Jen Liu

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RESEARCH AREAS:

critical data studies; human-computer interaction (HCI) and computer-supported collaborative work (CSCW); infrastructure studies; environmental studies; science and technology studies; qualitative methods; critical making and design research

EDUCATION

2018 – present	Ph.D, Information Science Cornell University, Ithaca, NY Working Dissertation Title: "Hanging on a Wire: Climate change and Networked Infrastructures in Southeast Louisiana" Committee: Steven Jackson (chair), Phoebe Sengers, Jenny Goldstein
2015 – 2017	Master of Tangible Interaction Design Carnegie Mellon University, Pittsburgh, PA Thesis: "Field Computing: Tools for Collaborative Survival" Committee: Daragh Byrne (Chair), Golan Levin, Eddy Man Kim
2008 – 2012	BFA Fiber Arts, summa cum laude Maryland Institute College of Art, Baltimore, MD

RESEARCH APPOINTMENTS

2020 – present	Research Assistant, Cornell University (advised by Phoebe Sengers) NSF #1955125: Understanding and Improving the Social Impact of High-Bandwidth Farm Networking Infrastructure
Summer 2019	Graduate Summer Researcher Cornell Initiative for Digital Agriculture
2018 – present	Graduate Researcher (advised by Steven Jackson) Information Science, Cornell University
2015 – 2017	Research Assistant, Carnegie Mellon University (advised by Marti Louw) NSF Grant: #1623969: "Learning to See, Seeing to Learn: A Sociotechnical System Supporting Taxonomic Identification Activities in Water Quality Biomonitoring"

PUBLICATIONS

Refereed Articles

Jen Liu. 2023. "Under Pressure: Keeping Cables Dry in South Louisiana." Journal of Environmental Media, Volume 4, Issue 1. P. 91-94

Jen Liu. 2023. "Unpacking Intermittency: A Case study from Southeast Louisiana." Ninth Workshop on Computing within Limits. LIMITS.

Jen Liu and Phoebe Sengers. 2021. "Legibility and the Legacy of Racialized Dispossession in Digital Agriculture." CSCW '21 Proceedings. **Honorable Mention Award**

Joselyn McDonald*, Siyan Zhao*, **Jen Liu***, Michael Riviera. 2018. "MaxiFab: Applied Fabrication to Advance Menstrual Technologies." DIS Works in Progress: Proceedings of the 2018 Designing for Interactive Systems Conference (DIS). Hong Kong, China. *contributed equally

Jen Liu, Daragh Byrne, Laura Devendorf. 2018."Designing for Collaborative Survival: An Inquiry into Human-Fungi Relationships." CHI '18 Proceedings. Montreal, Canada. **Best Paper Award**

Jen Liu. 2017. "Field Computing: Wearable Devices for Citizen Science Applications." TEI Works in Progress: Proceedings of the 2017 Tangible, Embedded and Embodied Interaction Conference, Yokohama, Japan.

Books and Book Chapters

(Forthcoming) Steve Jackson, **Jen Liu**, Ranjit Singh, Samir Passi. "Maintaining Data Infrastructures." SAGE Handbook on Data & Society.

Workshop Proposals

Sebastian Prost, Nick Taylor, Angelika Strohmayer, Henry Collingham. Débora de Castro Leal, Max Krüger, **Jen Liu**, Clara Crivellaro, John Vines. 2023. "Bringing Sustainability through, in, and of HCI in to Conversation." In Proceedings of the 2023 Designing Interactive Systems Conference: DIS '23.

Eleonora Mencarini, Christina Bremer, Chiara Leonardi, **Jen Liu**, Valentina Nisi, Nuno Jardim Nunes, Robert Soden. 2023 "HCI for Climate Change: Imagining Sustainable Futures." In Proceedings of the 2023 CHI Conference: CHI 23'

Esther Jang, Nicola Bidwell, **Jen Liu**, Phoebe Sengers, Naveen Bagalkot, Nervo Verdezoto, Melissa Densmore, Morgan Vigil-Hayes, Shaddi Hasan. 2022. "Situating Network Infrastructures with People, Practices, and Beyond: A Community Building Workshop." In Proceedings of the 2022 CSCW Conference: CSCW 22'.

