# Danaë Metaxa

Levine Hall metaxa.net

3330 Walnut St. metaxa@seas.upenn.edu
Philadelphia, PA 19104 Pronouns: they/them

'Ονομα, αντωνυμίες: Δαναός, ο/του

## RESEARCH AREAS

Human-Computer Interaction; Algorithm Audits; Social Justice & Technology; 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

## **AWARDS & HONORS**

2020-2021	Stanford Human-Centered AI Seed Grant
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)
2015–2020	Stanford Graduate 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 Award
2013	Box Engineering Diversity Scholarship
2013	Brown University Undergraduate Teaching and Research Award

#### **PUBLICATIONS**

- Refereed Conference Publications
- [c.12] Sampson, P., Encarnación, R., **Metaxa, D.** (2023). "Representation, Self-Determination, and Refusal: Queer People's Experiences with Targeted Advertising." FAccT 2023.
- [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.
- [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 **Honorable mention award**.
- [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-Coacher: 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. "Crowd-sourcing 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)
  - White Papers
- [w.4] **Metaxa, D.** Bias and Discrimination in Digital Advertising. PolicyLink 2023. In *Digital advertising: Discrimination, bias, and strategies for equity.*
- [w.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.
- [w.2] Sheuerman, M. K. et al. HCI Guidelines for Gender Equity and Inclusivity. 2019.
- [w.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**

- Spring 2023 CIS700: Algorithmic Justice (Penn, graduate-level)
  - Fall 2022 CIS399: Introduction to Human-Computer Interaction (Penn, undergraduate-level)
- 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)

#### INVITED TALKS

2023 **Nobel Prize Summit** | International Panel on the Information Environment (IPIE) Guest Speaker

**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" Link.

**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."
- 2016 Wellesley College | Computer Science Department. "Thinking About Graduate School"
  Smith College | Computer Science Department. "Thinking About Graduate School"

## 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 '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. Penn Wharton School Initiative on the Impacts of Technology | Faculty Affiliate
- 2023-curr. Penn Cognitive Science Dept MindCORE | Faculty Affiliate

University service

- 2023-curr. Penn CIS Department | Milestones Committee
- 2023–curr. Penn School of Engineering and Applied Science Diversity, Equity, and Inclusion Committee | CIS Dept. Liaison
- 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**

Ekaterina Fedorova (incoming fall 2023)

2023-curr. Stephanie Wang2023-curr. Ro Encarnacion2022-curr. Princess Sampson

## Current Undergraduate Students

2022-curr. Lena Armstrong, honors thesis

2022-curr. Sam Jung, Penn freshman

#### PREVIOUS STUDENT ADVISING

**Doctoral** 

Michelle Lam, 2021-2023 (Stanford)

## Undergraduate

Melanie Zhou, Stanford freshman (2021-2022)

Keitany Alison Jelagat, Stanford freshman (2021-2022)

Alison Kim, Swarthmore junior (2021-2022)

Janine Fleming, undergraduate at Stanford (2020-2021)

Hannah Kim, undergraduate at Stanford (2020-2021)

Ayush Pandit, Stanford undergraduate (2019-2022)

Colin Kalicki, Stanford undergraduate (2019-2022)

Su Goh, McGill senior (2019-2021)

Michelle Gan, Stanford undergraduate (2019-2021)

Justin Tinker, Stanford undergraduate (2019-2021)

Aayush Agrawal, Stanford sophomore (2019-2020)

Joon S. Park, Swarthmore senior (2018-2020)

Bec Smith, Stanford junior (2018-2019)

Michelle Park, Stanford senior (2018-2019)

Kelly Wang, Brown junior (2017-2018)

Xunru Rainy Chen, Northwestern junior (2017-2018)

Mo Tiwari (2016-2017)

Jared Bitz, Stanford freshman (2016-2017)

Gili Rusak (2014-2015)

### INDUSTRY EXPERIENCE

Fall 2017 Intern, Core Data Science Team, Facebook

May 17, 2023