

# Danaë Metaxa

Levine Hall  
3330 Walnut St.  
Philadelphia, PA 19104

[metaxa.net](http://metaxa.net)  
[metaxa@upenn.edu](mailto:metaxa@upenn.edu)  
Pronouns: they/them

Όνομα, ανωνυμίες:  
Δανάος, ο/του

## RESEARCH AREAS

Human-computer interaction; Algorithm audits; Algorithmic justice; Human-centered AI

## APPOINTMENTS

- 2022-curr. **University of Pennsylvania**  
Raj & Neera Singh Term Assistant Professor  
Department of Computer & Information Science (primary)  
Annenberg School for Communication (secondary)
- 2021-2022 **Stanford University**  
Postdoctoral Scholar, Center for Philanthropy and Civil Society  
Department of Political Science

## EDUCATION

- 2015-2021 **Stanford University**  
Ph.D. Computer Science
- 2015-2018 **Stanford University**  
M.Sc. Computer Science
- 2011-2015 **Brown University**  
B.A. Computer Science *with honors*  
B.A. Science, Technology, and Society

## GRANTS

- 2024 **National Science Foundation** | ITEST (Innovative Technology Experiences for Students and Teachers) — Co-PI (with Yasmin Kafai)  
*Auditing Machine Learning Applications for Algorithmic Justice with Computer Science High School Students and Teachers* (\$499,943)
- 2023 **National Science Foundation** | RAPID — Co-PI (with Yasmin Kafai)  
*Engaging High School Youth in Algorithmic Justice Through Audits of Designed and Everyday Machine Learning Applications* (\$200,000)
- 2021 **Stanford Human-Centered AI (HAI)** | Seed Grant — Project lead (with Jeff Hancock)  
*In(advert)ent: Investigating and countering disparities in race and gender representation in online advertising* (\$64,000)
- 2021 **Brown Institute for Media Innovation** | Magic Grant — Project lead (with Jeff Hancock)  
*In(advert)ent: Investigating and countering disparities in race and gender representation in online advertising* (\$50,000)

2020 **Stanford Human-Centered AI (HAI)** | Seed Grant — Graduate student (PI Jeff Hancock)  
*Explainable AI for All: A System for Studying Interpretable AI in Online Media Consumption*  
(\$75,000)

