

EDUCATION

Massachusetts Institute of Technology

2018– Ph.D. Electrical Engineering & Computer Science
Minor in Science, Technology, and Society
Advisor: Arvind Satyanarayan

2018–2020 S.M. Electrical Engineering & Computer Science

Princeton University

2014–2018 B.S.E. Computer Science
Advisor: J. Nathan Matias
Certificate in Visual Arts
Advisor: David Reinfurt

University of Oxford

Spring 2017 Visiting Student

RESEARCH EXPERIENCE

Visualization Group, MIT Computer Science and Artificial Intelligence Lab

2018– Graduate Researcher
Advisor: Arvind Satyanarayan

Digital Theory Lab, New York University

Nov 2020– Affiliate

Citizens and Technology Lab, Cornell University

Jun–Aug 2020 Graduate Research Fellow
Mentor: J. Nathan Matias

Center for Information Technology Policy, Princeton University

2017–2018 Undergraduate Researcher
Advisor: J. Nathan Matias

Oxford Internet Institute, University of Oxford

Feb–Jun 2017 Undergraduate Researcher
Mentor: Scott Hale

Fluid Interfaces Group, MIT Media Lab

Jan 2016 Undergraduate Researcher
Mentor: Tal Achituv

WORK EXPERIENCE

Google Research, AI UX Team

Jun–Sep 2018 UX Engineering Intern

Google Design, Material UX Team

Jun–Sep 2017 UX Engineering Intern

Linked by Air

Jun–Aug 2016 Software and Design Intern

Square

Jun–Sep 2015 Software Engineering Intern

Coursera

Jun–Aug 2014 Software Engineering Intern (KPCB Engineering Fellow)

AWARDS & HONORS

2023 **Forbes 30 Under 30 (Science)**

2022 **MIT Morningside Academy for Design Fellowship**
MIT Prize for Open Data Honorable Mention
Fast Company Innovation By Design Awards Finalist

2020 **Schnitzer Prize in the Visual Arts, MIT**

2019	Paul and Daisy Soros Fellowship for New Americans NSF Graduate Research Fellowship Hertz Foundation Fellowship Finalist
2018	Lucas Award in Visual Arts, Princeton University NSF Graduate Research Fellowship Honorable Mention
2017	Santos-Dumont Prize for Innovation, Princeton University Tau Beta Pi Scholarship Students All to Chaumont 3rd Place, Centre National du Graphisme Peter B. Lewis Summer Fund for the Arts
2016	Facebook Global Hackathon Finals Honorable Mention
2015	Greylock Partners Hackfest, 1st Place
2014	HackRice, 1st Place, Rice University KPCB Engineering Fellowship MIT THINK Scholars Interact Fellowship
2012	Eagle Scout

PUBLICATIONS

PEER-REVIEWED PUBLICATIONS

2023. **Data Refusal From Below: A Framework for Understanding, Evaluating, and Envisioning Refusal as Design.** [Jonathan Zong](#), J. Nathan Matias. *ACM Journal on Responsible Computing*.
2022. **Animated Vega-Lite: Unifying Animation with a Grammar of Interactive Graphics.** [Jonathan Zong](#)^{*}, Josh Pollock^{*}, Dylan Wootton, Arvind Satyanarayan. *IEEE Transactions on Visualization and Computer Graphics (IEEE VIS)*.
2022. **Rich Screen Reader Experiences for Accessible Data Visualization.** [Jonathan Zong](#)^{*}, Crystal Lee^{*}, Alan Lundgard^{*}, JiWoong Jang, Daniel Hajas, Arvind Satyanarayan. *Computer Graphics Forum (EuroVis)*. **Best Paper Honorable Mention**
2022. **Bartleby: Procedural and Substantive Ethics in the Design of Research Ethics Systems.** [Jonathan Zong](#), J. Nathan Matias. *Social Media + Society*.
2020. **Representing Real-Time Multi-User Collaboration in Visualizations.** Rupayan Neogy, [Jonathan Zong](#), Arvind Satyanarayan. *IEEE Visualization Conference (VIS)*.
2020. **Lyra 2: Designing Interactive Visualizations by Demonstration.** [Jonathan Zong](#), Dhiraj Barnwal, Rupayan Neogy, Arvind Satyanarayan. *IEEE Transactions on Visualization and Computer Graphics (IEEE VIS)*.
2019. **Unruly Cyborgs: The Relational Set Designs of Isamu Noguchi.** [Jonathan Zong](#). *Liminalities: A Journal of Performance Studies*.

EDITED PUBLICATIONS

2023. **Pointing, Mutual Intelligibility, and the Seeing Subject in HCI.** [Jonathan Zong](#). *Interface Critique*.
2020. **From Individual Consent to Collective Refusal.** [Jonathan Zong](#). *ACM XRDS (Crossroads)*.

