Rebecca Dorn

Los Angeles, CA | (301) 832 2668 | rdorn@usc.edu

EDUCATION

Pursuing Ph.D., Computer Science, & Certificate, Science & Technology Studies Expected 2026
University of Southern California GPA 3.54
Advisors: Kristina Lerman and Fred Morstatter
Academic Focus: Computational Social Science, Fairness in Artificial Intelligence, Trans-Inclusive Machine Learning

B.S., Computer Science June 2020
University of California, Santa Cruz GPA 3.47
Senior Thesis: Evaluating Bias in Face Verification
Relevant Coursework: Artificial Intelligence, Natural Language Processing, Applied Machine Learning, Linear Algebra

PUBLICATIONS

Dorn, R., Abramson, J., Jiang, J. & Lerman, K. *Non-Binary Gender Expression in Online Interactions*. Poster Session, SBP-BRiMS 2023.

RESEARCH EXPERIENCE

Online Attitudes Towards People Experiencing Homelessness January 2023 to Current
University of Southern California
- Gathering ~3 million tweets to capture attitudes towards people experiencing homelessness through large-scale study
- Designing structured annotation schema to capture socio-political phenomena, speaker target and speaker tone on AMT

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, July). Bias in Machine Learning. University of Southern California Stimulating STEM Summer Program. 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

Graduate Teaching Assistant, Fairness in Artificial Intelligence   January 2023 to Current
University of Southern California, Data Science Department
- Updating old assignments to match new learning objectives and designing rubrics for course grader
- Monitoring course web page for questions while holding weekly office hours

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
Basking Engineering at University of California, Santa Cruz
- 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
Learning Support Services at University of California, Santa Cruz
- 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.

SERVICE
Member: Women in Science and Engineering (2021 – present)
Reviewer: ACM WebSci (2022), JMIR (2022), CSCW (2023)

TECHNICAL SKILLS
Programming (Proficient): Python, Slurm, pandas, matplotlib, scikit-learn, Git, LaTeX, bash
Programming (Intermediate): Hugging Face, TensorFlow, C, HTML, Flasks, Postgres