

Crystal Lee

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Education

- PhD (in progress)**, Massachusetts Institute of Technology.
History, Anthropology, Science, Technology, and Society (HASTS)
Visualization Group, Computer Science and Artificial Intelligence Laboratory (CSAIL)
- 2016 **MA**, *History of Science*, Stanford University.
- 2015 **BA (high honors)**, *History of Science*, Stanford University.

Appointments

- 2020–2021 **Fellow**, Berkman Klein Center for Internet and Society, Harvard University.
Co-lead, Ethical Tech Working Group; Core team member, Edgelands Institute
- 2018 **Visiting Scientist**, Joint Research Center (Italy), European Commission.

Research Interests

Data visualization, AI ethics, misinformation, social media, critical cartography, science and technology studies, human-computer interaction, disability studies

Selected Fellowships, Grants, and Awards

- 2021 Honorable Mention, Conference on Human Factors in Computing Systems (top 5%)
T.S. Lin Fellowship, MIT
- 2020 National Science Foundation Dissertation Improvement Grant [#1941577](#) (\$18,825)
Social Science Research Council (SSRC) [Social Data Dissertation Fellowship](#) (\$15,000)
MIT Undergraduate Experiential Learning Opportunity Grant (\$15,680)
MIT Schwarzman College of Computing, Social and Ethical Responsibilities of Computing Grant (\$10,188)
MIT Digital Humanities Summer Graduate Fellowship
MIT Kelly Douglas Research Grant (also received in 2017, 2018)
- 2018 Research Grant, MIT International Science and Technology Initiatives (MISTI)
- 2017 Digital Humanities Summer Institute Scholarship, University of Victoria
- 2016 MIT Presidential Fellowship
Ida M. Green Fellowship, MIT
Lane Research Grant in the History of Science, Stanford University

Peer-Reviewed Publications

- 2021 Jamie Wong*, **Crystal Lee***, Vesper Long*, Di Wu*, Graham Jones*. “[Let’s Go, Baby Forklift: The Power of Cuteness and the Cuteness of Power on Chinese Social Media](#),” *Social Media + Society* (April 2021).
- 2021 **Crystal Lee**, Tanya Yang, Gabrielle Inchoco, Graham M. Jones, and Arvind Satyanarayan,  *Honorable Mention* “[Viral Visualizations: How Coronavirus Skeptics Use Orthodox Data Practices to Promote Unorthodox Science Online](#).” *ACM Human Factors in Computing Systems (CHI)*, 2021. [video]
- 2019 Alan Lundgard*, **Crystal Lee*** (co-first author), and Arvind Satyanarayan, “[Sociotechnical Considerations for Accessible Visualization Design](#),” *IEEE Transactions on Visualization and Computer Graphics* (October 2019). [video]

Essays and Reports

- 2022 **Crystal Lee**, “Review: A History of Data Visualization and Graphic Communication,” *Information and Culture*, 60.1 (Spring 2022).
- 2021 Jad Esber, Boaz Sender, Ethan Zuckerman, **Crystal Lee**, Nana Nwachukwu, Oumou Ly, Peter Suber, Primavera De Filippi, Sahar Massachi, Samuel Klein, Tom Zick, “[A meta-proposal for Twitter’s bluesky project](#).” March 31, 2021. Social Science Research Network.
- 2019 **Crystal Lee*** and Jonathan Zong*, “[Consent is Not An Ethical Rubber Stamp](#).” *Slate*. August 30, 2019.
- 2018 **Crystal Lee**, “Global Conflict Risk Index Final Consulting Report,” prepared for the Peace and Stability Unit, Joint Research Center, European Commission.
- 2016 **Crystal Lee**, “[Wartime Collaborations in Computing and Intelligence Collection](#),” in Crystal Lee, ed., *Glimpses: British Visions of War and Peace* (exhibit essay collection).

