Dora Zhao

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Education

PHD in Computer Science, Stanford University, GPA: 4.0/4.0 Advisors: Michael Bernstein and Diyi Yang

MSE in Computer Science, Princeton University, GPA: 4.0/4.0 Advisors: Olga Russakovsky and Andrés Monroy-Hernández

AB in Computer Science (*summa cum laude*), Princeton University, GPA: 3.97/4.0 Advisor: Olga Russakovsky

Publications

* denotes equal contribution

CONFERENCE PAPERS

- [Cio] **Zhao, D.***, Scheuerman, M.*, Chitre, P., Andrews, J., Panagiotidou, G., Walker, S., Pine, K., Xiang, A. "A Taxonomy of Challenges to Curating Fair Datasets." *NeurIPS Datasets and Benchmarks (NeurIPS D&B)* (Oral), 2024.
- [C9] Hirota, Y., Andrews, J., **Zhao, D.**, Papakyriakopoulos, O., Modas, A., Nakashima, Y., Xiang, A. "Resampled Datasets Are Not Enough: Mitigating Societal Bias Beyond Single Attributes." *Conference on Empirical Methods in Natural Language Processing (EMNLP)*, 2024.
- [C8] **Zhao, D.**, Andrews, J., Papakyriakopoulos, O., Xiang, A. "Position: Measure Dataset Diversity, Don't Just Claim It." *International Conference on Machine Learning (ICML)*, 2024.

 Best Paper Award
- [C7] Andrews, J., **Zhao, D.***, Thong, W.*, Modas, A.*, Papakyriakopoulos, O.*, Nagpal, S.*, Xiang, A. "Ethical Considerations for Responsible Data Curation." *Neural Information Processing Systems Datasets and Benchmarks (NeurIPS D&B) (Oral)*, 2023.
- [C6] Ramaswamy, V.V., Lin, P., **Zhao, D.**, Adcock, A., van der Maaten, V., Ghadiyaram, D., Russakovsky, O. "GeoDE: a Geographically Diverse Evaluation Dataset for Object Recognition." *Neural Information Processing Systems Datasets and Benchmarks (NeurIPS D&B)*, 2023.
- [C₅] **Zhao, D.***, Meister, N.*, Wang. A, Ramaswamy, V.V., Fong, R., and Russakovsky, O. "Gender Artifacts in Visual Datasets." *International Conference on Computer Vision (ICCV)*, 2023.
- [C4] **Zhao, D.**, Andrews, J., Xiang, A. "Men Also Do Laundry: Multi-Attribute Bias Amplification." *International Conference on Machine Learning (ICML)*, 2023.
- [C3] Papakyriakopoulos, O., Choi, A., Thong, W., **Zhao, D.**, Andrews, J., Bourke, R., Xiang, A., Koenecke, A. "Augmented Datasheets for Speech Datasets and Ethical Decision-Making." *ACM Conference on Fairness, Accountability, and Transparency (FAccT)*, 2023.

- [C2] **Zhao, D.**, Inaba M., and Monroy-Hernández, A. "Understanding Teenage Perceptions and Configurations of Privacy on Instagram." *Conference on Computer-Supported Cooperative Work & Social Computing (CSCW)*, 2022.
- [C1] **Zhao, D.**, Wang. A, and Russakovsky, O. "Understanding and Evaluating Racial Biases in Image Captioning." *International Conference on Computer Vision (ICCV)*, 2021.

JOURNAL ARTICLES

[J1] Wang, A., Liu, A., Zhang, R., Kleiman, A., Kim, L., **Zhao, D.**, Shirai, I., Narayanan, A., and Russakovsky, O. "REVISE: A Tool for Measuring and Mitigating Bias in Visual Datasets." *International Journal of Computer Vision (IJCV)*, 2022.

Workshop papers

[Wi] One of nineteen authors*. "Anti-Racist HCI: Notes on an Emerging Critical Technical Practice" *alt.chi*, 2022.

