Sterling Williams-Ceci

PhD Candidate, Department of Information Science, Cornell University scw222@cornell.edu https://sterlcwc.github.io/

EDUCATION

PhD Candidate, Department of Information Science, Cornell University (August 2021 – present)

Professor Michael Macy and Professor Mor Naaman (Co-Chairs)

Professor Gordon Pennycook (minor member)

Professor Lior Zalmanson (ad hoc member)

Graduate Minor: Psychology

B.A. in Robert S. Harrison College Scholar & B.A. in Psychology, Cornell University (May 2021)

Summa Cum Laude

Merrill Presidential Research Scholar (top 1% of graduating class)

Honors Thesis: "Impacts of Online Behavioral Data on Impression Formation Toward

Young Adults"

Minors: Information Science (Concentration: Ethics, Law, and Policy); Communication

RESEARCH INTERESTS

I am interested in applying theories from social and cognitive psychology to studies of Human-AI Interaction. My primary research interest is in how AI can manipulate human cognition in unanticipated ways, with a special emphasis on risks of this technology (such as undesired attitude shift and increased belief in unsupported sexist stereotypes).

RESEARCH POSITIONS

PhD Student in Social Technologies Lab, August 2021 – present: Cornell Tech, New York, NY. Director: Professor Mor Naaman. https://s.tech.cornell.edu/

PhD Student in Social Dynamics Lab, August 2021 – present: Department of Information Science, Cornell University, Ithaca, NY. Director: Professor Michael W. Macy. https://sdl.as.cornell.edu

Undergraduate Research Assistant, September 2017 – May 2021: Department of Information Science, Cornell University, Ithaca, NY. Director: Professor Michael W. Macy. https://sdl.as.cornell.edu

Contributed to a study measuring gender bias in language used to describe tenure-track job applicants by advisors in letters of recommendation across two fields (<u>linked here</u>)

Undergraduate Research Assistant, January 2020 – September 2020, Department of Science & Technology Studies, Cornell University, Ithaca, NY. Director: Professor Malte Ziewitz. https://dueprocess.sts.cornell.edu.

Contributed to an interview study: "Scoring Struggles: Everyday Experiences of Web Search Engines" (linked here)

FELLOWSHIPS AWARDED

Digital Life Initiative Doctoral Fellowship, Cornell Tech (2025-2026)

WORKING PAPERS

Williams-Ceci, S., Minkowitz, R. H., Zalmanson, L., Macy, M. W., & Naaman, M. (In progress). Anthropomorphic AI Chatbots Reinforce the Credibility of a Sexist Stereotype Among Conservative Women. https://osf.io/preprints/psyarxiv/eqisg-v2

UNDER REVIEW

Williams-Ceci, S., Jakesch, M., Bhat, A., Kadoma, K., Zalmanson, L., & Naaman, M. (2025). Biased AI Writing Assistants Shift Users' Attitudes on Societal Issues. Revise & Resubmit at *Science Advances*. https://osf.io/preprints/psyarxiv/mhin6 v3

Silver, B. M., **Williams-Ceci, S.,** & Naaman, M. (2025). Perceptions of AI as a Misinformation Moderator: The Roles of Argument Type and Group Chat Size. https://doi.org/10.31234/osf.io/r9aew_v1

JOURNAL PUBLICATIONS

Williams-Ceci, S. & Williams, W. M. (In Press). Bring Wisdom into AI Education (Before It's Too Late). *Roeper Review*. https://osf.io/preprints/psyarxiv/9v5pe-v3

Williams-Ceci, S. (2025). What I wish I knew when I switched fields for my PhD. *Nature Human Behaviour* [in press]. https://www.nature.com/articles/s41562-025-02214-5

**This is a World View piece in which I discuss the unforeseen challenges I encountered when switching fields for my PhD and offer advice to students who are considering switching fields.

Williams-Ceci, S., Macy, M. W., & Naaman, M. (2024). Misinformation Does Not Reduce Trust in Accurate Search Results, but Warning Banners may Backfire. *Scientific Reports, 14*(10977). https://www.nature.com/articles/s41598-024-61645-8

**Cited by NATO's Science & Technology Macro Trends Report 2024-2025 (<u>linked here</u>)

Bernstein, R.H., Macy, M.W., Williams, W.M., Cameron, C.J., **Williams-Ceci, S.C.**, & Ceci, S.J. (2022). Assessing gender bias in particle physics and social science recommendations for academic jobs. *Social Sciences*, *11*(2), 74. https://doi.org/10.3390/socsci11020074

