergaard, Nick Merrill, Britta Schulte, Richmond Y. Wong. 2020. *Human Factors in Computing Systems (CHI)*. (forthcoming)

Life-Affirming Biosensing in Public: Sounding Heartbeats on a Red Bench. Noura Howell, Greg Niemeyer, Kimiko Ryokai. 2019. *Human Factors in Computing Systems (CHI)*. (24% acceptance rate)

Emotional Biosensing: Exploring Critical Alternatives. Noura Howell, John Chuang, Abigail De Kosnik, Greg Niemeyer, Kimiko Ryokai. 2018. *Proceedings of the ACM on Human-Computer Interaction (CSCW)*. (26%)

Tensions of Data-Driven Reflection: A Case Study of Real-Time Emotional Biosensing. Noura Howell, Laura Devendorf, Tomás Vega Gálvez, Rundong (Kevin) Tian, Kimiko Ryokai. 2018. *Human Factors in Computing Systems (CHI)*. (26%)

Vivewell: Speculating Near-Future Menstrual Tracking through Current Data Practices. Sarah Fox, Noura Howell, Richmond Wong, Franchesca Spektor. 2019. *Designing Interactive Systems (DIS)*. (25%)

Capturing, Representing, and Interacting with Laughter. Kimiko Ryokai, Elena Duran, Noura Howell, Jonathan Gillick, David Bamman. 2018. *Human Factors in Computing Systems (CHI)*. (26%)

Biosignals as Social Cues: Ambiguity and Emotional Interpretation in Social Displays of Skin Conductance. Noura Howell, Laura Devendorf, Rundong (Kevin) Tian, Tomás Vega Gálvez, Nan-Wei Gong, Ivan Poupyrev, Eric Paulos, Kimiko Ryokai. 2016. *Designing Interactive Systems (DIS)*. (26%)

"I don't want to wear a screen": Probing Perceptions of and Possibilities for Dynamic Displays on Clothing. Laura Devendorf, Joanne Lo, Noura Howell, Jung Lin Lee, Nan-Wei Gong, M. Emre Karagozler, Shiho Fukuhara, Ivan Poupyrev, Eric Paulos, Kimiko Ryokai. 2016. *Human Factors in Computing Systems (CHI) - Best Paper Award*. (1%)

Celebrating Laughter: Capturing and Sharing Tangible Representations of Laughter. Kimiko Ryokai, Elena Duran, Dina Bseiso, Noura Howell, Ji Won Jun. 2017. *Extended Abstracts of Designing Interactive Systems (DIS)*. (22%)

Doodle Daydream: An Interactive Display to Support Playful and Creative Interactions Between Coworkers. Samitha Elvitigala, Samantha W. T. Chen, Noura Howell, Denys J. C. Matthies, Suranga Nanayakkara. 2018. *Proceedings of the Symposium on Spatial User Interaction*. (31%)

Interrogating Biosensing in Everyday Life. Nick Merrill, Richmond Wong, Noura Howell, Luke Stark, Lucian Leahu, Dawn Nafus. 2017. *Workshop Hosted at Designing Interactive Systems (DIS)*.

Representation and Interpretation of Biosensing. Noura Howell. 2016. *Doctoral Consortium at Designing Interactive Systems (DIS)*.

Connecting Two Oakland Neighborhoods: Surveillance and Self-Representation. Noura Howell. 2015. *Workshop Paper at Critical Alternatives Aarhus Decennial Conference*.

On the $L(2,1)$ -Labelings of Amalgamations of Graphs. Sarah Spence Adams, Noura Howell, Nathaniel Karst, Denise Sakai Troxell, Junjie Zhu. 2013. *Discrete Applied Mathematics*.

Effect of Microbial Pretreatment on Enzymatic Hydrolysis and Fermentation of Cotton Stalks for Ethanol Production. Jian Shi, Ratna R. Sharma-Shivappa, Mari Chinn, Noura Howell. 2009. *Biomass and Bioenergy*.

▷ ART EXHIBITONS

Heart Sounds Buckets, 2019, at Worth Ryder Art Gallery, Berkeley, U.S.

Salaam Participatory Sculpture, 2018, at Figment Arts Festival, Oakland, U.S.

Ebb Color-Changing Fabric, 2018, at the Tech Museum of the Center for Information Technology Research in the Interest of Society, Berkeley, U.S.

Salaam Participatory Sculpture, 2017, at the Islamophobia Conference, Berkeley, U.S.

▷ MENTORING

Tomás Vega, Computer Science, Cognitive Science

Sahil Mohan, Architecture, Computer Science, New Media

Wenny Miao, Mechanical Engineering, Electrical Engineering & Computer Science

Francesca Spektor, Interdisciplinary Studies in Neuro-Ethics

Stephanie Tang, Architecture

Victor Iancu, Computer Science

▷ SCHOLARSHIPS, GRANTS, & AWARDS

Center for Technology, Society, & Policy and Algorithmic Fairness & Opacity Group, 2020

Center for Technology, Society, & Policy and Center for Long Term Cybersecurity Fellowship, 2019

Center for Long Term Cybersecurity, 2019

New Media Undergraduate Research Mentorship Award, 2019

Tech for Social Good, 2018

Jacobs Innovation Center, 2018

Arts Research Center Fellowship, 2018

Center for Technology, Society, & Policy and Center for Long Term Cybersecurity Fellowship, 2018

New Media Summer Research Award, 2018

Graduate Division Summer Grant, 2018

New Media Undergraduate Research Mentorship Award, 2018

Outstanding Graduate Student Instructor, 2017

Cota Robles Fellowship, 2014

▷ ACADEMIC SERVICE

Associate Chair, Designing Interactive Systems, 2020

Associate Chair, Designing Interactive Systems Pictorials, 2019

Office Redesign Committee, 2019

PhD Student Representative to the Faculty, 2015 - 2016 academic year

Reviewer, CSCW, 2019

Reviewer, CHI, 2016 - 2020

Reviewer, Tangible Embedded Embodied Interactions, 2018 - 2019

Reviewer, DIS, 2017 - 2019

Reviewer, NordiCHI, 2018

Reviewer, Design Issues, 2017

▷ TALKS & WORKSHOPS

Designing for Emotional Meaning-Making with Data. Talk at North Carolina State University Department of Communication, Raleigh, U.S., 2020

Designing for Emotional Meaning-Making with Data. Talk at Queens School of Computing, Kingston, Canada, 2020

Designing for Emotional Meaning-Making with Data. Talk at University of Michigan School of Information, Ann Arbor, U.S., 2019

Re-Imagining 'Smart City' Cybersecurity through the Design of the Heart Sounds Bench. Talk at the Center for Long-Term Cybersecurity Research Exchange, Berkeley, U.S., 2019

Data for Experience, Interpretation, Affirmation. Talk at InfoCamp conference, Berkeley, U.S., 2019

Data for Experience, Interpretation, Affirmation. Talk at Bay Innovative Signal Hackers Bash, Oakland, U.S., 2019

Exploring Critical Alternatives for Emotional Biosensing. Talk at Simon Fraser School of Interactive Arts & Technology, Vancouver, Canada

A Case Study of Emotional Biosensing: Tensions of Data-Driven Reflection. *Society for the Social Studies of Science (4S)*, Boston, U.S., 2017

Design Thinking: From Idea to Innovation. Day-long design thinking workshop for tech industry executives with the Augmented Human Lab, Colombo, Sri Lanka, 2017

I have also given numerous invited guest lectures on machine learning, human centered design, and emotional biosensing for courses in city planning, technology policy, data science, computer science, and design. I select readings and create my own slides, class activities, and discussion prompts