ERIK BROCKBANK

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Last Updated: Summer, 2024

APPOINTMENTS

Stanford University   *Sep. 2023 -*
Postdoctoral Fellow *Department of Psychology*

EDUCATION

University of California, San Diego   *2023*
Ph.D. *Experimental Psychology*

Stanford University   *2014*
B.S., M.S. *Symbolic Systems*

ACADEMIC HONORS & AWARDS

PsychTerms Graduate Research Award   *2022*
Psychonomic Society Graduate Conference Award   *2020*
Cognitive Science Society Computational Prize   *2020*

FELLOWSHIPS & GRANTS

NSF SBE Postdoctoral Research Fellowship   *2024-2026*
UCSD Academic Senate General Research Grant   *2022*
UCSD Anderson Graduate Research Fellowship   *2019*
UCSD Katzin Graduate Fellowship   *2018-2023*

MANUSCRIPTS

Brockbank, E., Lloyd, H., Tait, Z., Bear, A., Liao, S., & Fan, J. E. (in prep). Measuring links between student attitudes, engagement, and learning in introductory data science courses.

JOURNAL ARTICLES

Brockbank, E., Verma, A., Lloyd, H., Huey, H., Padilla, L., & Fan, J. E. (*under review*). Evaluating convergence between two data visualization literacy assessments.

Brockbank, E., & Vul, E. (2024). Repeated rock, paper, scissors play reveals limits in adaptive sequential behavior. *Cognitive Psychology*.

Brockbank, E., Lombrozo, T., Gopnik, A., & Walker, C. (2022). Ask me why, don't tell me why: Asking children for explanations facilitates relational thinking. *Developmental Science*.

Brockbank, E., & Walker, C. (2022). Explanation Impacts Hypothesis Generation, but not Evaluation, During Learning. *Cognition*.

Brockbank, E., Vul, E. & Barner, D. (2022). Ongoing dynamic calibration produces unstable number estimates. *Journal of Experimental Psychology: General*.

Schneider, R., **Brockbank, E.**, Feiman, R., & Barner, D. (2021). Counting and the ontogenetic origins of exact equality. *Cognition*.

Brockbank, E., & Vul, E. (2021). Formalizing Opponent Modeling with the Rock, Paper, Scissors Game. *Games*.

Destefano, I., Oey, L.A., **Brockbank, E.**, & Vul, E. (2021). Integration by Parts: Collaboration and Topic Structure in the CogSci Community. *Topics in Cognitive Science.*

CONFERENCE PROCEEDINGS

Jin, E., Huang, Z., Fränken, J. P., Liu, W., Cha, H., **Brockbank, E.**, Wu, S., Zhang, R., Wu, J., & Gerstenberg, T. (2024). MARPLE: A Benchmark for Long-Horizon Inference. In *NeurIPS Datasets & Benchmarks Track.*

***Brockbank, E.**, *Yang, J., Govil, M., Fan, J. E., & Gerstenberg, T. (2024). Without his cookies, he's just a monster: A counterfactual simulation model of social explanation. In *Proceedings of the 46th Annual Conference of the Cognitive Science Society.*

*Wu, S., ***Brockbank, E.**, Cha, H., Fränken, J. P., Jin, E., Huang, Z., Liu, W., Zhang, R., Wu, J., & Gerstenberg, T. (2024). Whodunnit? Inferring what happened from multimodal evidence. In *Proceedings of the 46th Annual Conference of the Cognitive Science Society.*

Brockbank, E., Wang, H., Yang, J., Mirchandani, S., Bıyık, E., Sadigh, D., & Fan, J. (2022). How do people incorporate advice from artificial agents when making physical judgments? In *Proceedings of the 44th Annual Conference of the Cognitive Science Society.*

Brockbank, E., & Vul, E. (2021). Humans fail to outwit adaptive rock, paper, scissors opponents. In *Proceedings of the 43rd Annual Conference of the Cognitive Science Society.*

