Sarah A. Wu

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Education

Stanford University 2020 – Present
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

Undergraduate Researcher 2019 – 2020
Computational Cognitive Science Group, Brain & Cognitive Sciences, MIT
– Bayesian theory of mind and multi-agent reinforcement learning for social cooperation

Undergraduate Researcher 2018
Izquierdo Lab, Psychology, UCLA
– Paradigms for computing uncertainty and volatility in probabilistic learning in rodents

Honors and Awards

Stanford Institute for Research in the Social Sciences Grant	2021
NeurIPS CoopAI Workshop Best Paper Award	2020
CogSci Computational Modeling Prize in Higher Cognition	2020
NSF Graduate Research Fellowship	2020
Phi Beta Kappa	2020
MIT Hans Lukas Teuber Award for Outstanding Academics	2019, 2020
Amgen National Scholar	2018
U.S. National Physics Team	2016

Publications

Sarah A. Wu and Tobias Gerstenberg (in prep). The role of counterfactual reasoning in responsibility judgments.

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.*

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.* Oxford University Press.

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).

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).

Presentations

Sarah A. Wu and Tobias Gerstenberg. The role of counterfactual reasoning in responsibility judgments. Talk at the *47th Annual Meeting of the Society for Philosophy and Psychology (SPP).*

Sarah A. Wu and Tobias Gerstenberg. The role of counterfactual reasoning in responsibility judgments. Poster at the *43rd Annual Meeting of the Cognitive Science Society (CogSci)*.

Sarah A. Wu and Edward Gibson. Word order predicts cross-linguistic differences in the production of redundant color and number modifiers. Talk at the *26th Architectures and Mechanisms for Language Processing (AMLaP)*.

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

Sarah A. Wu, Ben Hayden, Alireza Soltani, and Alicia Izquierdo. Role of Anterior Cingulate Cortex in Evaluating Expected Uncertainty in Complex Learning Environments. Poster at the *2018 Amgen Scholars Symposium*.

Invited Talks

Social and Cognitive Computational Neuroscience Lab (PI: Stefano Anzellotti) — 2020

Teaching

Teaching Assistant

Stanford PSYCH 252 Statistical Methods for Social & Behavioral Sciences	Winter 2022
Stanford PSYCH 251 Experimental Methods	Fall 2021
Stanford SYMSYS 1 Minds and Machines	Summer 2021
MIT 6.046 Design and Analysis of Algorithms	Spring 2019, Fall 2019, Spring 2020
MIT 6.036 Introduction to Machine Learning	Fall 2018
MIT 12.000 Solving Complex Problems (Terrascope)	Fall 2017

Instructor, MIT Global Teaching Labs — 2019
IIS Curie-Sraffa (STEM high school), Milan, Italy

Lab Assistant
MIT 6.042 Introduction to Discrete Mathematics — Spring 2018

Service and Activites

Director of Mentor Recruitment; **Mentor** — 2020 – Present
Future Advancers of Science and Technology (`https://fast.stanford.edu/`)

Graduate Representative Committee — 2020 – Present
Psychology, Stanford University

Design Staff/Editor — 2018 – 2020
MIT *Technique* vol. 134, 135, 136 (`https://technique.mit.edu/`)

Executive Officer — 2018 – 2020
MIT Brain & Cognitive Sciences Society