# Noura Howell

Assistant Professor

Department of Communication

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#### **DEDUCATION**

# 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.

#### **PUBLICATIONS**

Vasiliki Tsaknaki, Tom Jenkins, Laurens Boer, Sarah Homewood, Noura Howell, Pedro Sanches. 2020. Challenges and Opportunities for Designing with Biodata as Material. *Workshop to be Hosted at NordiCHI 2020.* 

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 (CHI). (23% acceptance rate)

Expanding Modes of Reflection in Design Futuring. Sandjar Kozubaev, Chris Elsden, Noura Howell, Marie Louise Juul Søndergaard, Nick Merrill, Britta Schulte, Richmond Y. Wong. 2020. *Human Factors in Computing Systems* (CHI). (23.4%)

**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 Wenny M

Franchesca Spektor, Interdisciplinary Studies in

**Neuro-Ethics** 

Sahil Mohan, Architecture, Computer Science, New

Media

Wenny Miao, Mechanical Engineering, Electrical

Engineering & Computer Science

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

#### ▶ INDUSTRY COLLABORATIONS & WORK EXPERIENCE

### **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

#### The Echo Nest & SiriusXM

Software Developer. Data viz, full stack web,

#### ▶ 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

parallelization, and a dashboard for 50K+ dynamic music objects for SiriusXM, 2012 - 2013

# **Augmented Human Lab**

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

### **Army Corps of Engineers**

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

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