WORKSHOPS, CONFERENCES, POSTERS, AND DEMOS

2022. **Olli: An Extensible Visualization Library for Screen Reader Accessibility.** Matt Blanco, [Jonathan Zong](#), Arvind Satyanarayan. *IEEE VIS Posters*.
2021. **Design Spaces of Domain-Specific Languages: Comparing and Contrasting Approaches in PL and HCI.** [Jonathan Zong](#)^{*}, Josh Pollock^{*}, Dylan Wootton, Arvind Satyanarayan. *PLATEAU Workshop on the Intersection of HCI and PL*.
2021. **Pointing, Mutual Intelligibility, and the Seeing Subject in HCI.** [Jonathan Zong](#). *Computer Mouse Conference*.
2020. **The (Minimal) Persuasive Advantage of Political Video over Text.** Chloe Wittenberg, Adam Berinsky, [Jonathan Zong](#), David Rand. *International Conference on Computational Social Science*.

2020. **Lyra: An Interface for Designing Interactive Visualizations.** [Jonathan Zong](#), Dhiraj Barnwal, Rupayan Neogy, Arvind Satyanarayan. *Computation + Journalism Symposium*.

2020. **Collective Refusal and the Limits of Informed Consent for Data Protection.** [Jonathan Zong](#), J. Nathan Matias. *Data & Society Contested Data Workshop*.

2018. **Automated Debriefing: Interface for Large-Scale Research Ethics.** [Jonathan Zong](#), J. Nathan Matias. *Companion of the 2018 ACM Conference on Computer Supported Cooperative Work and Social Computing*.
Best Demo Award

THESES

2018. **Empirically Studying Research Ethics with Interface Designs for Debriefing Online Field Experiments.** *B.S.E. Thesis, Princeton University*.

TALKS & PRESENTATIONS

INVITED TALKS

2023. **Participation and Power in Data Collection and Analysis.** *Penn HCI Group, University of Pennsylvania*.

2023. **Accessible Data Visualization for Blind and Low Vision Users.** *MIT Morningside Academy for Design*.

2022. **Designing Data Representations for Embodiment and Refusal.** *Information Science Seminar, Cornell University*.

2022. **Rich Screen Reader Experiences for Accessible Data Visualization**

HackNY Fellowship Speaker Series

Design for Assistive Technology, MIT Beaver Works Summer Institute

DiverseAbilities Employee Resource Group, New York Department of Transportation

2022. **Designing Research Ethics Systems.** *Accountable Algorithms Reading Group, Northeastern University*.

2022. **Art, Concepts, Visualizations.** *Interact Fellowship Symposium*.

2020. **Designing Systems to Theorize Collective Power.** *Digital Theory Lab, NYU Media, Culture, and Communication*.

2020. **Layered Abstractions for Interactive Visualization Design.** *Digital Structures Group, MIT Department of Architecture*.

2019. **"The Most Liberal of Arts"**. *Lewis Center for the Arts, Princeton University*.

2018. **Public Accountability in Research Ethics.** *CivilServant Research Summit, MIT Media Lab*.

CONFERENCE TALKS AND PANELS

2023. **Data Refusal From Below: A Framework for Understanding, Evaluating, and Envisioning Refusal as Design.** *Panel: Resistance · AoIR 2023*.

2022. **Consent: A Research and Design Lens for Human-Computer Interaction (Panel).** *CSCW 2022*.

2020. **Public Display and Biometric Sans: Embodied Writing in the Age of Data.** *Before and Beyond Typography, Stanford University Department of History*.

2019. **In Our Own Image: The Autonomy of Artificial Bodies in Synthetic Porn.** *Panel: Internet Connection · Theorizing the Web*.

PUBLIC SCHOLARSHIP

OP-EDS

2019. **The Struggle to Democratize MIT.** Rodrigo Ochigame, Alan Lundgard, Alonso Espinosa Dominguez, [Jonathan Zong](#), Gabrielle Ballard, Sally Haslanger, Edmund Bertschinger, Mani Mengiste, Ruth Perry. *The Tech (MIT)*.

2019. **Consent Is Not an Ethical Rubber Stamp.** Crystal Lee*, [Jonathan Zong](#)*. *Slate*.

2018. **Researching the Researchers: Ethics and Privacy in Institutional Research.** [Jonathan Zong](#). *Nassau Weekly*.

CONVERSATIONS

2022. **CAPSULE No. 1.** Cammie Lee, Megan Pai.

2021. **Form, Content, Data, Bodies: Jonathan Zong and Beth Semel on Biometric Sans.** [Jonathan Zong](#), Beth Semel. *Somatosphere*.

2021. **Holly Herndon in conversation with Tabea Nixdorff and Jonathan Zong.** *Version Space*.

2018. **w-t-f: a conversation with Eric Li and Jonathan Zong.** *Lewis Center for the Arts, Princeton University*.

DATA JOURNALISM

2021. **The Data Visualizations Behind COVID-19 Skepticism.** Crystal Lee, [Jonathan Zong](#), Anna Arpaci-Dusseau, Katherine Huang, Mateo Monterde, Ethan Nevidomsky, Tanya Yang, Anna Meurer, Soomin Chun, Arvind Satyanarayan. *MIT Visualization Group*.

