

Rebecca Dorn

(301) 832 2668 | rdorn@usc.edu | rebedorn.github.io

EDUCATION

Pursuing Ph.D., Computer Science

University of Southern California

Advisors: Kristina Lerman and Fred Morstatter

Academic Focus: Computational Social Science, Fairness in Artificial Intelligence

Expected 2026

GPA 3.54

B.S., Computer Science

University of California, Santa Cruz

Senior Thesis: Evaluating Bias in Face Verification

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

August 2023 to Current

University of Southern California

- Designing templates to understand how GPT-3.5, Llama2 and BERT classify toxicity in Transgender and Non-Binary dialect
- Formulating bias mitigation technique grounded in recent linguistic and natural language processing literature

Online Attitudes Towards People Experiencing Homelessness

January 2023 to Current

University of Southern California, Computer Science Department

- Gathering ~5 million tweets to capture attitudes towards people experiencing homelessness through large-scale study
- Annotating hundreds of tweets to develop a robust annotation schema with the USC Social Work department

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 less common non-binary pronouns to under-display pleasant emotions and receive less retweets and likes

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

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

NYPD Fare Evasion Enforcement

December 2019

University of California, Santa Cruz

- Fetched n-grams from Twitter grassroots campaign @unfairnyc to match tweets containing police sightings to subway stops
- Developed interactive map showing neighborhood demographics and NYPD fare evasion enforcement using Folium

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

August 2023 to Current

University of Southern California, Computer Science

- Holding 6 hours of office hours weekly to aid ~250 undergraduate students learn computer science fundamentals
- Collecting and implementing regrade requests for bi-weekly assignments, ensuring regrades finish in a timely manner

Teaching Assistant, Fairness in Artificial Intelligence

January 2023 to May 2023

University of Southern California, Data Science

- Held weekly office hours to support students in as they designed, evaluated and implemented course projects
- Updated assignments to match new learning objectives, communicated with course grader regularly

Educational Director

January 2020 to August 2020

Habonim Dror Camp Moshava

- Led over 100 staff members in building social justice educational curriculum for campers entering grades 3 through 11
- Adapted programming and staff training to meet evolving needs during the Coronavirus pandemic

Undergraduate Teaching Assistant, Ethics & Algorithms

Winter and Spring 2020

University of California Santa Cruz, Computer Science

- Designed assignments and rubrics for new Computer Science course, serving as sole undergraduate teaching assistant
- Surveyed research in fair machine learning spanning differential privacy, bias mitigation, and algorithm accountability

Peer Tutor

Winter to Fall 2019

University of California Santa Cruz, Learning Support Services

- Planned and led tutoring sessions for Artificial Intelligence, Intro to Algorithm Analysis, and Algorithms/Abstract Data Types
- Coordinated with Multicultural Education Program (MEP) to better support students historically underrepresented in STEM.

AWARDS

SBP-BRiMS Scholarship, 2023

Inclusive STEM Educator Award, 2019

SERVICE

K-12 Outreach: Guest lecture at USC Stimulating STEM Summer Program (July 2023)

Member: Women in Science and Engineering (2021 – present)

External Reviewer: ACM WebSci (2022), JMIR (2022), CSCW (2023)

TECHNICAL SKILLS

Programming (Proficient): Python, PyTorch, TensorFlow, Web Scraping