# Dora Zhao

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## Education

PHD in Computer Science, Stanford University, GPA: 4.0/4.0

Advisors: Michael Bernstein and Diyi Yang

2021-2022 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

**Zhao, D.**, Andrews, J., Papakyriakopoulos, O., Xiang, A. "Measuring Diversity in Datasets." *International Conference on Machine Learning (ICML) Position Paper Track (Oral)*, 2024.

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.

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.

**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.

**Zhao, D.**, Andrews, J., Xiang, A. "Men Also Do Laundry: Multi-Attribute Bias Amplification." *International Conference on Machine Learning (ICML)*, 2023.

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.

**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.

**Zhao, D.**, Wang. A, and Russakovsky, O. "Understanding and Evaluating Racial Biases in Image Captioning." *International Conference on Computer Vision (ICCV)*, 2021.

### JOURNAL ARTICLES

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

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

#### PRE-PRINTS

**Zhao, D.\***, Scheuerman, M., Chitre, P., Andrews, J., Panagiotidou, G., Walker, S., Pine, K., Xiang, A. "A Taxonomy of Challenges to Curating Fair Datasets." *arXiv*, 2024.

#### Presentations and Talks

#### Measure Dataset Diversity, Don't Just Claim It

- Invited talk at Sony AI
- Oral talk at ICML 2024

#### Multimodal Systems through a Social Lens: Uncovering and Mitigating Biases

• Invited talk at the 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

Brown Institute for Media Innovation Magic Grant
Joseph Clifton Elgin Prize, Award for the senior in School of Engineering and Applied
Sciences who has done the most to advance the interests of the School in the community at large,
Princeton University
Sigma Xi Book Award for Outstanding Undergraduate Research, Princeton University
Computing Research Association's Outstanding Undergraduate Researcher – Honorable Mention
Accenture Prize in Computer Science, Merit-based award for top 2 seniors in the Princeton Computer
Science department

### **Professional Service**

#### Reviewing

CSCW 2024, FAccT 2024, Web 2024, CVPR 2023

#### Outreach

2023-Present	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
2017-2021	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