Misha O'Keeffe

(847) 977-9056 | mokeeffe@stanford.edu | Website | LinkedIn | Github

EDUCATION

The University of Wisconsin-Madison

Madison, WI

B.Sc. – Psychology; Economics

2022 - 2024

- Psychology GPA 4.0; Overall GPA 3.9
- Psi Chi, Psychology club, Economics Student Association, Chadbourn Residential College (CRC)

The University of Alabama

Tuscaloosa, AL

2021 - 2022

B.Sc. - Physics; Minor in English

• Overall GPA 3.79

• Honors College, Society of Physics Students (SPS), Astronomical Society

RESEARCH EXPERIENCE

Social Learning Lab at Stanford University (PI: Hyowon Gweon)

07/24 - Present

Predoctoral Fellow

- Collaborating on a VR experiment investigating how people assess their abilities through physical sensations and task outcomes, with responsibilities in Python programming and participant recruitment (graduate student: Peter Zhu).
- Contributing to manuscript preparation through data cleaning/wrangling (R, MATLAB), data visualizations, and manuscript editing for a project investigating how children and adults estimate difficulty (graduate student: Peter Zhu).
- Working with Dr. Gweon and Dr. Velez to develop a computational model explaining how people leverage sparse statistical information to infer group preferences and affiliations.
- Leading online study implementation on the Lookit platform (CHS) for three concurrent developmental studies (graduate student: Adani Abutto; postdoctoral fellow: Antonia Langenhoff).

Social Interaction Lab at Stanford University (PI: Robert Hawkins)

08/23 - Present

Research Assistant

- Led a multi-classroom study collecting 100+ hours of child-child interactions; currently conducting video redaction and transcript diarization for analysis (postdoctoral fellow: Claire Bergey).
- Developing coding schemes for analyzing child-adult and child-child communication patterns using NLP, statistical analysis, and manual validation (postdoctoral fellow: Claire Bergey).
- Published findings (CogSci 2024) demonstrating that children's communicative repertoire diversifies between 14-58 months and shows stable individual differences matching parental patterns (postdoctoral fellow: Claire Bergey).

Computational Cognitive Development Lab at Harvard University (PI: Elizabeth Bonawitz) 01/23 – 05/2024 Research Assistant

- Analyzing data from study investigating children's belief updating given unexpected evidence, using R for data cleaning and statistical analysis (postdoctoral fellow: Junyi Chu).
- Implemented a large-scale Theory of Mind development study on Lookit platform for 3-6 year olds (postdoctoral fellow: Rosie Aboody).
- Designed stimuli and helped implement a Lookit study examining how 4-6 year olds interpret questioning behavior as signaling doubt (postdoctoral fellow: Rosie Aboody).

Social Cognitive Development Lab at Yale University (PI: Yarrow Dunham)

05/23 - 08/23

Summer Intern

- Developed and validated a Bayesian computational model (WebPPL) to predict how people infer others' motivations from their social roles and actions, finding close alignment with empirical judgments (graduate student: Aaron Baker).
- Conducted statistical analyses and cleaning on an 800+ participant dataset examining relationships between Just World Beliefs, demographics, and social ideologies.

National Aeronautics and Space Administration (NASA)

L'SPACE Scholar

01/22 - 05/22

• Led physics analysis for a 129-page lunar rover mission proposal focused on assessing potential for sustained lunar human presence. Project recognized among top teams nationally. Utilized JMARS, CAD, and MATLAB for modeling.

The University of Alabama (PI: William C. Keel)

08/21 - 05/22

Research Assistant

• Discovered nine rare spiral galaxies (SDRAGNs) through analysis of sky survey data (HST, VLASS), adding to only four previously known. Manuscript in review. Presented findings at URCA conference.

Research Assistant

• Investigated object behavior in curved spacetime using Einstein's Special Relativity theorem through mathematical modeling in MATLAB and Mathematica.

PUBLICATIONS

- Bergey, C. A, O'Keeffe, M. E, & Hawkins, R. (2024). A longitudinal analysis of children's communicative acts.
 Proceedings of the Annual Meeting of the Cognitive Science Society, 46. https://escholarship.org/uc/item/85t9s85w
- J. Tate, W. C. Keel, M. O'Keeffe, O. Ivy Wong, H. Andernach, J. K. Banfield, A. Moiseev, E. Shablovicnkaya, S. Shabala, I. Terentiev, C. Molloy, V. Linares. "Here Be SDRAGNs Hubble Space Telescope Observations of Spiral-Galaxy Hosts of Large Double Radio Sources." Monthly Notices of the Royal Astronomical Society (MNRAS), [Preprint].