## PUBLICATIONS

### *Refereed Conference Publications*

- [c.19] Mahomed, Y., Crawford, C.M., Gautam, S., Friedler, S.A., **Metaxa, D.** “Auditing GPT’s Content Moderation Guardrails: Can ChatGPT Write Your Favorite TV Show?” FAccT 2024. *Forthcoming*.
- [c.18] Wang, S., Huang, S., Zhou, A., **Metaxa, D.** “Lower Quantity, Higher Quality: Auditing News Content and User Perceptions on Twitter/X’s Algorithmic versus Chronological Timelines.” CSCW 2024. *Forthcoming*.
- [c.17] Armstrong, L., **Metaxa, D.** “Navigating Automated Hiring: Fairness Perceptions, Strategy Use, and Outcomes Among Young Job Seekers.” *Under review*.
- [c.16] Armstrong, L., Liu, A., MacNeil, S., **Metaxa, D.** “The Silicone Ceiling: Auditing GPT’s Race and Gender Biases in Hiring.” *Under review*.
- [c.15] Morales-Navarro, L., Kafai, Y., Konda, V., **Metaxa, D.** “Youth as Peer Auditors: Engaging Teenagers with Algorithm Auditing of Machine Learning Applications.” IDC 2024. [Available here](#).
- [c.14] Kambhamettu, H., **Metaxa, D.**, Johnson, K., Head, A. (2024). “Explainable Notes: Examining How to Unlock Meaning in Medical Notes with Interactivity and Artificial Intelligence.” CHI 2024. [Available here](#).
- [c.13] Kadoma, K., Le Quéré, M.A., Fu, J., Munsch, C., **Metaxa, D.**, Naaman, M. (2024). “The Role of Inclusion, Control, and Ownership in Workplace AI-Mediated Communication.” CHI 2024. [Available here](#).
- [c.12] Sampson, P., Encarnación, R., **Metaxa, D.** (2023). “Representation, Self-Determination, and Refusal: Queer People’s Experiences with Targeted Advertising.” FAccT 2023. [Available here](#).
- [c.11] Lam, M.S., Pandit, A., Kalicki, C.H., Gupta, R., Sahoo, P., **Metaxa, D.** (2023). “Sociotechnical Audits: Broadening the Auditing Lens to Investigate Targeted Advertising.” CSCW 2023. [Available here](#). [Best paper honorable mention](#).
- [c.10] Lam, M. S., Gordon, M. L., **Metaxa, D.**, Hancock, J. T., Landay, J. A., & Bernstein, M. S. (2022). “End-User Audits: A System Empowering Communities to Lead Large-Scale Investigations of Harmful Algorithmic Behavior.” CSCW 2022. [Available here](#).
- [c.9] **Metaxa, D.**; Gan, M.; Goh, S., Hancock, J.; Landay, J.A. “An Image of Society: Gender and Racial Representation and Impact in Image Search Results for Occupations.” CSCW 2021. [Available here](#).
- [c.8] Xiao, S.; **Metaxa, D.**; Park, J.S.; Karahalios, K., Salehi, N. “Random, Messy, Funny Raw: Finstas as Intimate Reconfigurations of Social Media.” CHI 2020. [Available here](#). [Best paper honorable mention](#).
- [c.7] **Metaxa, D.**; Park, J.S.; Landay, J.A.; Hancock, J. “Search Media and Elections: A Longitudinal Investigation of Political Search Results in the 2018 U.S. Elections.” CSCW 2019. [Available here](#).
- [c.6] **Metaxa, D.**; Maas, P; Aldrich, D. “How Social Ties Influence Hurricane Evacuation Behavior.” CSCW 2018. [Available here](#).
- [c.5] Che, X.; **Metaxa, D.**; Hancock, J. “Fake News in the News: An Analysis of Partisan Coverage of the Fake News Phenomenon.” CSCW 2018. [Available here](#).
- [c.4] **Metaxa, D.**; Wang, K.; Landay, J.A.; Hancock, J. “Gender-Inclusive Design: Stereotypes and

- Biases in Web Interfaces.” CHI 2018. [Available here.](#)
- [c.3] Daskalova, N.; **Metaxa, D.**; Tran, A.; Nugent, N.; Boergers, J.; McGeary, J.; Huang, J. “Sleep-Coach: A Personalized Automated Self-Experimentation System for Sleep Recommendations.” UIST 2016. [Available here.](#)
  - [c.2] **Metaxa, D.**; Rusak, G.; Teevan, J.; and Bernstein, M. “The Web is Flat: The Inflation of Uncommon Experiences Online.” CHI 2016. [Available here.](#) [Best short paper award.](#)
  - [c.1] Papoutsaki, A.; Guo, H.; **Metaxa, D.**; Gramazio, C.; Rasley, J.; Xie, W.; and Huang, J. “Crowdsourcing from Scratch: A Pragmatic Experiment in Data Collection by Novice Requesters.” HCOMP 2015. [Available here.](#) [Best paper runner-up.](#)

#### *Books*

- [b.1] **Metaxa, D.**, et al. (2022) Auditing Algorithms: Understanding Algorithmic Systems from the Outside In, Foundations and Trends in Human-Computer Interaction 14 (4)

#### *Book Chapters*

- [bc.1] **Metaxa, D.**, Raji, D. “A Tale of Two Audits: Investigating the Politics of Algorithm Audit Evaluations” in AI // Assembly edited by Bernholz, L. (*In progress*)

#### *Workshop Papers*

- [w.1] Deng, W. H., Lam, M. S., Cabrera, Á. A., **Metaxa, D.**, Eslami, M., Holstein, K. (2023, October). Supporting User Engagement in Testing, Auditing, and Contesting AI. In Companion Publication of the 2023 Conference on Computer Supported Cooperative Work and Social Computing (pp. 556-559). [Available here.](#)

#### *White Papers*

- [wp.4] **Metaxa, D.** Bias and Discrimination in Digital Advertising. PolicyLink 2023. In *Digital advertising: Discrimination, bias, and strategies for equity.*
- [wp.3] Garton Ash, T.; Gorwa, R.; **Metaxa, D.**, Glasnost! Nine ways Facebook can make itself a better forum for free speech and democracy. 2019. Reuters Institute for the Study of Journalism.
- [wp.2] Sheuerman, M. K. et al. [HCI Guidelines for Gender Equity and Inclusivity.](#) 2019.
- [wp.1] **Metaxa, D.**; Torres-Echeverry, N. [Google’s Role in Spreading Fake News and Misinformation.](#) SSRN. 2017.