Williams-Ceci, S., Grose, G.E., Pinch, A.C., Kizilcec, R.F., & Lewis, N.A., Jr. (2021). Combating Sharenting: Interventions to Alter Parents' Attitudes Toward Posting About Their Children Online. *Computers in Human Behavior, 125*. https://doi.org/10.1016/j.chb.2021.106939

Ceci, S.J., **Williams-Ceci, S**., & Williams, W.M. (2016). How to actualize potential: A bio-ecological approach to talent development. *Annals of the New York Academy of Science*, *1-12*. https://doi.org/10.1111/nyas.13057

PAPERS PUBLISHED IN CONFERENCE PROCEEDINGS

Silver, B. M., **Williams-Ceci, S.,** & Naaman, M. (2025). AI is Perceived as Less Trustworthy and Less Effective when Using Emotional Arguments to Moderate Misinformation. In *CHI EA* '25: Extended Abstracts of the CHI Conference on Human Factors in Computing Systems. https://doi.org/10.1145/3706599.3720008

Wang, L., Wang, R., **Williams-Ceci, S.,** Menda, S., & Zhang, A. X. (2023). Is Reporting Worth the Sacrifice of Revealing What I've Sent?' Privacy Considerations When Reporting on End-to-End Encrypted Platforms. *SOUPS 2023*.

https://www.usenix.org/conference/soups2023/presentation/wang

CONFERENCE PRESENTATIONS

[Forthcoming] "Anthropomorphic AI Exacerbates Politically Conservative Women's Belief in a Sexist Stereotype" Single presenter podium talk, *Society for Personality and Social Psychology (SPSP)*, 2026 (Acceptance rate ~12%)

[Forthcoming] "Designs and Dispositions: Implicit Effects of AI on Attitudes." Guest Speaker on a symposium, *Society for Personality and Social Psychology (SPSP)*, 2026

"Biased AI Writing Assistants Shift Users' Attitudes on Societal Issues" *AI+*, *International Advisory Board for Graduate Studies*, Hong Kong, China, June 26, 2025.

**Chosen by Dean Robert Weiss of the Cornell Graduate School as one of two student presenters from Cornell.

"AI is Perceived as Less Trustworthy and Less Effective when Using Emotional Arguments to Moderate Misinformation" *CHI* '25, Yokohama, Japan.

"Stereo-Typing: LLM Chatbots' Appearance of Typing Increases Women's Belief in a False Stereotype" *APS Annual Convention*, Association for Psychological Science, Washington, D.C., May 24, 2025 (largest international Psychology research conference).

"Impact of Generative AI on Opinion Formation" *INFORMS* Annual Meeting, Seattle, WA., October 20, 2024.

"Evaluations of intelligence in physics reveal three times more "brilliance" words used to describe women than men." *International Society for Intelligence Research (ISIR '24)*, Zürich, Switzerland, August 1, 2024.

Williams-Ceci, S.C., Grose, G.E., Pinch, A., Kizilcec, R.F. & Lewis, Jr., N.A. Combating Sharenting: Interventions to alter parents' attitudes toward posting about their children online. *Society for Research in Child Development Biennial Meeting*, Virtual., April 8, 2021.

**Awarded as Strategic Poster for exemplifying Interdisciplinary Research in Child Development

NON-CONFERENCE PRESENTATIONS

"AI Helps Us Write – But At What Cost?" Presented at the following events:

Innovation Meets Impact, Cornell Tech, December 10, 2024

Cornell Board of Trustees Meeting, May 23, 2024

Ivy+ Deans Conference, May 3, 2024

3-Minute Thesis Competition, March 20, 2024

Selected as a finalist for Cornell's 3-Minute Thesis competition, in which participants are limited to three minutes and one static slide to describe their thesis work to a live audience. I was awarded Second Place by a panel of judges and recognized by the Dean of the Graduate School.

"The Cognitive Impacts of Generative AI" University of Central Florida, November 14, 2024

Presentation at Google's New York Office: "The Impact of Rank, Misinformation, and Warning Banners on Trust in Search Results: A Covid-19 Case Study."

Guest Lecture, INFO 4450: Computer-Mediated Communication. "Computer-Mediated Communication in Families."

Guest Lecture, INFO 4800: Behavioral Science Interventions. "Translating Ideas Into Experiments."

College Scholar Honors Thesis Presentation to the Public, 8 May 2021:

Presented the methods and findings of 2 randomized controlled experiments I conducted on impression formation toward young adults based on their online behavioral data. Communicated complex methods and results to an audience of about 100 people from multiple fields and without backgrounds in social science.

Cornell Human Development Youth Engagement Program, 26 June 2019:

Spoke to approximately 100 low income and underserved high school youth as part of New York State's 4-H program. Discussed how I became interested in my research questions and how I found a career path that would allow me to explore them.

