

RESEARCH AREAS:

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

RESEARCH APPOINTMENTS

2025 – present	Arts & Sciences Postdoctoral Fellow (advised by Robert Soden) Department of Computer Science, University of Toronto
2023 – 2025	Research Fellow, Critical Infrastructure Lab University of Amsterdam
2020 – 2024	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
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”

EDUCATION

2018 – 2025	Ph.D, Information Science Cornell University, Ithaca, NY Dissertation: “Beyond the Storm: Climate Change, Repair, and Reimagining Networked Infrastructures in Southeast Louisiana” Committee: Steven Jackson (chair), Phoebe Sengers, Jenny Goldstein
2018 – 2021	Master of Science, Information Science Cornell University, Ithaca, NY
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

PUBLICATIONS

Peer-Reviewed Journal Articles

In Preparation. **Jen Liu.** “Dialing in from Katrina: Disasters and the Reconfiguration of Mobile Communications.” *Journal of Critical Library and Information Science.*

Hannah Friedrich*, Yajaira Ayala*, **Jen Liu***, Melissa Villareal*. 2025. “Positionalities in Disaster Recovery Research: Reflections from Fieldwork across the Gulf South.” *Disaster Prevention and*

Management: An International Journal, 1 – 12. *contributed equally <https://doi.org/10.1108/DPM-07-2024-0192>

Vesna Bacheva, Imani Madison, Mathew Baldwin, Mark Beilstein, Douglas F. Call, Jessica A. Deaver, Kirill Efimenko, Jan Genzer, Khara Grieger, April Z. Gu, Mehmet Mert Ilman, **Jen Liu**, Sijin Li, Brooke K. Mayer, Anand Kumar Mishra, Juan Claudio Nino, Gloire Rubambiza, Phoebe Sengers, Robert Shepherd, Jesse Woodson, Hakim Weatherspoon, Margaret Frank, Jacob Jones, Rosangela Sozzani, and Abraham Stroock. 2025. "Transdisciplinary collaborations for advancing sustainable and resilient agricultural systems". Global Change Biology. Volume 31, Issue 4. <https://doi.org/10.1111/gcb.70142>

Lara Roeven, Steven Wolf, Phoebe Sengers, **Jen Liu**, Gloire Rubambiza, Donny Persaud, Hakim Weatherspoon. 2024. "Analyzing abstraction in critical agri-food studies and computer science: Toward interdisciplinary analysis of digital agriculture innovation." Agriculture and Human Values. <https://doi.org/10.1007/s10460-024-10655-3>

Jen Liu. 2023. "Under Pressure: Keeping Cables Dry in South Louisiana." Journal of Environmental Media, Volume 4, Issue 1. P. 91-94. https://doi.org/10.1386/jem_00098_1

Jen Liu and Phoebe Sengers. 2021. "Legibility and the Legacy of Racialized Dispossession in Digital Agriculture." Proceedings in ACM Human-Computer Interaction. 5, CSCW, Article 480 (October 2021). <https://doi.org/10.1145/3479867> **Honorable Mention Award**

Peer-Reviewed Conference Proceedings

Jen Liu and Cindy Lin. 2024. What Worlds are We Designing For? In Proceedings of the Halfway to the Future Symposium (HTF '24). Association for Computing Machinery, New York, NY, USA, Article 25, 1–5. <https://doi.org/10.1145/3686169.3686203>

Gloire Rubambiza, Phoebe Sengers, Hakim Weatherspoon, and **Jen Liu**. 2024. "Seam Work and Simulacra of Societal Impact in Networking Research: A Critical Technical Practice." Proceedings of the ACM CHI Conference of Human Factors in Computing Systems (CHI '24). <https://doi.org/10.1145/3613904.3642337>

Jen Liu. 2023. "Unpacking Intermittency: A Case study from Southeast Louisiana." Proceedings of the Ninth Workshop on Computing within Limits. LIMITS. <https://doi.org/10.21428/bf6fb269.80fa33f5>

Jen Liu, Daragh Byrne, Laura Devendorf. 2018. "Designing for Collaborative Survival: An Inquiry into Human-Fungi Relationships." Proceedings of the CHI Conference on Human Factors in Computing Systems (CHI '18). <https://doi.org/10.1145/3173574.3173614> **Best Paper Award**

Book Chapters

Steve Jackson, **Jen Liu**, Ranjit Singh, Samir Passi. 2025. "Maintaining Data Infrastructures." In The SAGE Handbook on Data & Society edited by Tommaso Venturini, Amelia Acker, Jean-Christophe Plantin, Tone Wolford. <https://doi.org/10.4135/9781529674699.n2>