#### *Popular Press*

- [p.3] Gorwa, R.; **Metaxa, D.** [Here’s how Mark Zuckerberg can save Facebook from itself.](#) *Wired UK.* March 4, 2019
- [p.2] Hancock, J.; **Metaxa, D.** Park, J. S. [Are Google search results politically biased?](#) *The Guardian.* September 6, 2018.
- [p.1] Aldrich, D. P.; **Metaxa, D.** [How your social network could save you from a disaster.](#) *The Conversation.* July 16, 2018.

## TEACHING

- Fall 2023 CIS4120/5120: Introduction to Human-Computer Interaction (Penn)
- Spring 2023, 2024 CIS7000: Algorithmic Justice (Penn)
- Fall 2022 CIS3990: Introduction to Human-Computer Interaction (Penn)
- Spring 2021 CS347: Human-Computer Interaction Research (Stanford, co-taught with Parastoo Abtahi)
- Winter 2017, 2018 CS181: Computers, Ethics, and Public Policy (Stanford, Graduate TA)
- Spring 2014, 2015 CS8: A First Byte of Computer Science (Brown University, Head TA)

Fall 2014 CS130: User Interface Design and Evaluation (Brown University, TA)  
Fall 2013 CS111: Introduction to Computer Science (Smith College, TA)  
Fall 2012 CS17: Introduction to Computer Science (Brown University, TA)

## HONORS

2019 EECS Rising Stars Participant, University of Illinois at Urbana-Champaign  
2018 Stanford McCoy Center for Ethics in Society Grad Student Fellowship  
2017 NSF Graduate Research Fellowship (Declined)  
2015 Stanford Graduate Fellowship (5-Year Fellowship)  
2015 Google Anita Borg Memorial Scholarship  
2015 Brown University Outstanding Computer Science Undergraduate Award  
2014 CRA Outstanding Undergraduate Researcher (Runner Up)  
2014 CRA Distributed Research Experiences for Undergraduates (DREU)  
2013 Box Engineering Diversity Scholarship  
2013 Brown University Undergraduate Teaching and Research Award

## INVITED SPEAKING

2024 **University of Pennsylvania** | Center for Information Networks and Democracy, 2024 Workshop on Political and Information Networks. “Research Priorities in the Era of AI” Panelist.  
**AERA 2024** | “Perspectives on Promoting Algorithmic Justice in Artificial Intelligence and Machine Learning Education in K-12” Discussant.  
**Cornell Tech** | CS5382: Practical Principles for Designing Fair Algorithms.

2023 **Princeton University** | Center for Information Technology Policy (CITP). “The Future of Auditing is Sociotechnical.” Available here.  
**University of Southern California** | Media As SocioTechnical Systems (MASTS) Seminar. “The Future of Auditing is Sociotechnical.”  
**University of Pennsylvania** | ASSET Seminar. “The Future of Auditing is Sociotechnical.”  
**Nobel Prize Summit** | International Panel on the Information Environment (IPIE) Guest Panelist  
**PepsiCo** | “In(advert)ent: Potential Biases in Digital Advertising.”

2022 **University of Pennsylvania** | Penn SEAS Board of Advisors Spring Meeting. “Auditing Algorithms and Sociotechnical Systems.”  
**Simon Fraser University** | Mellon-Digital Democracies Institute - Experimental Algorithmic Futures Working Group. “In(advert)ent: Sociotechnical Audits and Targeted Advertising.”

2021 **University of Pennsylvania** | Annenberg Conversations on Gender. “From Algorithm Audits to Accountability.” Available here.  
**Virginia Commonwealth University** | Camp Qmunity Mobile Data Management Conference. Diversity and Inclusion Session.  
**Cornell University** | Graduate Students for Gender Inclusion in Computing Group. “Bias and Representation in Sociotechnical Systems.”