Jen Liu, Cindy Lin, Anne Pasek, Lace Padilla, Robert Soden, Daniela Rosner, and Steve Jackson. 2022. "Towards a Material Ethics of Computing: Addressing the Uneven Stakes of Digital Infrastructures." In Proceedings of the 2022 CHI Conference: CHI 22'

Szu-Yu (Cyn) Liu, **Jen Liu**, Kristin Dew, Patrycja Zdziarska, Maya Livio, and Shaowen Bardzell. 2019. "Exploring Noticing as Method in Design Research." In Proceedings of the 2019 Designing Interactive Systems Conference: DIS '19.

Other Published Materials

Remy Hellstern and **Jen Liu**. 2023. "Lessons from Storms and Wetlands: Rethinking disaster response for communication infrastructures." Issue 6, Branch Magazine.

Jen Liu, Sheila Tahir, Shreyas Vasudevan, Josie Ygnatowiz, Alahna Moore. 2023. "Tools for Resisting Toxic Air: Methods from South Louisiasna." DIY Methods Conference.

Jen Liu. 2023. "Living with Intermittent Infrastructures." Sun Thinking exhibit hosted by Solar Protocol. http://solarprotocol.net/sunthinking/

Jen Liu. 2022. "How to get to the end of the world." *interactions* 29, 1 (January - February 2022), 39–43.

Jen Liu and Camille Baumann-Jaeger. "Dissenting Jabots." Disobedient Electronics. Ed. Garnet Hertz. Vancouver. 2017.

Jen Liu. 2014. "Butt Blinkers." Featured project in Make: Wearable Electronics. Sebastopol: Maker Media. 2014.

INVITED TALKS and PRESENTATIONS

2023	"Internet in Extractive Landscapes: A Case Study from Southeast Louisiana." As part of panel on "Digital infrastructures and environmental justice: policies, practices, and visions." Association for Internet Researchers Conference.
2022	"Hanging on a Wire: Utility Pole Maintenance in Southeast Louisiana." Terrestrial Internet Panel, 4S (Society for Social Studies of Science) Annual Meeting.
2022	"Bayou Infrastructures: Keeping the Internet on in South Louisiana." Computational Design Speaker series, Carnegie Mellon University.
2021	"Technologies of Land Dispossession: Digital Agriculture and Legibility." Networking Rurality Panel, 4S (Society for Social Studies of Science) Annual Meeting.
2020	*(interrupted due to COVID-19) "*Race to the Bottom: Racial Identity and Implications for Digital Agriculture". Rurality, Identity, and Digital Technology panel, Rural Sociological Society Meeting.
2019	"Internet of Dirt: Understanding Challenges of Adoption and Maintenance of Digital Agricultural Technologies". Science Studies Reading Group, Cornell University
2019	"Internet of Dirt: Maintaining Agricultural IoT Systems". Information Infrastructures panel, Maintainers III: Practice, Policy, and Care., Gallaudet University.
2019	"Reconsidering the Coalpit". Critical and Imaginative Restoration Ecologies panel, Dimensions of Political Ecology, University of Kentucky.
2018	"Tools for Collaborative Survival" MALfunction, Media Archaeology Lab, University of Colorado, Boulder.
2016	"Soft Fabrication: A Skills-Based Micro Course". Teaching and Learning Summit, Carnegie Mellon University.
2016	Invited participant, a2ru Emerging Creative Student Summit, University of Michigan.
2014	"Soft Circuits". Textile Futures panel, Studio Art Quilt Association.

TEACHING

Primary Instructor

S16, F16, S17   Soft Fabrication Skills Micro-course (IDeATe 99-352)

Carnegie Mellon University, Co-instructed with Susan Finger

Teaching Assistant

S20   Information Ethics, Law, and Policy (INFO 1200)
        Cornell University, Co-Instructors: Steven Jackson & Karen Levy

F19   Human Computer Interaction and Design (INFO 3450)
        Cornell University, Instructor: Gilly Leshed

S19   Information Ethics, Law, and Policy (INFO 1200)
        Cornell University, Instructor: Steven Jackson

F18   Designing Technologies for Social Impact (INFO 4240)
        Cornell University, Instructor: Phoebe Sengers

Guest Lecturer

S18   "Intro to Soft Circuits", Designing for Curiosity (ATLS 5519)
        University of Colorado, Boulder, Instructor: Daniel Leithinger