EXHIBITIONS

2020 **WRECKED ALPHABET.** *Marcel Broodthaers Society of America.*
BODY TEXT. *Wiesner Gallery, MIT.*

2018 **w-t-f.** *Lucas Gallery, Princeton University.*
Internet Yami-Ichi. *Rhizome, New Art Dealers Alliance.*

2017 ***a graphic design exhibition*.** *Princeton University and IN-FO.CO, Los Angeles.*
Faire Signe. *Biennale de design graphique, Chaumont, France.*

COLLECTIONS

2018 **Van Alan Clark, Jr. Library, School of the Museum of Fine Arts, Tufts University**
Everyone Should

2016 **Graphic Arts Collection, Firestone Library, Princeton University**
Nap Poems

ART BOOK FAIRS

2019 **Tiny Tech Zines, Navel LA**
with Free Radicals

2019 **Press Play, Pioneer Works**
with Tech Zine Fair

2018 **Odds and Ends, Yale University**
Zine Soup 3.0: Makers Market, Chinatown Soup
NY Tech Zine Fair, School for Poetic Computation
Boston Art Book Fair, Boston Center for the Arts

TEACHING

INSTRUCTOR

2020. **AI, Justice, Imagination: Technology and Speculative Fiction.** Tufts University Experimental College
Visiting Lecturer (Adjunct) (co-instructor with Janet Zong York)

GUEST LECTURER / SPEAKER

2023. **Transversal Design for Social Impact.** MIT Program in Art, Culture, and Technology

2022. **Transformations in Engineering and the Arts.** Princeton University

GUEST CRITIC

2022. **i-n-t-e-r-f-a-c-e.** Princeton University

STUDENT MENTORSHIP

M.ENG. STUDENTS

2023–24 Isabella Pedraza Pineros, Katie Chen

Summer 2023 Evan Caragay, Katherine Xiong

2022–23 Shuli Jones

2020–21 EJ Sefah, Katie Bacher

2019–20 Rupayan Neogy

UNDERGRADUATE STUDENTS

Spring 2023	Isabella Pedraza Pineros
Fall 2022	Mufaro Makiwa
Spring/Summer 2022	Matt Blanco (Northeastern)
Summer 2021	JiWoong Jang (CMU)
Fall 2020	Anna Arpaci-Dusseau, Katherine Huang, Mateo Monterde, Ethan Nevidomsky, Tanya Yang, Anna Meurer, Soomin Chun

SERVICE

PEER REVIEWING

2024	ACM CHI
2023	ACM CHI, IEEE VIS, IEEE TVCG, ACM SIGGRAPH, PacificVis Visual Data Storytelling Contest
2022	ACM CHI (Special Recognition for Outstanding Review), IEEE VIS, Journal of Empirical Research on Human Research Ethics
2021	IEEE VIS

EVENT ORGANIZING

2022	Princeton University Workshop on Ethics of Field Experiments
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COMMUNITY BUILDING & ACTIVISM

2020–2022	MIT Graduate Student Union, Organizer
2020–2021	MIT Human-Computer Interaction, Social Committee
2019–20	MIT Students Against War

SELECTED PRESS

FEATURED

2023. **Improving accessibility of online graphics for blind users.** *MIT News*.

2023. **Student Spotlight: Jonathan Zong.** *MIT CSAIL*.

2023. **MIT MAD Fellow Improves Accessibility of Online Graphics for Blind Users.** *MIT Morningside Academy for Design*.

2023. **These tools help visually impaired scientists read data and journals.** *Nature Technology Features*.

2022. **Developing community around design.** *MIT News*.

2022. **Making data visualization more accessible for blind and low-vision individuals.** *MIT News*.

2022. **3 Questions: Designing software for research ethics.** *MIT News*.

2021. **Helping data journalists create interactive graphics.** *MIT CSAIL News*.

2020. **Forty artists elide, dismantle, and politicize the alphabet.** *Art & Education*.

2020. **Students Plumb Barriers of Sound, Space, and Sight at MIT.** *Arts at MIT*.

2020. **Bezos, Bodies, and Backprop.** *The Tech (MIT)*.

2018. **PolitEcho: A Mirror for the “Daily Me”.** *Frontier Magazine*.

2017. **How to Escape Your Political Bubble for a Clearer View.** *The New York Times*.

2016. **This browser extension shows how biased your social media feed is.** *A.V. Club*.

2016. **Find out just how biased your Facebook feed is with this Chrome extension.** *Mashable*.

2016. **A Browser Extension That Shows You Your Filter Bubble.** *New York Magazine*.

2016. **Transformations: Students find creativity at intersection of art and engineering.** *Princeton University News*.

2013. **Houston's Hackers Gather to Help City Solve Problems.** *Xconomy.*

QUOTED

2022. **MIT grad students vote to form labor union.** *Boston Business Journal.*

2022. **After weeks of wrangling, MIT's grad student union will come to a vote this week.** *WBUR.*

2021. **Digital exclusions: mental health and digital life.** *Our Sick Society Podcast.*

2020. **Facial Recognition Software: Masks, Ethics & The Future.** *Forbes.*

2019. **The Dark Implications of Facial Swap Filter Technology.** *Paper Magazine.*