Data Visualization and Museum Projects

- 2021 **Crystal Lee**, Jonathan Zong, Anna Arpaci-Dusseau, Katherine Huang, Mateo Monterde, Ethan Nevidomsky, Tanya Yang, Anna Meurer, Soomin Chun, and Arvind Satyanarayan, *The Data Visualizations Behind Coronavirus Skepticism* (interactive digital project).
- 2016 **Crystal Lee***, Murphy Temple*, Meade Klingensmith*, Holly Dayton*, *Glimpses: British Visions of War and Peace* (museum exhibition), Stanford University.

Invited Talks

- July 2021 “[Going Viral: How Covid Misinformation Spreads Online](#)” (invited panel with Carl Bergstrom and Chase Small). *Scientists Speak Up*, Stanford University (July 29, 2021).
- July 2021 “Viral Visualizations: How Coronavirus Skeptics Use Orthodox Data Practices to Promote Unorthodox Science Online.” DUB Seminar, University of Washington (July 14, 2021).
- June 2021 “[Prototyping AI ethics futures: Rights, access, and refusal](#)” (invited roundtable with Alex Taylor and Mara Mills). JUST AI joint event between Ada Lovelace Institute, British Academy, and the Arts and Humanities Research Council (UK). June 23, 2021.
- June 2021 “[Talking About and Thinking with Disability](#)” (invited panel with Cora Olson and Ashley Shew). *STS as Critical Pedagogy*, James Madison University (June 23, 2021).

- June 2021 “More Data, More Problems: Lessons from the Far Right Internet.” U.S. Department of Health and Human Services (June 10, 2021).
- May 2021 “[The Future of the Digital Archive: Data Hoarders and Radical Librarianship](#).” *House/Keeping: Domestic Accumulation, Decluttering, and the Stuff of Kinship in Anthropological Perspective*, Laboratoire d’Anthropologie des Mondes Contemporains, Université libre de Bruxelles (May 31–June 2, 2021).
- May 2021 “[Radical Possibilities for Technology](#)” (invited roundtable with Christine McRae and Regan Sommer McCoy). YX Foundation and the Radical AI Podcast (May 18, 2021).
- May 2021 “[Academic Ableism and New Paradigms for Design](#).” The Science Speak-Easy, University of Colorado-Boulder (May 17, 2021).
- April 2021 “[Disability Justice & Crip Technoscience: Racism & Ableism in AI & the Future of Technology](#)” (with Damien Patrick Williams and Lydia X.Z. Brown). Autistic Women and Nonbinary Network Liberating Webinar Series (April 23, 2021).
- March 2021 “[Visualizing Misinformation: Digital Ethnography and Computational Methods in a Pandemic](#).” MIT Digital Humanities Speaker Series (March 18, 2021).
- Feb 2021 “[Beyond Visualization: Technoableism and New Paradigms for Design](#).” *Reimagining Access: Inclusive Technology Design for Archives and Special Collections*, ArtCenter College of Design (February 11, 2021).
- Nov 2020 “[The Promises and Perils of Data Visualization](#),” Tufts STS Seminar, Tufts University (November 13, 2020).
- Oct 2020 “Learning from COVID-19 Data Visualizations.” Berkman Klein Center for Internet and Society, Harvard University (October 28, 2020).
- Oct 2020 “[Data By Touch](#),” North American Cartographic Information Society (October 15–16, 2020).
- April 2020 “Universalizing Tactile Literacy: Media Ideologies and the History of Braille Uniformity,” *Before and Beyond Typography*. Stanford Humanities Center, Stanford University (April 24–25, 2020). [cancelled due to COVID-19]
- April 2017 “Lining Things Up: Mapping Time, Power, and Politics,” *History of Visualization / Visualizations in History*. Center for Science and Society, Columbia University (April 8, 2017).