Essays, Public Scholarship, and Other Published Materials

Jen Liu, Monique Verdin, and Ozone 504. 2025. "Signals Through the Storm: Designing Networks for Mutual Aid Communities in Southeast Louisiana." Interactions, Volume 32, Issue 5. P 54 – 57. <https://doi.org/10.1145/3758320>

Jen Liu. 2025. “From Sugarcane to Data Centers: Building Solidarities Across Infrastructures.” From The Cloud is Dead: A Series on Living the Legacies of Resource Extraction. Data & Society. <https://datasociety.net/points/from-sugarcane-to-data-centers-building-solidarities-across-infrastructures>

Jen Liu and Monique Verdin. 2025 “Networking a Network.” Open Rivers: Rethinking Water, Place & Community, no. 28. <https://doi.org/10.24926/2471190X.12133>

Eleonora Mencarini, Valentina Nisi, Christina Bremer, Chiara Leonardi, Nun Jardim Nunes, **Jen Liu**, and Robert Soden. 2024 “Imagining Sustainable Futures: Expanding the Discussion on Sustainable HCI.” Interactions, Volume 31, Issue 2. P 39-43. <https://doi.org/10.1145/3643493>

Remy Hellstern and **Jen Liu.** 2023. “Lessons from Storms and Wetlands: Rethinking disaster response for communication infrastructures.” Issue 6, Branch Magazine. <https://branch.climateaction.tech/issues/issue-6/lessons-from-storms-and-wetlands/>

Jen Liu. 2023. “Living with Intermittent Infrastructures.” Sun Thinking exhibit hosted by Solar Protocol. <http://solarprotocol.net/sunthinking/#liu>

Jen Liu. 2022. “How to get to the end of the world.” Interactions, Volume 29, Issue 1. P. 39–43. <https://dl.acm.org/doi/10.1145/3501291>

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.

Peer Reviewed Extended Abstracts

Ashique Ali Thuppilikkat, Hiu-Fung Chung, Kaushar Mahetaji, Anubha Singh, Nussara Tieanklin, Isabella Jaimes Rodriguez, **Jen Liu**, Noopur Raval, Priyank Chandra. 2025. “(Re)working for Sustainable Futures: Climate Change and Platform Economies” Proceedings of the ACM COMPASS '25. <https://doi.org/10.1145/3715335.3737685>

Anya Martin, **Jen Liu**, Shreyasha Paudel, Rikke Hagensby Jensen, Rachel Charlotte Smith, Shaowen Bardzell, Robert Soden, Cindy Lin. 2025. “Datafication of Climate Change: From Prediction to Participation”. Aarhus Conference on Critical Computing. <https://doi.org/10.1145/3737609.3747099>

Olivia Doggett, **Jen Liu**, Ufuoma Ovienmhada, Samar Sabie, Sarah Gram, Laura J Perovich, Matt Ratto, and Robert Soden. 2023. Environmental and Climate Justice in Computing. In Companion Publication of the 2023 Conference on Computer Supported Cooperative Work and Social Computing (CSCW '23 Companion). <https://doi.org/10.1145/3584931.3611296>

Sebastian Prost, Nick Taylor, Angelika Strohmayr, Henry Collingham. Débora de Castro Leal, Max Krüger, **Jen Liu**, Clara Crivellaro, John Vines. 2023. “Bringing Sustainability through, in, and of HCI into Conversation.” In Proceedings of the 2023 Designing Interactive Systems Conference: DIS '23. <https://doi.org/10.1145/3563703.3591459>

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'. <https://doi.org/10.1145/3544549.3573833>

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’. <https://doi.org/10.1145/3500868.3560716>

Jen Liu. 2022. Hanging on a Wire: Understanding the Impacts of Climate Change on Networked Infrastructures in South Louisiana. In Extended Abstracts of the 2022 CHI Conference on Human Factors in Computing Systems (CHI EA '22). Association for Computing Machinery, New York, NY, USA, Article 70, 1–5. <https://doi.org/10.1145/3491101.350381>

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’. <https://doi.org/10.1145/3491101.3505649>

Natalie Friedman, Kari Love, Alexandra Bremers, A.J. Parry, Ray LC, Bolor Amgalan, **Jen Liu,** and Wendy Ju. 2021. Designing Functional Clothing for Human-robot Interaction. In Companion of the 2021 ACM/IEEE International Conference on Human-Robot Interaction (HRI '21 Companion). Association for Computing Machinery, New York, NY, USA, 703–705. <https://doi.org/10.1145/3434074.3444870>

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. <https://doi.org/10.1145/3301019.3319995>

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). <https://doi.org/10.1145/3197391.3205405> *contributed equally

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. <https://doi.org/10.1145/3024969.3025072>