F17   "Intro to Soft Circuits", Physical Computing Interfaces (ATLS 4519)
        University of Colorado, Boulder, Instructor: Hyunjoo Oh

S14   "Noise Sweater", Systems Thinking: Smart Textiles (FB 287)
        Maryland Institute College of Art, Instructor: Olivia Robinson

Workshop Lead

2018   "Powered by Muck: A Microbial Fuel Cell Workshop", Civic Art Lab, New York, NY

2018   "Terms of Subversion: A DIY Terms of Service Creative Coding Workshop", co-organized
        with Brianna Dym, MediaLive Festival, Boulder, CO

2014   "Soft Circuits Public Workshop", Ripple Gallery, Rockville, MD

2014   "Paper Circuits", Maryland Art Education Association, Ellicott City, Maryland

2013   "Intro to Soft Circuits", Interactive Telecommunications Program, New York, NY

SCHOLARSHIPS and GRANTS

2022   NSF Doctoral Dissertation Improvement Grant #2147052

2021   QuIRi small grant, Cornell University

2021   /Art Microgrant recipient, Cornell Tech

2020   Critical Perspectives on Disaster Data Research Award, Co-Risk Labs

2020   Paul Evans Peters Doctoral Fellowship, Coalition for Networked Information

2020   *(interrupted due to COVID-19)* Rural Sociology Society Diversity Travel Grant

2020   Graduate School Conference Travel Grant Award, Cornell University

2019   Cornell Initiative for Digital Agriculture Summer Stipend Award

2019   Graduate School Conference Travel Grant Award, Cornell University

2018   Partial NEST Grant awardee with Laura Kim, University of Colorado, Boulder

2016   Graduate Travel Scholarship, Carnegie Mellon University

2016   Frank-Ratchye Fund for Art @ the Frontier Grant, Studio for Creative Inquiry
            Carnegie Mellon University

2015	Graduate Studies Scholarship, Carnegie Mellon University
2008 – 2012	Full tuition scholarship, Maryland Institute College of Art
2011	Nancy Lee Rhodes Robert '39 Scholarship, Maryland Institute College of Art

HONORS and AWARDS

2023	Special Recognition for Outstanding Review (CHI 2023)
2021	ACM CSCW 2021 Honorable Mention Award
2021	Special Recognition for Outstanding Review (DIS 2021)
2020	Special Recognition for Outstanding Review (DIS 2020)
2020	Special Recognition for Outstanding Review (CHI 2020)
2018	ACM CHI 2018 Best Paper Award
2013	30 Creative Minds Under 30, Maryland Art Place, Baltimore, MD
2012	Fiber Department Recognition Award, Maryland Institute College of Art
2010	Achievement Award, Maryland Institute College of Art
2008 – 2012	Dean's List, Maryland Institute College of Art
2008	U.S. Presidential Scholar in the Arts

SERVICE

Field-based Service

2017 – 2023	Reviewer for ACM Conference on Human Factors in Computing Systems (CHI)
2019 – 2020	Reviewer for ACM Conference on Tangible, Embedded, and Embodied Interaction (TEI)
2017 – 2023	Reviewer for ACM Conference on Designing Interactive Systems (DIS)
2019	Student Volunteer, ACM Designing Interactive Systems (DIS)

University-based Service

2020 – 2022	Seminar Coordinator, Information Science Graduate Student Association, Cornell University
2019 – 2021	First year mentor, Information Science Department, Cornell University
2019 – 2020	Engineering Teaching Assistant Development Consultant, Cornell University
2019 – 2020	President, Information Science Graduate Student Association, Cornell University
2019 – 2020	Visit Day Organizing Committee, Information Science, Cornell University
2018 – 2020	Vice President, Cornell Mapping Society, Cornell University
2016	Selection Committee, Teaching Innovation Award, Carnegie Mellon University

PROFESSIONAL EXPERIENCE

| 2022 | Contract Researcher
Healthy Gulf, New Orleans, LA |
| 2016 | Smart Textile Design and Engineering Intern
Welspun USA, Pittsburgh, PA and New York, NY |

2013 – 2015   DIY Manager, Education and Outreach Department
                     Maryland Science Center, Baltimore, MD

2012 – 2014   Workshop Leader / Maker-in-Residence
                     FutureMakers, Baltimore, MD