Rebecca Dorn

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EDUCATION

Pursuing Ph.D., Computer Science Expected 2026
University of Southern California GPA 3.54

Advisors: Kristina Lerman and Fred Morstatter

Academic Focus: Machine Learning Fairness, Computational Social Science

B.S., Computer Science

University of California, Santa Cruz

GPA 3.47

Senior Thesis: Evaluating Bias in Face Verification

RESEARCH EXPERIENCE

Transgender and Non-Binary Dialect Bias in LLM Toxicity Detection

August 2023 to Current

University of Southern California

- 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.

Online Attitudes Towards People Experiencing Homelessness

January 2023 to Current

University of Southern California, Computer Science Department

- 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.

Non-Binary Gender Expression in Online Interactions

August 2022 to January 2023

University of Southern California, Information Science Institute

- 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

August 2021 to August 2022

University of Southern California, Information Science Institute

- 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

December 2020

Families USA

- 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.

PUBLICATIONS

Dorn, R., Mokhberian, 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.

INVITED TALKS

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
Teaching Assistant, Fairness in Artificial Intelligence
Undergraduate Teaching Assistant, Ethics & Algorithms
Undergraduate Peer Tutor

Fall 2023 Spring 2023 Winter, Spring 2020 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: QueerinAl (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)