Brockbank, E., & Vul, E. (2020). Recursive Adversarial Reasoning in the Rock, Paper, Scissors Game. In *Proceedings of the 42nd Annual Conference of the Cognitive Science Society.*

Brockbank, E., & Walker, C. (2020). Explanation Supports Hypothesis Generation in Learning. In *Proceedings of the 42nd Annual Conference of the Cognitive Science Society.*

Oey, L.A., Destefano, I., **Brockbank, E.**, & Vul, E. (2020). Formalizing interdisciplinary collaboration in the CogSci community. In *Proceedings of the 42nd Annual Conference of the Cognitive Science Society.*

Brockbank, E., & Vul, E. (2019). Mapping visual features onto numbers. In *Proceedings of the 41st Annual Conference of the Cognitive Science Society.*

Brockbank, E., & Smith, K. & Vul, E. (2019). When do people use containment heuristics for physical predictions? In *Proceedings of the 41st Annual Conference of the Cognitive Science Society.* (Retraction November, 2019).

BOOK CHAPTERS

Brockbank, E., Holdaway, C., Acosta-Kane, D. & Vul, E. (2023). Sampling Data, Beliefs, and Actions. In Fiedler, K., Juslin, P., & Denrell, J. (Eds.), *Sampling in Judgment and Decision Making.* Cambridge University Press.

CONFERENCE PRESENTATIONS

Jin, E., Huang, Z., Fränken, J. P., Liu, W., Cha, H., **Brockbank, E.**, Wu, S., Zhang, R., Wu, J., & Gerstenberg, T. (2024). MARPLE: A Benchmark for Long-Horizon Inference. Poster presented at *NeurIPS Datasets & Benchmarks Track.*

***Brockbank, E.**, *Yang, J., Govil, M., Fan, J. E., & Gerstenberg, T. (2024). Without his cookies, he's just a monster: A counterfactual simulation model of social explanation. Poster presented at the *46th Annual Conference of the Cognitive Science Society.*

*Wu, S., ***Brockbank, E.**, Cha, H., Fränken, J. P., Jin, E., Huang, Z., Liu, W., Zhang, R., Wu, J., & Gerstenberg, T. (2024). Whodunnit? Inferring what happened from multimodal evidence. Poster presented at the *46th Annual Conference of the Cognitive Science Society.*

***Brockbank, E.**, *Yang, J., Govil, M., Fan, J. E., & Gerstenberg, T. (2024). Without his cookies, he's just a monster: A counterfactual simulation model of social explanation. Talk presented at the *50th Annual Conference of*

the Society for Philosophy and Psychology.

Hurwitz, E., Dean, J., Farrell, B., Mckinty, A., **Brockbank, E.**, Gopnik, A., Walker, C. (2024). A Cognitive Development Model of the Effects of Psychedelics. Poster presented at the *50th Annual Conference of the Society for Philosophy and Psychology.*

Lloyd, H., Tait, Z., **Brockbank, E.**, Liao, S., & Fan, J. (2022). How well do student attitudes and engagement predict learning outcomes in introductory data science courses? Talk at the *PsychTerms Annual Meeting.*

Brockbank, E., Wang, H., Yang, J., Mirchandani, S., Bıyık, E., Sadigh, D., & Fan, J. (2022). How do people incorporate advice from artificial agents when making physical judgments? Talk at the *44th Annual Conference of the Cognitive Science Society.*

Brockbank, E., & Vul, E. (2021). Rock, paper, scissors agents exploit patterns in human sequential behavior. Talk at the *62nd Annual Meeting of the Psychonomic Society.*

Brockbank, E., & Vul, E. (2021). Humans fail to outwit adaptive rock, paper, scissors opponents. Poster presented at the *43rd Annual Conference of the Cognitive Science Society.*

Brockbank, E., & Walker, C. (2021). Explanation Impacts Hypothesis Generation, but not Evaluation, during Learning. Poster presented at the *47th Annual Conference of the Society for Philosophy and Psychology.*

