EDUCATION

Massachusetts Inst. of Technology

Advisor: Alex (Sandy) Pentland **PhD** in Media Arts and Sciences

Title: Centering Communities in Research

and Technology Design

Massachusetts Inst. of Technology

Advisor: Alex (Sandy) Pentland

M.S. in Media Arts and Sciences

Thesis: Network Exploration Effects in Machine & Human Groups

Northeastern University

College of Computer and Information Science

B.S in Computer Science

Minors: Political Science, Sociology

Honors: 3.5/4.0 GPA, Dean's Scholarship, Garnet Award, CCIS

Fellow, CCIS Peer Mentor

RESEARCH INTERESTS

Crowdsourced Algorithmic Auditing

Building and deploying tools for crowdsourced algorithmic audits in highimpact, real-world environments.

Systems for Community Data Collection and Analysis

Engineering, evaluating, and deploying tools that help communities share, control, and use their data.

Al and the Future of Labor/Work

Investigating the future of global AI and data regulation in the employment context.

Surveillance and Privacy in the Real-World

Theorizing and investigating how ballooning corporate surveillance networks impact public space, consumers, privacy, and community governance.

RELEVANT EXPERIENCE

Feb. 2019 - May 2023

Sep 2016 - May 2018

Sep 2011 - Dec 2015



Princeton University CITP July 2023 - Present

Postdoctoral Fellow

- Conceive, plan, and execute original research agendas focused on engineering tools for organizers and workers to share and analyze data.
- Assist in managing a team of PhD and staff researchers while overseeing execution of deliverables for research grants.



June 2020 - Sep 2020

Media Artist

- \cdot Conceptualized and executed artistic projects investigating the epistemology of scientific research and visualization.
- Created mixed-media artistic outputs including interactive computational art, collage, and academic knowledge.



Riff Analytics

June 2018 - Feb 2019

Cofounder and Chief Research Scientist

- Designed and develop research and product strategies for an A.I. as a service company.
- Led AI and data science pipeline, product architecture, and research designs.
- Developed and co-wrote grant application that led to a successful National Science Foundation SBIR grant.



June 2020 - Present

Researcher In Residence

- · Design, develop, and deploy worker-centric labor technology.
- Advise on grant applications and applications of technology for advocacy.
- Run and organize workshops with trade union leaders on data visualization, data storytelling, and digital maturity.



Sep 2018 - Feb 2019

Data Analysis Instructor

- Taught, mentored, and supported a cohort of 18 midcareer students in learning data analysis, statistics, and predictive analytics over a 20 week intensive hybrid class.
- Developed and designed custom data science curriculum.
- Nine of 18 students obtained new positions or graduate school acceptance post-program.

SELECTED PUBLIC WRITING

Google Needs to Unlock Its Ad Privacy Black Box

Gizmodo, 2022

Accessible at https://perma.cc/RQT6-QLSK

Location Tracking to Fight Coronavirus is Dangerous and Possibly Pointless

Gizmodo, 2020

Accessible at https://perma.cc/BW98-W7MZ

SELECTED MEDIA

IRL: Online Life is Real Life

Podcast from Mozilla. 2022.

Accessible at https://perma.cc/E6UU-P8ZW

RadioLab: Gigaverse

NPR WNYC, 2022. Featured interview in last segment of episode.

Accessible at https://perma.cc/5SG3-A8C3

Mozilla Internet Health Report

Mozilla, 2022. Podcast.

Accessible at https://perma.cc/RJ8Y-XK2J

Google's FloC flopped, boffins claim, because it failed to provide promised privacy

The Register, 2022

Accessible at https://perma.cc/FN9V-YCEK

Some Shipt workers report seeing lower pay under new effort-based model

The Verge, 2020

Accessible at https://perma.cc/RX2K-E427

Shipt's 'Effort-Based' Model Is Cutting Pay for 40% of Workers, Study Shows

Gizmodo, 2020

Accessible at https://perma.cc/A4EY-TSYN

Ring's Hidden Data Let Us Map Amazon's Sprawling Home Surveillance Network

Gizmodo, 2019

Accessible at https://perma.cc/L7QS-34VK

The 'Atlas of Inequality' Maps Micro-Level Segregation

Bloomberg, 2019

Accessible at https://perma.cc/4L59-44ZS

'Atlas Of Inequality' Shows Income Segregation Around Boston

WBUR, 2019

Accessible at https://perma.cc/G4WR-S76N

INVITED TALKS & PANELS

Why Data Rights Should be Labor Rights: Data Protection and AI Regulation for Gig Workers and Beyond

Invited talk at Princeton's Center for Information Technology Policy, 2023

Why Data Rights Should be Labor Rights: Data Protection and AI Regulation at Work