Presentations and Talks

Measure Dataset Diversity, Don't Just Claim It

- Invited talk at Sony AI
- Oral talk at ICML 2024 Data & Society Session

Multimodal Systems through a Social Lens: Uncovering and Mitigating Biases

Invited talk at CIKM 2023 Multimodal Human Understanding for the Web and Social Media Workshop

Understanding Teenage Perceptions and Configurations of Privacy on Instagram

• Part of a panel at CSCW 2022 Northeast Meetup

Understanding and Evaluating Racial Biases in Image Captioning

- Part of an invited talk at CVPR 2022 AI for Content Creation (AI4CC) Workshop
- Part of an invited talk at CVPR 2021 Visual Question Answering (VQA) Workshop

Work Experience

July 2022 -Aug 2023 AI Engineer, Sony Research (AI Ethics Team), New York, NY

- Assisted with large-scale data collection for an ethical human-centric dataset by creating toolkits for data quality review
- Developed educational materials on fairness, bias, and privacy concerns in AI made publicly available for users of Sony Semiconductor Solutions Corporation's edge AI sensing platform, AITRIOS
- Created AI Ethics Checklists and designed a research ethics review process that has been adopted
 by all flagship projects in Sony AI

May 2021 -Aug 2021 Research Intern, Sony Research (AI Ethics Team), Remote

- Proposed methods for using generative adversarial networks to reduce spurious correlations in image datasets
- Mentors: Alice Xiang, Jerone Andrews

Sept 2017 -Dec 2018 Undergraduate Research Assistant, Stigma and Social Perception Laboratory, Princeton, NJ

Assisted Professors Nicole Shelton and Stacey Sinclair on audit study exploring the representations
of diversity in college admissions materials and mission statements

Teaching

Spring 2022 Advanced Programming Techniques (COS 333), Teaching Assistant, Princeton University
Advanced Programming Techniques (COS 333), Teaching Assistant, Princeton University
Spring 2021 Computer Vision for Social Good (COS IW 07), Teaching Assistant, Princeton University
Spring 2021 Fairness in Visual Recognition (COS IW 08), Teaching Assistant, Princeton University

Honors and Awards

Best Paper at ICML 2024

For "Position: Measure Dataset Diversity, Don't Just Claim It"

Brown Institute for Media Innovation Magic Grant

Awarded \$60k for research on the spiral of silence on social media

Joseph Clifton Elgin Prize

Award for the senior in Princeton University's School of Engineering and Applied Sciences who has done the most to advance the interests of the School in the community at large

Sigma Xi Book Award for Outstanding Undergraduate Research

2020 Computing Research Association's Outstanding Undergraduate Researcher – Honorable Mention

2020 Accenture Prize in Computer Science

Merit-based award for top 2 seniors in the Princeton Computer Science department

Professional Service

Program Committee: FAccT 2024

Reviewing: CSCW 2024, CVPR 2023, WRD24 @ CVPR 2024, CEGIS @ ECCV 2024, Web 2024

Outreach

2024-Present Stanford Human-Computer Interaction Seminar, Organizer - Help organize weekly seminar series on

topics related to HCI

2023-2024 Stanford Computing and Society Group, Organizer - Host biweekly speaker seminars on topics related

to computing and society

2023-Present Stanford CS Undergraduate Mentoring Program, Volunteer - Mentor Stanford CS undergraduate stu-

dents from underrepresented backgrounds

2023-Present Stanford CS Student-Applicant Support Program, Volunteer - Provide feedback to first-generation, low-

income students on their application materials before they formally apply to the Stanford CS PhD program

2022-2023 Clinic to End Tech Abuse, Volunteer - Support survivors of intimate partner violence by helping deter-

mine if someone is using technology to harm them and provide assistance with navigating privacy settings

Asian American Student Association (AASA), Co-President - Led Princeton's largest undergraduate or-

ganization and organized both cultural and political events

2018-2019 Carl A. Fields Center, Fellow - Facilitated dialogue about race and identity for students

Mentoring

2017-2021

2024-Present Renn Su, *Stanford CS Undergrad*, project on ranking social media feed based on values
2024-Present Akaash Kolluri, *Stanford CS Undergrad*, project on ranking social media feed based on values
2024-Present Yutong Zhang, *Stanford CS MS*, project on social implications of character-based chatbots

Last updated: September 27, 2024