Sarah A. Wu she/her

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Education

Stanford University	2020 - 2026
Ph.D. in Psychology	
Advisor: Tobias Gerstenberg	
Diverse Intelligences Summer Institute	2021
Massachusetts Institute of Technology	2016 - 2020
B.S. in Mathematics with Computer Science; Brain & Cognitive Sciences	

Experience

Research Scientist Intern, Human-Centered AI Research, Apple	Summer 2024
Manager: James Rae	
PhD Research Intern, Mosaic, Allen Institute for Artificial Intelligence (AI2)	Summer 2023
Mentors: Sydney Levine, Xiang Ren	

Honors & Awards

Hsieh Family Fellow, Stanford Interdisciplinary Graduate Fellowship (SIGF)	2023 - 2026
Norman H. Anderson Research Fund, Stanford Psychology	2023
Stanford Institute for Research in the Social Sciences Grant	2022
Stanford Institute for Research in the Social Sciences Grant	2021
Best Paper Award, NeurIPS Cooperative AI Workshop	2020
Computational Modeling Prize in Higher Cognition, Cognitive Science Society	2020
NSF Graduate Research Fellowship (GRFP)	2020 - 2023
Phi Beta Kappa	2020

Publications

Journal Articles

Sarah A. Wu and Tobias Gerstenberg (2023). If not me, then who? Responsibility and replacement. Cognition, 242, 105646.

Sarah A. Wu*, Rose E. Wang*, James A. Evans, Joshua B. Tenenbaum, David C. Parkes, and Max Kleiman-Weiner (2021). Too many cooks: Bayesian inference for coordinating multi-agent collaboration. *Topics in Cognitive Science*, 13(2), 414-432.

Sarah A. Wu and Edward Gibson (2021). Word order predicts cross-linguistic differences in the production of redundant color and number modifiers. *Cognitive Science*, 45(1), e12934.

Book Chapters

Rose E. Wang*, **Sarah A. Wu***, James A. Evans, Joshua B. Tenenbaum, David C. Parkes, and Max Kleiman-Weiner (2021). Too many cooks: Bayesian inference for coordinating multi-agent collaboration. In S. Muggleton and N. Charter (Ed.), *Human-like Machine Intelligence*, pp. 152-170. Oxford University Press.

Peer-reviewed Conference Proceedings

Emily Jin, Zhuoyi Huang, Jan-Philipp Fränken, Weiyu Liu, Hannah Cha, Erik Brockbank, **Sarah A. Wu**, Ruohan Zhang, Jiajun Wu, and Tobias Gerstenberg (2024). MARPLE: A Benchmark for Long-Horizon Inference. *Advances in Neural Information Processing Systems (NeurIPS)*.

Sarah A. Wu, Xiang Ren, Tobias Gerstenberg, Yejin Choi, and Sydney Levine (2024). Resource-rational moral judgment. Proceedings of the 46th Annual Conference of the Cognitive Science Society.

Sarah A. Wu*, Erik Brockbank*, Hannah Cha, Jan-Philipp Fränken, Emily Jin, Zhuoyi Huang, Weiyu Liu, Ruohan Zhang, Jiajun Wu, and Tobias Gerstenberg (2024). Whodunnit? Inferring what happened from multimodal evidence. Proceedings of the 46th Annual Conference of the Cognitive Science Society.

Sarah A. Wu, Shruti Sridhar, and Tobias Gerstenberg (2023). A computational model of responsibility from counterfactual simulations and intention inferences. *Proceedings of the 45th Annual Conference of the Cognitive Science Society.*

Sarah A. Wu, Shruti Sridhar, and Tobias Gerstenberg (2022). That was close! A counterfactual simulation model of causal judgments about decisions. Proceedings of the 44th Annual Conference of the Cognitive Science Society.

Sarah A. Wu*, Rose E. Wang*, James A. Evans, Joshua B. Tenenbaum, David C. Parkes, and Max Kleiman-Weiner (2020). Too many cooks: Coordinating multi-agent collaboration through inverse planning. *Proceedings of the 42nd Annual Conference of the Cognitive Science Society*.

Conference Presentations

"Whodunnit? Inferring what happened from multimodal evidence" Poster at CogSci 2024

"Resource-rational moral judgment"

Talk at SPP 2024

Poster at CogSci 2024

Poster at NeurIPS 2023 AI Meets Moral Philosophy and Moral Psychology (MP2) Workshop

"A computational model of responsibility from counterfactual simulations and intention inferences" Poster at CogSci 2023

"That was close! A counterfactual simulation model of causal judgments about social agents"

Talk at (E)SPP 2022

Poster at CogSci 2022

Poster at RSS 2022 Social Intelligence in Humans and Robots Workshop

"The role of counterfactual reasoning in responsibility judgments"

Talk at SPP 2021

Poster at CogSci 2021

"Too many cooks: Bayesian inference for coordinating multi-agent collaboration" Spotlight talk & poster at NeurIPS 2020 Cooperative AI Workshop

"Word order predicts cross-linguistic differences in the production of redundant color and number modifiers" Talk at AMLaP 2020

"Too many cooks: Coordinating multi-agent collaboration through inverse planning"

Talk at CogSci 2020

Talk at AAMAS 2020

Invited Presentations

Workshop on Genericity, Stability, and Structural Interactions, Cal State East Bay	2024
CompCogSci Group, University of Edinburgh	2023
Cognitive Tools Lab, UCSD	2023
Computational Vision and Learning Lab, UCLA	2022
Experimental Jurisprudence Workshop, Michigan Law School	2022
Visual Intelligence Lab, UCLA	2022
Social and Cognitive Computational Neuroscience Lab, Boston College	2020

Teaching

Stanford PSYCH 205 Foundations of Cognition Stanford PSYCH 251 Experimental Methods Stanford PSYCH 252 Statistical Methods for Social & Behavioral Sciences Stanford SYMSYS 1 Minds and Machines	Fall 2021, Fall 20	Spring 2023 022, Fall 2023 Winter 2022 Summer 2021
MIT 6.046 Design and Analysis of Algorithms MIT 6.036 Introduction to Machine Learning	Spring 2019, Fall 2019, Spring 2020 Fall 2018	
Instructor		
IIS Curie-Sraffa High School, Milan, Italy (through MIT Global Teaching Labs)		2019
Mentoring		
Chuqi Hu (Master's student, 2024 –) Verona Teo (predoctoral researcher, 2024 –) Shruti Sridhar (undergraduate, 2021 – 2024) Siying Zhang (research assistant, 2022 – 2023) Gabe Gaw (undergraduate, 2022 – 2023)		
Professional Service & Activities		
Reviewing		
Journal of Experimental Psychology: Learning, Memory, and Cognition Cognitive Science Society Conference (CogSci) NeurIPS Workshops ICML Workshops AAAI Workshops		
Conference Organizing		
"Counterfactuals in Minds and Machines" Workshop, ICML 2023		
Department & University Service		
Stanford Psychology Admissions Reader Stanford Psychology Advising Coach Stanford Psychology Faculty Meeting Representative MIT Educational Counselor		2024 - 2023 - 2020 - 2022 2020 - 2025
Outreach		
Stanford Future Advancers of Science & Technology (https://fast.stanford. President Chief Program Officer Director of Mentor Recruitment	edu/)	$2020 - \\ 2023 - 2024 \\ 2022 - 2023 \\ 2021 - 2022$