Conference Presentations

- Oct 2021 “STS as Critical Pedagogy” (roundtable discussion), with Emily York, Anna Geltzer, Michael Klein, Sean Ferguson, Marisa Brandt, Jim Malazita, Matthew Harsh, Shelby Dietz, Matt Wisnioski, Nicole Mogul, Kathryn de Ridder-Vignone, and Lindsay Smith. 4S 2021 (virtual).
- May 2021 “Viral Visualizations: How Coronavirus Skeptics Use Orthodox Data Practices to Promote Unorthodox Science Online.” ACM CHI. Yokohama, Japan (May 8–13, 2021).
- March 2021 ACM FAccT Doctoral Consortium. Virtual conference (March 3–10, 2021).
- Nov 2020 “The History of Computing and the Future of UX Design.” Society for the History of Technology. New Orleans, LA (October 8–11, 2020). [**rescheduled** for November 2021]
- April 2020 “Multisensory Mapping and Design,” American Association for Geographers. Denver, CO (April 6–10, 2020). [cancelled due to COVID-19]

- April 2020 [“Practicing Disability Justice: A Working Group on Bringing Activist Praxis into our Teaching and Research,”](#) (with Cynthia Bennett and Joanne Woiak), Society for Disability Studies. Columbus, OH (April 3–5, 2020).
- Oct 2019 [“Sociotechnical Considerations for Accessible Visualization Design,”](#) (with Alan Lundgard), IEEE VIS 2019. Vancouver, Canada (October 20–25, 2019).
- Nov 2018 “Modeling Flavor,” History of Science Society Annual Meeting. Seattle, WA (November 1–4, 2018).
- Nov 2017 “Visualizing Historical Knowledge,” History of Science Society Annual Meeting. Toronto, Canada (November 9–11, 2017).
- Nov 2017 Discussant and chair, “Computing and Science: Application and Influences.” History of Science Society Annual Meeting. Toronto, Canada (November 9–12, 2017).
- Sep 2017 “History Along a Line: Historical Timelines and the Digital Humanities,” Tradition and Transformation. Emmanuel College, University of Cambridge, UK (September 18–20, 2017).
- Nov 2016 “One Nation Under Quantification: Measuring Nazi-ness in post-1945 Germany,” History of Science Society Annual Meeting. Atlanta, GA (November 3–6, 2016).
- June 2016 “Joseph Priestley’s Charts of History & Biography, Redrawn,” Digital Humanities Australasia. University of Tasmania, Hobart, Australia (June 20–23, 2016).
- March 2016 “Hidden Narratives: Inventing Universal History in Joseph Priestley’s Charts of History & Biography,” Columbia History of Science Group Annual Meeting. Friday Harbor Biological Research Station, University of Washington. Friday Harbor, WA (March 11–13, 2016).

Organized Seminars, Panels, & Conferences

- 2021 “Making and Doing History: On Non-Traditional Modes of Critical Engagement” roundtable discussion, Society for the History of Technology, New Orleans, LA (with Ranjodh Dhaliwal). [Panel abstract.](#)
- 2021 Misinformation Working Group Invited Speaker Series, Harvard University: Gerald Mullally (UK Prime Minister’s Office), “G7 Vaccine Confidence Campaign and Research Partnerships”; Yvonne Lee (Facebook), “Misinformation Policy.”
- 2019–20 Columbia History of Science Annual Meeting, University of Washington, Friday Harbor Marine Station (program chair with Nathan Kapoor).
- 2018 “Technologies of Taste” panel, History of Science Society, Seattle, WA (with Hannah Leblanc). [Panel abstract.](#)
- 2017–18 Cross-STs Seminar Series, Massachusetts Institute of Technology (with Elena Sobrino).
- 2017 Workshop on the History of the Physical Sciences, Princeton University (co-organized with Brad Bolman, Jenne O’Brien, and Michael McGovern).

Workshops

- 2021 Flash talk, VIS Summer Camp (co-organized by Universities of Florida, Arizona, Utah; Northwestern, Northeastern, and MIT).
- 2021 “Methodological Challenges to Studying Online Radicalization” (with John A. Maldonado and Jonas Kaiser). Roundtable discussion, Berkman Klein Center for Internet and Society Festival of Ideas (May 7, 2021).