- Carnegie Mellon University** | Human-Computer Interaction Institute. “Bias and Representation in Sociotechnical Systems.”
- University of Pennsylvania** | Computer and Information Science Department. “Bias and Representation in Sociotechnical Systems.”
- University of Texas at Austin** | School of Journalism and Media. “Bias and Representation in Sociotechnical Systems.”
- Johns Hopkins University** | Computer Science Department. “Bias and Representation in Sociotechnical Systems.”
- University of Washington** | Information School. “Bias and Representation in Sociotechnical Systems.”
- Simon Fraser University** | Computer Science Department. “Bias and Representation in Sociotechnical Systems.”
- 2019 **University of Illinois at Urbana-Champaign** | CS598RK: Human-Computer Interaction for Machine Learning. “Inclusive Design from the Lab to the Classroom.”
- Stanford University** | CS247i: Design for Understanding. “Inclusive Web Design.”
- Stanford University** | Democracy & Internet Scholars Workshop. “Search Media and Elections: Investigating Partisanship in Political Search Results.”
- 2018 **Stanford Law School** | Project on Democracy and Internet Seminar Series. “Algorithm Audits and Political Bias in Web Search.”

## PROFESSIONAL SERVICE

### *Editorial Boards*

Journal of Online Trust and Safety, 2020-current

### *Conference Leadership*

2019-2021 CSCW Conference Steering Committee | Graduate student member

2017-2018 ICWSM Conference | Web Chair

### *Conference Reviewing*

FACCT '24 (AC), CSCW '24, CSCW '23, FACCT '23 (AC), CSCW '22, FACCT '22 (AC), CSCW '21, FACCT '20, CSCW '20, CHI '20, ICWSM '20, CSCW '19, CHI '18, ICWSM '18

### *Professional Affiliations*

2023-curr. International Panel on the Information Environment (IPIE) | Member

2023-curr. AI at Wharton | Faculty Affiliate

2023-curr. Penn Cognitive Science Dept MindCORE | Faculty Affiliate

### *University service*

2023-curr. Penn School of Engineering and Applied Science's Diversity, Equity, and Inclusion Committee | CIS Dept. Liaison

2023-24 Penn CIS Department | Milestones Committee

2015-2020 Stanford CS PhD Social Committee | Founder and Chair

2015-2016 Stanford CS PhD Liaison to the Faculty | Liaison

2020-2021 Stanford HCI Qualifying Exam Equity & Justice Update | Lead volunteer

2020-2021 Stanford CS PhD Applicant Student Support Program, Volunteer

2020-2021 Stanford Out in STEM | Mentor

2020-2021 Underrepresented in Stanford Computer Science program | Mentor  
2017-2019 Stanford Enhancing Diversity in Graduate Education (EDGE) | Mentor

*Other Service*

2017-2018 Stanford Alpine Club | President  
2015-2016 Stanford Hellenic Student Association | Board Member

ADVISING

*Current Doctoral Students*

2023-curr. Ekaterina Fedorova  
2023-curr. Stephanie Wang  
2023-curr. Ro Encarnación  
2022-curr. Princess Sampson

*Current Undergraduate Students*

2022-curr. Lena Armstrong, Penn'23 (to-be PhD student at Harvard)  
2022-curr. Sam Jung, Penn'26

PAST ADVISEES

*Doctoral*

2021-2023 Michelle Lam (Stanford)

*Undergraduate*

Melanie Zhou, Stanford freshman  
Keitany Alison Jelagat, Stanford freshman  
Alison Kim, Swarthmore junior  
Janine Fleming, undergraduate at Stanford  
Hannah Kim, undergraduate at Stanford  
Ayush Pandit, Stanford undergraduate  
Colin Kalicki, Stanford undergraduate  
Su Goh, McGill senior  
Michelle Gan, Stanford undergraduate  
Justin Tinker, Stanford undergraduate  
Aayush Agrawal, Stanford sophomore  
Joon S. Park, Swarthmore senior  
Bec Smith, Stanford junior  
Michelle Park, Stanford senior  
Kelly Wang, Brown junior  
Xunru Rainy Chen, Northwestern junior  
Mo Tiwari, Engineer at Meta; later Stanford PhD  
Jared Bitz, Stanford freshman  
Gili Rusak, incoming Stanford freshman

## INDUSTRY EXPERIENCE

2017 Intern, Core Data Science Team, Facebook

2015 Intern, MetaMind

Updated April 29, 2024