Price Lab for Digital Humanities, University of Pennsylvania, 2023

Centering Communities in Research and Technology Design

Princeton University Digital Investigators Conference, 2023

Big Data & Society 2023 Colloquium: Data & Social Justice

2023

DAN CALACCI

Worker surveillance fireside chat with Veena Dubal, Wilneida Negrón and Dan Calacci Federal Trade Commission, 2023

Federal Trade Commission PrivacyCon: Why Worker Data Regulation Is About More Than Privacy
Panel on Commercial Surveillance, 2022

How to Bargain with a Black Box: Hacking our Way Towards Data-Driven Organizing (Or: a Roadmap for Data-Driven Organizing)

Hackers On Planet Earth, 2022

Ring Around the Neighborhood: Spatial Analysis of Doorbell Camera Use

Pitt Computational Social Science Seminar, 2021

One Ring To Surveil Them All: Hacking Amazon Ring to Map Neighborhood Surveillance
Data & Society, 2020

KEYNOTES

How to Bargain with a Black Box: Auditing an Algorithmic Pay Change With a Community-Led Audit

Community Keynote. Fifth Annual ACM FAccT Conference. (2022) **Dan Calacci**, Willy Solis, Drew Ambrogi, Vanessa Bain, Danny Spitzberg

PUBLISHED PAPERS

Insights from an experiment crowdsourcing data from thousands of US Amazon users: The importance of transparency, money, and data use

Under Review

Alex Berke, Robert Mahari, Alex (Sandy) Pentland, Kent Larson, **Dan Calacci**

Building Dreams Beyond Labor: Worker Autonomy in the Age of Al

ACM Interactions (2023). Accessible at https://doi.org/10.1145/3626245

Dan Calacci

Worker's Collective Data Access Rights: Adding Context to Worker Data Protection

European Labor Law Journal (2023)

Dan Calacci, Jake Stein

Privacy Limitations Of Interest-based Advertising On The Web: A Post-mortem Empirical Analysis Of Google's FLoC

ACM Conference on Computer and Communications Security (2022)

Alex Berke, Dan Calacci

Bargaining With the Black-Box: Designing and Deploying Worker-Centric Tools to Audit Algorithmic Management

25th ACM Conference on Computer-Supported Cooperative Work (2022)

Dan Calacci, Alex (Sandy) Pentland

The Cop in Your Neighbor's Doorbell: Amazon Ring and the Spread of Participatory Mass Surveillance

25th ACM Conference on Computer-Supported Cooperative Work (2022)

Dan Calacci, Jeffrey Shen, Alex (Sandy) Pentland

Organizing in the End of Employment: Information Sharing, Data Stewardship, and Digital Workerism

2022 Symposium on Human-Computer Interaction for Work 1 (2022): 1-9.

Dan Calacci

DAN CALACCI

Mobility patterns are associated with experienced income segregation in large US cities

Nature Communications 12.1 (2021): 1-10.

Esteban Moro, Dan Calacci, Xiaowen Dong, Alex (Sandy) Pentland

Leveraging Communication Topologies Between Learning Agents in Deep Reinforcement Learning

AAMAS. pp. 1738-1740. (2020)

Dhaval Adjodah, Dan Calacci, Abhimanyu Dubey, Anirudh Goyal, P.M. Krafft, Esteban Moro, Alex Pentland

Patterns of Interaction Predict Social Role in Online Learning

SBP-BRIMS (2018)

Cici Sun, Dan Calacci, Alex (Sandy) Pentland

Rhythm: A unified measurement platform for human organizations

IEEE MultiMedia 25.1 (2018): 26-38.

Oren Lederman, Akshay Mohan, Dan Calacci, Alex (Sandy) Pentland

Breakout: An Open Measurement and Intervention Tool For Distributed Peer Learning Groups

SBP-BRIMS (2016)

Dan Calacci, Oren Lederman, David Shrier, Alex (Sandy) Pentland

A frame of mind: Using statistical models for detection of framing and agenda setting campaigns

Proceedings of the 53rd ACL Vol. 1. (2015): 1629-1638.

Oren Tsur, Dan Calacci, David Lazer

As Long as You Name My Name Right: Social Circles and Social Sentiment in the Hollywood Hearings

Proceedings of the ACL Joint Workshop on Social Dynamics and Personal Attributes in Social Media (2014): 83-87.