- 2021 Discussion on “Viral Visualizations” project. *MIT Data + Feminism Lab* (March 26, 2021); *University of Washington Social Futures Lab* (February 9, 2021).
- 2020 Discussant, “Crippling the History of Computing.” *MIT HASTS Program Seminar*.
- 2018 Discussant, “Searching for Google.” *MIT HASTS*.
- 2017 Discussant, “The Multiple Autonomies of Self-Driving Cars.” *MIT HASTS*.
- 2017 Discussant, “Crafting Nanotechnology for Art and Heritage Conservation.” *MIT HASTS*.
- 2016 “Lining Things Up: Mapping Time, Power, and Politics.” *MIT HASTS*.
- 2016 “Digital Methods in History.” History of Science Workshop, Stanford University.

Research Mentorship (UROP)

Recipient of 2021 Outstanding UROP Mentor Award, MIT. Asterisks denote published student co-author.

- Summer 2021 **MIT Summer Research Program:** JiWoong Jang (Carnegie Mellon), Sovesh Mohapatra (UMass-Amherst)
- Spring 2021 **The Social Life of Climate Data:** Casey Hong (MS candidate), Emma Chabane
- Fall 2020 **The Data Visualizations Behind Coronavirus Skepticism** (interactive essay)
[Kat Huang*](#), [Anna Arpaci-Dusseau*](#), [Tanya Yang*](#), Ethan Nevidomsky*, Anna Meurer*, Soomin Chun*, Mateo Monterde*
- Summer 2020 **Viral Visualizations** (published in ACM CHI 2021): [Tanya Yang*](#), [Gaby Inchoco*](#)
Let’s Go, Baby Forklift (forthcoming in *Social Media + Society*): Vesper Long*
History of Braille Uniformity: Zhirui Xiong

Teaching

Guest Lectures

- Spring 2020 “Methods in Spatial History,” Intro to Digital History (Stephan Risi), MIT
- Fall 2019 “Mapping and Forensic History,” Forensic History (Kate Brown), MIT

Teaching Assistantships

- 2020 MIT: Medieval Economic History in Comparative Perspective (no evaluation, COVID)
- 2019 Harvard: Sugar, Spice, and Science: A Global History of Science (evaluation: [5.0/5.0](#), Certificate of Distinction for Teaching)
- 2018 MIT: American History from 1865 (evaluation: [7.0/7.0](#))
- 2017 MIT: Introduction to Anthropology (evaluation: [6.9/7.0](#))

Service

Professional Service

- 2021 Program Committee, Visualization for Social Good Workshop, IEEE Visualization
- 2020 Program Committee, ACM Conference on Fairness, Accountability, and Transparency

Peer Review

NeurIPS, ACM FAccT, *Public Culture*

Institutional Service

- 2017 Judge, MIT INSPIRE; Committee, MIT Digital Technology Teaching Awards
- 2016–18 Co-founder and Treasurer, Science Studies Student Committee, MIT
- 2016–17 Department Representative, MIT Graduate Student Council

Media

- 2021 STAT, “[He's a Stanford professor and a Nobel laureate. Critics say he was dangerously misleading on COVID](#)”
Slate, “[COVID skeptics don't just need more critical thinking.](#)”
MIT News, “[When more Covid-19 data doesn't equal more understanding.](#)”
- 2020 Al Jazeera English, “[Will people with disabilities be disenfranchised?](#)”
MIT News, “[Collaborating with users to develop accessible designs.](#)”

Professional Organizations

- 2020– Coalition for Critical Technology, Association for Computing Machinery (ACM), Society for Disability Studies (SDS)
- 2019– Institute of Electrical and Electronics Engineers (IEEE)
- 2016–18 History of Science Society (HSS)