College Scholar Research Presentations, 10 May 2019:

Presented to a group of 30 Cornell University students, faculty, and staff how I planned to study various impacts of the Big Data Age on young adults; gave examples of experimental studies I planned to conduct. My presentation was covered by the Cornell Arts and Sciences Communications website (https://tinyurl.com/y4ag7aqf) and the Cornell Chronicle (https://tinyurl.com/y5ry2pcg).

HONORS AND AWARDS

Outstanding TA Award, Cornell Tech, June 10, 2025

2nd Place Winner (\$1,000), 3-Minute Thesis Competition, Cornell University, Spring 2024

Nominated for Outstanding TA Award, INFO 4100: Learning Analytics, Spring 2022

Merrill Presidential Scholar, Cornell University, May 2021

Selected as one of the top 37 graduating seniors in recognition of "outstanding scholastic achievement, strong leadership ability, and demonstrated potential for contributing to society."

Top 1% Strategic Poster Designation for Interdisciplinary Research, SRCD Biennial Meeting, April 2021

My first-authored behavioral intervention experiment on Sharenting (see **Publications**) was designated as one of the top 50 studies out of a few thousand exemplifying interdisciplinary research in child development. Awarded by the Society for Research in Child Development, a leading international organization devoted to developmental psychology research.

Phi Beta Kappa Honor Society inductee, Cornell Chapter, April 2021

Selected Spring 2021 for having a GPA in the top 7% for the senior class.

Selected for Golden Key Honor Society, Cornell University, May 2021

Robert S. Harrison College Scholar, Cornell University, December 2018 – May 2021

National Scholastic Writing Awards (Northeast Region-at-Large; > 300,000 works submitted annually):

Gold Key Award for Creative Writing & National Finalist, 2016 Silver Key Award for Creative Writing, February 2017

New York State Academic Excellence Scholarship, New York State Board of Education, May 2017 (\$2000.00)

TEACHING

Graduate TA for INFO 5330: Technology, Media, and Democracy (Justin Hendrix). Spring 2025.

Graduate TA for INFO 5310: Psychological and Social Aspects of Technology (Professor Mor Naaman). Fall 2024.

Workshop on how to conduct online survey experiments (for Prof. Michael Macy's Social Dynamics Lab). Spring 2024.

Graduate TA for INFO 5310: Psychological and Social Aspects of Technology (Professor Mor Naaman). Fall 2023.

Graduate TA for INFO 5310: Psychological and Social Aspects of Technology (Professor Mor Naaman). Fall 2022.

Graduate TA for INFO 4450: Computer-Mediated Communication (Professor Susan R. Fussell). Spring 2022.

Graduate TA for INFO 4100: Learning Analytics (Professor Rene Kizilcec). Fall 2021.

Undergraduate TA for INFO 1260: Choices and Consequences in Computing (co-taught by Professor Karen Levy and Professor Jon Kleinberg). Spring 2021.

Undergraduate TA for SOC 2580: Six Pretty Good Books (co-taught by Professor Michael W. Macy and Professor Stephen J. Ceci). Spring 2021.

REVIEWING

Children & Society

Journal of Computer-Mediated Communication

Journal of Creative Communications

Proceedings of the ACM Conference on Human-Computer Interaction

Brain & Behavior

International Communication Association Annual Conference

Nature Communications

LEADERSHIP & MENTORSHIP

Supervised MS Students (3) for Independent Study, (Spring 2022, Fall 2022, Spring 2024, Fall 2024).

Research Mentor for Ossining Science Research Program (Spring 2023 – Spring 2024)

Peer Mentor for Cornell Information Science PhD Program (Fall 2022 – Fall 2023)

Lab Manager, Social Dynamics Laboratory, Spring 2022 (Spring 2023)

Coordinated the presentation schedule, managed the member listserv, and led the lab meetings for Professor Macy's Social Dynamics Lab.

Student Lead, Social Dynamics Laboratory (Fall 2017 – Fall 2018)

Led other students working on the Letters of Recommendation project with Professor Macy and coauthors. Assigned tasks to students, held meetings, taught students individually, did the majority of coding, and presented on this project to the entire lab.

AWARDED GRANTS

The Contribution Project (2019) - \$400.00

TECHNICAL SKILLS

Inferential Statistics & Frequentist Approaches (multilevel modeling, hypothesis testing)

R (advanced in data science, inferential statistics and modeling approaches, data visualization, and basic machine learning)

Python (elementary scripting, data tidying, & basic data science)

Javascript, ReactJS (elementary app development)

GitHub (web design and development)

CSS & HTML (elementary design and layout skills)