Dan Calacci, Oren Tsur, David Lazer

CONFERENCE TALKS, WORKSHOPS, & POSTERS

FairFare: Towards crowdsourced algorithmic inquiry in the gig economy

Talk. CSCW Workshop: Back to 'Back to Labor' (2023)

Dan Calacci, Samantha Dalal, Varun Rao, Danny Spitzberg, and Andrés Monroy-Hernandez

Fairer Working Futures: Co-Developing a Roadmap For Labor-Centric FAccT Research

CRAFT Workshop Session. Fifth Annual ACM FAccT Conference. (2022)

Dan Calacci, Willy Solis, Wilneida Negrón

One Ring To Surveil Them All: Hacking Amazon Ring to Map Neighborhood Surveillance

Talk. Hackers On Planet Earth Conference. (2020)

Dan Calacci

Ring Around the Neighborhood: Spatial Analysis of Doorbell Camera Use

Talk. 6th International Conference on Computational Social Science. (2020)

Dan Calacci, Jeffrey Shen, Alex (Sandy) Pentland

Far-Right Forum Network and LDA analysis

Poster. 6th International Conference on Computational Social Science. (2020)

Dan Calacci, Aliah Braley, Dhaval Adjodah, Alex (Sandy) Pentland

Find My {}: Location Data, Surveillance, and the Commons

Workshop Session, Privacy & Security, MozFest. (2019)

Dan Calacci, Becca Ricks, Nasser Eledroos

DAN CALACCI

The tradeoff between the utility and risk of location data and implications for public good

Talk. Connected Life Conference; Oxford/LSE. (2019)

Dan Calacci, Alex Berke, Kent Larson, Alex (Sandy) Pentland

Economical Segregation of Encounter Networks in Cities

Talk. Network Science Society Conference. (2018)

Esteban Moro, Dan Calacci, Xiaowen Dong, Alex (Sandy) Pentland

Optimizing Inter-Agent Communication Networks for Improved Deep Reinforcement Learning

Talk. Network Science Society Conference. (2018)

Dhaval Adjodah, Dan Calacci, Yan Leng, Abhimanyu Dubey, Peter Krafft, Esteban Moro, and Alex 'Sandy' Pentland

Improved Learning in Evolution Strategies via Sparser Inter-Agent Network Topologies

Talk. Thirty-first Conference on Neural Information Processing Systems (NeurIPS). (2017)

Dhaval Adjodah, **Dan Calacci**, Yan Leng, Peter Krafft, Esteban Moro, and Alex 'Sandy' Pentland

Exploring inter-group social contact using high-resolution geospatial data

Talk. Conference on Complex Systems. (2017)

Dan Calacci, Esteban Moro, Alex (Sandy) Pentland

Automatic Discovery of Partisan Campaigns, Agenda Setting, and Political Spin in Press Releases

Poster. Computational Journalism, Columbia, NYC (2015)

Oren Tsur, Dan Calacci, David Lazer

Separated by a common language? Using topic models in reconstructing networks of political influence and cooperation

Talk. Political Networks. (2014)

Oren Tsur, Dan Calacci, David Lazer

What you know and who you know: discussion networks and political knowledge

Poster. Political Networks. (2014)

Katherine Ognyanova, Dan Calacci, David Lazer, Michael Neblo, William Minozzi, Brian Rubineau

INVOLVED GRANTS

Current

The Worker's Observatory: Crowdsourced tools for Collective Audits of Algorithmic Systems in the Gig Economy

Mozilla Technology Fund, 2022

Award Amount: \$50,000.00

Role: Grant co-author, engineering lead.

Completed / Past

SBIR Phase I: Positive Effects of Feedback and Intervention for Engagement in Online Learning

National Science Foundation. Grant # 1843391

Award Amount: \$223,090.00

Role: Grant co-author, data analysis and system development as Co-Founder

SBIR Phase II: Using Intervention and Feedback to Improve Group Function In Online Contexts National Science Foundation. Grant # 2026003

Award Amount: \$991,417.00

Role: Grant co-author, analysis and reporting

SERVICE

(interpreted broadly)

In 2020, I served as a mentor in the Queer in Al community, mentoring younger queer students in research and career development.

I routinely do volunteer data analysis and rough visualization for journalists without credit. Some notable outlets I have helped in some way include The New York Times, Reuters, Gizmodo, and the MIT Technology Review. I have served as a reviewer for:

CHI 2023 CSCW 2022-23 SBP-BRiMS 2020

SBP-BRiMS 2021 PLOS-ONE IC2S2 2022-23 FAccT 2022-23

From 2018 to 2020, I cofounded and co-hosted a semiannual local art, poetry, and music series in my home in Jamaica Plain, MA. In the Fall of 2019, I organized and co-hosted a feminist poster-making and performance benefit at the MIT Media Lab following the Epstein scandal.

In 2019 and 2020, I testified at the Massachusetts Statehouse in support of the first A.I. Governance bills to be introduced in the MA state legislature.