Sarah A. Wu

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Education Stanford University

2020 - Present

Ph.D. in Psychology

Advisor: Tobias Gerstenberg

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

Undergraduate Researcher

2017

Sinha Lab for Vision Research, Brain & Cognitive Sciences, MIT

- Feature saliency and strategies in directed visual search

Honors and Awards

NeurIPS CoopAI Workshop Best Paper Award	2020
CogSci Computational Modeling Prize in Higher Cognition	2020
NSF Graduate Research Fellowship	2020
Phi Beta Kappa	2020
Hans Lukas Teuber Award for Outstanding Academics, MIT	2019, 2020
Amgen National Scholar	2018
Singapore-MIT Undergraduate Research Fellow	2017
U.S. National Physics Team	2016
Singapore International Mathematics Challenge Distinction Award	2016

Publications

Sarah A. Wu*, Rose E. Wang*, James A. Evans, Joshua B. Tenenbaum, David C. Parkes, and Max Kleiman-Weiner (2021, in press). Too many cooks: Bayesian inference for coordinating multiagent collaboration. *Topics in Cognitive science*.

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). https://doi.org/10.1111/cogs.12934.

Presentations

Sarah A. Wu*, Rose E. Wang*, James A. Evans, Joshua B. Tenenbaum, David C. Parkes, and Max Kleiman-Weiner. Too many cooks: Bayesian inference for coordinating multi-agent collaboration. Spotlight talk & poster at the *NeurIPS 2020 Cooperative AI Workshop*.

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 Sciences 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, Boston University 2020

Instructor, MIT Global Teaching Labs 2019

IIS Curie-Sraffa (STEM high school), Milan, Italy

Teaching Assistant/Fellow, MIT
6.046 Design and Analysis of Algorithms
Spring 2019, Fall 2019, Spring 2020

6.036 Introduction to Machine Learning Fall 2018
12.000 Solving Complex Problems (Terrascope) Fall 2017

Lab Assistant, MIT

Teaching

6.042 Introduction to Discrete Mathematics Spring 2018

Service and Mentor 2020 – Present

Activites Future Advancers of Science and Technology https://fast.stanford.edu/

Graduate Representative Committee 2020 – Present

Psychology, Stanford University

Design Editor 2018 – 2020

MIT Technique vol. 135, 136 https://technique.mit.edu/

Executive Officer 2018 – 2020

MIT Brain & Cognitive Sciences Society