Brockbank, E., & Vul, E. (2020). Modeling Adaptive Reasoning in Rock, Paper, Scissors. Poster presented at the *61st Annual Meeting of the Psychonomic Society.*

Brockbank, E., & Vul, E. (2020). Recursive Adversarial Reasoning in the Rock, Paper, Scissors Game. Talk at the *42nd Annual Conference of the Cognitive Science Society.*

Brockbank, E., & Walker, C. (2020). Explanation Supports Hypothesis Generation in Learning. Talk at the *42nd Annual Conference of the Cognitive Science Society.*

Oey, L.A., Destefano, I., **Brockbank, E.**, & Vul, E. (2020). Formalizing interdisciplinary collaboration in the CogSci community. Talk at the *42nd Annual Conference of the Cognitive Science Society.*

Brockbank, E., & Vul, E. (2020). Adaptive Reasoning in Rock-Paper-Scissors. Talk at the *53rd Annual Conference of the Society for Mathematical Psychology.*

Brockbank, E., & Vul, E. (2019). Mapping visual features onto numbers. Poster presented at the *41st Annual Conference of the Cognitive Science Society.*

Brockbank, E., Smith, K., & Vul, E. (2019). When do people use containment heuristics for physical predictions? Poster presented at the *41st Annual Conference of the Cognitive Science Society.*

Brockbank, E., & Vul, E. (2019). Mapping visual features onto numbers. Poster presented at the *45th Annual Conference of the Society for Philosophy and Psychology.*

INVITED TALKS

2023, December. Stanford Social and Language Technology Reading Group

2022, October. Naval Research Laboratory "Reasoning Lunch Series"

TEACHING

Instructor of Record Data & Model Programming for Comp. Social Science	*Mar.-Jun. 2022*
Teaching Assistant Research Methods in Psychology	*Jan.-Mar. 2023*
Teaching Assistant Research Methods in Psychology	*Sep.-Dec. 2022*
Teaching Assistant Research Methods in Psychology	*Sep.-Dec. 2021*
Teaching Assistant Computational Social Science Foundations (python)	*Aug.-Sep. 2021*
Teaching Assistant Psychology: Cognitive Foundations	*Mar.-Jun. 2021*

Teaching Assistant Introduction to Psychology	*Sep.-Dec. 2020*
Teaching Assistant Psychology of Parenting	*Mar.-Jun. 2020*
Teaching Assistant Introduction to Psychology	*Sep.-Dec. 2019*
Teaching Assistant Industrial & Organizational Psychology	*Jul.-Aug. 2019*
Teaching Assistant Developmental Psychology	*Jan.-Mar. 2019*

MENTORSHIP

Mishika Govil (Stanford Undergraduate Researcher)	*Nov. 2023-*
Alison Yu (UCSD Undergraduate Researcher)	*Apr. 2021-Mar. 2023*
MJ Mei (UCSD Undergraduate Researcher)	*Apr. 2021-Mar. 2023*
Ziling Gong (UCSD Undergraduate Researcher)	*Apr. 2021-Mar. 2023*
Annalea O'Halloran (UCSD Undergraduate Researcher)	*Apr. 2021-Dec. 2021*

LEADERSHIP & OUTREACH

UCSD Graduate Student Association Psychology Dept. Representative	*2022-2023*
UCSD Psychology Department Climate Committee Member	*2020-2023*
UCSD Psychology Department Graduate Statistics Advisor	*2019-2023*
UCSD Psychology Student Speaker Series Graduate Student Officer	*2019-2023*
UCSD Graduate Students GradAMP Mentor	*2020-2021*
UCSD Psychology Data Science Club Club Leader	*2019-2020*
UCSD Psychology Colloquium Series Graduate Student Officer	*2019-2020*

PROFESSIONAL SERVICE

Ad hoc reviewer: *Cognitive Science, Journal of Experimental Psychology: Learning, Memory, and Cognition*