Posters, Talks, & Projects

- O'Keeffe, M. (2024). *Modeling Question-Based Social Inferencing*. Presented to the Institute for Research in the Social Sciences at Stanford University.
- Liu, S., Chu, S., O'Keeffe, M., Ullman, T., & Bonawitz, E. (2024). *Stumped! How well can 3-8-year-old children learn to think outside the box?* Submitted to Society for Research in Child Development.
- Bergey, C., Lyu, A., **O'Keeffe, M.**, Li, S., Zubak, Y., Plum, B., Yang, S., Patil, A., Zhou, I., & Hawkins, R. (2024). *Examining Social Interaction from a Preschooler's Point of View.* Submitted to Society for Research in Child Development.
- O'Keeffe, M., *Liu, S., Chu, J., Bonawitz, E., & Ullman, T. (2024). *Learning to Think Outside the Box.* Presented at the Harvard Spring Symposium.
- O'Keeffe, M., Baker, A., Dunham, Y., & Jara-Ettinger, J. (2023). *Mental State Inferences and Social Roles*. Presented at the Social Interaction Lab.
- O'Keeffe, M., *Wang, W., & Aboody, R. (2023). *Understanding Preschoolers' Source Considerations in Testimony*. Presented at the Computational Cognitive Development Lab at Harvard Fall Symposium.
- O'Keeffe, M., Baker, A., Dunham, Y., & Jara-Ettinger, J. (2023). Formalizing Institutional [Role] Models. Presented at the Social Cognitive Development Lab at Yale Summer Symposium.
- O'Keeffe, M., *Shen, F., & Aboody, R. (2023). *Causal Counterfactual Reasoning*. Presented at the Computational Cognitive Development Lab at Harvard Spring Symposium.
- J. Tate, W. C. Keel, M. O'Keeffe, O. Ivy Wong, H. Andernach, J. K. Banfield, A. Moiseev, E. Shablovicnkaya, S. Shabala, I. Terentiev, C. Molloy, V. Linares. *Here Be SDRAGNs Hubble Space Telescope Observations of Spiral-Galaxy Hosts of Large Double Radio Sources*. Poster presented at the Undergraduate Research and Creative Activity Conference (2021).
- Dumka, A., Hurst, L., *Stingley, A., *Dejo Lopez, J., *Behlen, K., *Solis, M., *O'Keeffe, M., *Goenka, R., *Vardanyan, S., *Guerrerro, V., & *Pham, Y. (2021). Preliminary Design Review: Team 29. NASA L'Space Mission Concept Academy.

Fellowships, Scholarships & Awards

- Dean's List 2021; 2022; 2023; 2024
- UW Housing Scholar (\$15,219) 2022; 2023; 2024
- Outstanding Undergraduate Research Scholar (OURS) Award (\$1,000) 2023
- Global Gateways Initiative Scholar (\$8,350) 2023
- SuccessWorks Internship Fund (\$3,000) 2023
- Yale Internship Stipend (\$5,000) 2023
- Economics Association Chicago Scholar (\$300) 2023
- Presidential Merit Scholarship (\$28,000) 2021; 2022
- Honors College 2021; 2022
- Presidents List 2021

^{*} Indicates equal contribution.

SERVICE

- Introduction to Data Analysis in Python. Workshop led for the SLL and LangCog Lab Summer Interns. (2024)
- Stanford Psychology Podcast. Interviewer and podcast host. (2024)
- Stanford Psychology Diversity Committee. (2024)
- Stanford Psychology Paths to PhD. Volunteer (2024)
- Tutoring. Provided free tutoring for Economics and Psychology. (2023-2024)
- Big Sibling Program. Founded a mentorship program placing over 250 freshmen with upperclassmen tutors. (2022-2024)

Professional Experience

The University of Wisconsin-Madison Resident Advisor

Madison, WI 01/23 – 05/24

Skills

• Languages: English (native); Spanish and French (intermediate)

• Programming: Github, JavaScript, Python, R / RStudio, SPSS, Python, STATA, and MATLAB

• Running experiments: Lookit, Qualtrics, Prolific

• Manuscripts: LaTeX/Overleaf