Noura Howell

School of Information & Center for New Media University of California, Berkeley

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DEDUCATION

School of Information, University of California, Berkeley

Ph.D., July 2019 (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.

DEXPERIENCE

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

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

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

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).

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).

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

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).

"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.

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).

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.

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.

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.

> SCHOLARSHIPS, GRANTS, & AWARDS

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

Center for Long Term Cybersecurity, 2019, UC Berkeley.

New Media Undergraduate Research Mentorship Award, 2019, UC Berkeley.

Tech for Social Good, 2018, UC Berkeley.

Jacobs Innovation Center Ignite Grant, 2018, UC Berkeley.

Arts Research Center Fellowship, 2018, UC Berkeley.

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

New Media Summer Research Award, 2018, UC Berkeley.

Graduate Division Summer Grant, 2018, UC Berkeley.

New Media Undergraduate Research Mentorship Award, 2018, UC Berkeley.

Outstanding Graduate Student Instructor, 2017, UC Berkeley.

Cota Robles Fellowship, 2014, UC Berkeley

MENTORING

Tomás Vega, Computer Science, Cognitive Science

Sahil Mohan, Architecture, Computer Science, New Media

Wenny Miao, Mechanical Engineering, Electrical Engineering & Computer Science

Franchesca Spektor, Interdisciplinary Studies in Neuro-Ethics

Stephanie Tang, Architecture

Victor lancu, Computer Science

D FXHIBITONS

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

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

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

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

▶ TALKS & WORKSHOPS

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

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

▶ ACADEMIC SERVICE

Reviewer, CSCW, 2019

Associate Chair, Designing Interactive Systems, 2020 Reviewer, CHI, 2016 - 2020

Associate Chair, Designing Interactive Systems Reviewer, Tangible Embedded Embodied Interactions,

Pictorials, 2019 2018 - 2019

Office Redesign Committee, 2019 Reviewer, DIS, 2017 - 2019

PhD Student Representative to the Faculty, 2015 -Reviewer, NordiCHI, 2018

2016 academic year Reviewer, Design Issues, 2017