

# Rebecca Dorn

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## EDUCATION

**Pursuing Ph.D., Computer Science**

**University of Southern California**

Advisors: Kristina Lerman and Fred Morstatter

Academic Focus: Machine Learning Fairness, Computational Social Science

August 2021-Present

GPA 3.54

**B.S., Computer Science**

**University of California, Santa Cruz**

Senior Thesis: Evaluating Bias in Face Verification

September 2016-June 2020

GPA 3.47

## PUBLICATIONS

Dorn, R., Mokherian, N., Jiang, J., Abramson, J., Morstatter, F. & Lerman, K. *Non-Binary Gender Expression in Online Interactions*. Poster Session, SBP-BRIMS 2023.

Dorn, R., Ma, Y., Morstatter, F. & Lerman, K. *Gender and Prestige Bias in Coronavirus News Reporting*. Arxiv Preprint 2022.

## RESEARCH EXPERIENCE

**Transgender and Non-Binary Dialect Bias in LLM Toxicity Detection**

University of Southern California

August 2023-Present

- Designing templates to measure non-binary and transgender dialect bias in GPT-3.5, Llama2 and BERT toxicity detection.
- Experimenting with bias mitigation techniques using community identity information and chain-of-thought prompting.
- ★ Working paper presented at *Southern California Natural Language Processing Symposium (SoCalNLP)* 2023.

**Online Attitudes Towards People Experiencing Homelessness**

University of Southern California, Computer Science Department and Social Work Department

January 2023-Present

- Annotating >1K tweets to develop a robust and pragmatic framework that captures online attitudes towards homelessness.
- Scraping ~5 million tweets about homelessness and testing GPT-4 annotator functionality on the collected dataset.
- ★ Working paper presented at *Southern California Natural Language Processing Symposium (SoCalNLP)* 2023.

**Non-Binary Gender Expression in Online Interactions**

University of Southern California, Information Science Institute

August 2022-January 2023

- Collected ~1.1 million tweets from users with pronouns to analyze pronoun group differences in twitter behavior.
- Found users with non-binary pronouns receive low attention online and are flagged for toxicity at alarmingly high rates.
- ★ Published in *the International Conference on Social Computing, Behavioral-Cultural Modeling & Prediction and Behavior Representation in Modeling and Simulation (SBP-BRIMS)* 2023. [See paper here.](#)

**Gender and Prestige Bias in Coronavirus News**

University of Southern California, Information Science Institute

August 2021-August 2022

- Extracted ~90,000 expert quotes from news articles using Named Entity Recognition (NER) and Dependency Parsing.
- Analyzed gender representation of experts, finding that 1 woman is referenced as a coronavirus expert for every 3 men.
- ★ Preprint on arXiv. [See paper here.](#)

**Expanding Healthcare Subsidies**

Families USA

December 2020

- Integrated multiple Census datasets to examine demographics of uninsured populations receiving unemployment benefits.
- Communicated findings to health policy experts in video calls and e-mails to aid in developing policy research publication.
- ★ Used by Nancy Pelosi's office to add provisions to the American Relief Act (2021). [See report here.](#)

## INVITED TALKS

Dorn, R. (2023, November). Gender-Queer Dialect Bias in Harmful Speech Detection by Large Language Models. University of Southern California Information Science Institute Fairness and Bias Group. Los Angeles, CA.

Dorn, R. (2023, March). Non-Binary Gender Expression in Online Interactions. University of Southern California Center for AI in Society. Los Angeles, CA.

Dorn, R. (2022, October). Studying Gender Equity with Data Science. University of Southern California Women in Science and Engineering (WiSE) STEM Bytes. Los Angeles, CA.

## TEACHING EXPERIENCE

Teaching Assistant, Data Structures	Fall 2023
Teaching Assistant, Fairness in Artificial Intelligence	Spring 2023
Undergraduate Teaching Assistant, Ethics & Algorithms	Winter, Spring 2020
Undergraduate Peer Tutor	Winter, Spring, Fall 2019

## AWARDS

SBP-BRIMS Scholarship, 2023  
Inclusive STEM Educator Award, 2019

## SERVICE

**External Reviewer:** ACM WebSci (2022), JMIR (2022), CSCW (2023)  
**Member:** QueerInAI (2023 - present), Women in Science and Engineering (2021 – present)  
**K-12 Outreach:** USC Stimulating STEM Summer Program Planning Committee Member (October 2023 – Current), Guest lecture at USC Stimulating STEM Summer Program (July 2023), Educational Director of Habonim Dror Camp Moshava (Summer 2020)