Lindsay Popowski

Research Interests

social computing, human-computer interaction, social media design, algorithmic folk theories, online communities.

Education

2021-present Stanford University, Ph.D. in Computer Science, Palo Alto, CA.

GPA 4.00 Human-Computer Interaction Group

Advised by Professor Michael Bernstein

2017–2021 Harvey Mudd College, B.Sc. in Computer Science and Mathematics, Claremont, CA.

GPA 3.99 • Graduated with High Distinction

- o Departmental Honors in Computer Science; Humanities, Social Sciences, and Arts
- o Clinic (team capstone) award for "Generating Explanations for Random Forest Decisions"

Awards & Honors

2023 **ACM CSCW**, Best Paper Award.

Cura: Curation at Social Media Scale

- 2022, 2023 Stanford University, CS Student Service Award.
 - 2022 Stanford University, EDGE Doctoral Fellowship.
 - 2021 Computing Research Association, Outstanding Undergraduate Research Award.

One of four awardees nation-wide

2021 **ACM CHI**, Best Paper Honorable Mention award.

Screen2Vec: Semantic Embedding of GUI Screens and GUI Components

2021 Harvey Mudd College, Class of '94 Award.

One of three awardees in the Computer Science department recognized for excellence in research and academics

2021 Harvey Mudd College, Clinic Team Award.

Three Clinic teams recognized for excellent final reports and client deliverables

Publications

The titles of papers currently under review are edited to maintain authors' anonymity.

- CSCW 2024 (under submission) Encouraging Online Group Formation and Tie-Building, Lindsay Popowski, Yutong Zhang, and Michael Bernstein, ACM Conference On Computer-Supported Cooperative Work And Social Computing...
- Acivi Comerence On Computer-Supported Cooperative Work And Social Computing.
- CSCW 2023 Cura: Curation at Social Media Scale,

Wanrong He, Mitchell L. Gordon, **Lindsay Popowski**, and Michael Bernstein, *ACM Conference On Computer-Supported Cooperative Work And Social Computing*. Best Paper Award (awarded to top 1%).

UIST 2022 **Social Simulacra: Creating Populated Prototypes for Social Computing Systems**, Joon Sung Park, **Lindsay Popowski**, Carrie J. Cai, Meredith Ringel Morris, Percy Liang, and Michael S. Bernstein,

ACM Symposium on User Interface Software and Technology.

CHI 2021 Screen2Vec: Semantic Embedding of GUI Screens and GUI Components,

Toby Jia-Jun Li*, Lindsay Popowski*, Tom M. Mitchell, and Brad A. Myers,

CHI Conference on Human Factors in Computing Systems.

Best Paper Honorable Mention award (awarded to top 5%).

SIGCSE 2021 A Biology-based CS1: Results and Reflections, Ten Years In,

Zachary Dodds, Malia Morgan, Lindsay Popowski, Henry Coxe, Caroline Coxe,

Kewei Zhou, Eliot Bush, and Ran Libeskind-Hadas,

ACM Technical Symposium on Computer Science Education.

AlJ 289 Quantifying controllability in temporal networks with uncertainty,

(2020) Shyan Akmal, Savana Ammons, Hemeng Li, Michael Gao, Lindsay Popowski,

and James C. Boerkoel Jr,

Journal of Artificial Intelligence.

AAAI 2020 Dynamic control of probabilistic simple temporal networks,

Michael Gao*, Lindsay Popowski*, and Jim Boerkoel,

AAAI Conference on Artificial Intelligence.

Research Experience

2022-present **Stanford University**,

Advisor: Michael Bernstein.

Working on topics related to online behavior and social media: encouraging participation in online communities, critiquing and analyzing communication affordances, and analyzing user mental model formation.

2021-2022 Stanford University Rotations,

With Michael Bernstein*, Angèle Christin**, Jeff Hancock***.

- Fall* (with Joon Sung Park): Using large language models to power a prototyping tool for online communities and other social computing systems.
- Winter**: Ethnography of Instagram fashion and lifestyle influencers focused on authenticity, audience mediation, platform conflict, and self-representation.
- Spring***: Study of mental health misinformation on TikTok and the use of "Stitch" video responses for correction and call-out.

Summer/Fall Carnegie Mellon University,

2020 with Toby Jia-Jun Li and Brad A. Myers.

Designed and coded four self-supervised models for embedding app GUI components and screens, developed evaluation frameworks for each, and performed the evaluations

Summer/Fall Harvey Mudd College,

2019 with James C. Boerkoel Jr.

Developed two new algorithms to dynamically schedule multi-agent teams, and implemented/tested one along with a baseline

Summer 2018 Harvey Mudd College,

with Zachary Dodds.

Helped revise intro CS course (writing homework problems, organization), and developed tools for professors in other disciplines (lab data analysis Python workflows and instructions for physics faculty, NLP pipeline for professor in government)

Mentorship

Ignacio Fernandez, Summer 2023-present.

Yutong Zhang (MSc), Fall 2023-present.

Sydney Yeh, Anavi Baddepudi, Brian Park, Fall 2023-present.

Taeuk Kang, Summer 2023-present.

Carmel Limcaoco, Emma Wang, Estella Zhou, Star Doby, Fall 2023.

Chijioke Chinaza Mgbahurike, Summer-Fall 2023.

Tiangi Li, Summer 2023.

Wanrong He, Summer-Fall 2022.

Pauline Arnoud, Kris Jeong, Nicole Garcia, Summer 2022-Spring 2023.

Service

2021, 2023 Stanford CS PhD Student-Applicant Support Program (SASP) Reviewer.

2023 EDGE Mentor.

2023 Reviewer, CSCW.

2023 **STEM Fellows Mentor**.

2022 Reviewer, ICA.

2022 **Reviewer**, Social Media + Society.

2022-present Stanford CS PhD Admit Weekend Co-chair.

2022-2023 Stanford CS PhD Breadth Requirement Committee.

2020 AAAI Student Volunteer.

Skills

Technologies Proficient in Python, Java, C++, Git

Familiar with pytorch, scikit-learn, R, jupyter notebook, haskell

Languages English (native), Spanish (advanced, 6 years)