INVITED TALKS, PRESENTATIONS, and WORKSHOPS

Forthcoming	Invited speaker for 2025-2026 FlashLab seminar series on “Environment.” médialab. Sciences Po.
2025	“Beyond Disaster Data” co-presented with Hannah Friedrich. Building and Infrastructuring Disaster panel, 4S (Society for Social Studies of Science) Annual Meeting.
2025	Invited participant. “Situating Network Infrastructure with People, Practices, and Beyond (SNIP2+)” Virginia Tech Research Center.
2025	Invited speaker. “Networked Infrastructures for Climate Justice.” Transdisciplinary Climate Justice Summer Institute. Cornell University.
2024	Invited panelist. “Climate Change and Networked Infrastructures in Southeast Louisiana.” Digital Infrastructures and Society Consultancy (DISC) group. University of Santa Barbara.
2024	Invited panelist. “Regenerative Infrastructures.” Sustainable and Equitable Internet Infrastructure Dialogs and Debates. Hosted by Critical Infrastructure Lab, Mozilla Foundation, and Green Web Foundation.
2024	Invited participant. Consortium for the Science of Sociotechnical Systems (CSST) Summer Research Institute. Irvine, California.
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.

2023	Invited participant. Green Screen Climate Justice and Digital Rights Coalition Gathering. San Jose, Costa Rica.
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	<i>(interrupted due to COVID-19)</i> “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
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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

F21	“Understanding technology development, use, and maintenance” Rural Communities (EDUC 3250), Cornell University
S18	“Intro to Soft Circuits” Designing for Curiosity (ATLS 5519), University of Colorado, Boulder

F17	“Intro to Soft Circuits” Physical Computing Interfaces (ATLS 4519), University of Colorado, Boulder
S14	“Noise Sweater” Systems Thinking: Smart Textiles (FB 287), Maryland Institute College of Art

Public Workshops

2024	SwampNet Propagation Workshop, New Orleans, LA
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

2024	Feminist Tech Infrastructure Grant with SwampNet, Numun Fund (\$10,000)
2022	NSF Doctoral Dissertation Research Improvement Grant #2147052 (\$15,000)
2021	QuIRi small grant, Cornell University (\$1,575)
2021	/Art Microgrant recipient, Cornell Tech (\$500)
2020	Critical Perspectives on Disaster Data Research Award, Co-Risk Labs (\$2000)
2020	Paul Evans Peters Doctoral Fellowship, Coalition for Networked Information (\$10,000)
2020	<i>(interrupted due to COVID-19)</i> Rural Sociology Society Diversity Travel Grant
2019	Cornell Initiative for Digital Agriculture Summer Stipend Award (\$11,000)
2019, 2020	Graduate School Conference Travel Grant Award, Cornell University (\$700)
2018	Partial NEST Grant awardee with Laura Kim, University of Colorado, Boulder (\$2,500)
2016	Graduate Travel Scholarship, Carnegie Mellon University (\$1,200)
2016	Frank-Ratchye Fund for Art @ the Frontier Grant, Studio for Creative Inquiry Carnegie Mellon University (\$600)
2015	Graduate Studies Scholarship, Carnegie Mellon University (\$30,000)
2008 – 2012	Full tuition scholarship, Maryland Institute College of Art (\$120,000)
2011	Nancy Lee Rhodes Robert ’39 Scholarship, Maryland Institute College of Art (\$5,000)

HONORS and AWARDS

2021	ACM CSCW 2021 Honorable Mention Award
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

2025	Associate Chair for CHI
2024	Reviewer for ACM CSCW Received Special Recognition for Outstanding Review: 2024
2024	Reviewer for Journal of Environmental Media
2024 - 2025	Reviewer for ACM Creativity & Cognition
2023	Reviewer for ACM COMPASS
2021	Reviewer for Culture, Agriculture, Food, and Environment
2017 – 2025	Reviewer for ACM Conference on Human Factors in Computing Systems (CHI) Received Special Recognition for Outstanding Review: 2020, 2023, 2024
2017 – 2025	Reviewer for ACM Conference on Designing Interactive Systems (DIS) Received Special Recognition for Outstanding Review: 2020, 202, 2025
2019 – 2025	Reviewer for ACM Conference on Tangible, Embedded, and Embodied Interaction (TEI)
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 – present	Research Advisor for “Internet Infrastructure Climate Resilience Coalition: Action Research in Aotearoa New Zealand”
2022	Just Transition Researcher Healthy Gulf, New Orleans, LA
2016	Smart Textile Design and Engineering Intern Welspun USA, Pittsburgh, PA and New York, NY
2013 – 2015	DIY / Makerspace Manager, Education and Outreach Department Maryland Science Center, Baltimore, MD
2012 – 2014	Workshop Leader / Maker-in-Residence FutureMakers, Baltimore, MD