ERIK BROCKBANK

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EDUCATION

University of California, San Diego *2018–2023 (expected)*
Ph.D. *Psychology and Cognitive Science* (GPA: 3.94 / 4.0)

Marine Biological Laboratory Summer Course *2020 - Remote*
Brains, Minds, & Machines Program

Stanford University *2014*
B.S., M.S. *Symbolic Systems* (GPA: 3.63 / 4.0)

ACADEMIC HONORS AND AWARDS

UCSD Chancellor's Interdisciplinary Collaboratories ($7,500)	*Feb. 2021*
Psychonomic Society Graduate Conference Award ($1,000)	*Oct. 2020*
Cognitive Science Society Computational Prize ($1,000)	*June 2020*
UCSD Anderson Graduate Research Fellowship ($1,500)	*Sep. 2019*
UCSD Katzin Graduate Fellowship ($50,000)	*Sep. 2018*
K. Jon Barwise Award for distinguished contributions to Stanford Symbolic Systems	*June 2014*

LEADERSHIP & OUTREACH EXPERIENCE

UCSD Psychology Department Climate Committee Member	*Nov. 2020 - present*
UCSD Psychology Department Graduate Statistics Advisor	*Sep. 2019 - present*
UCSD Psychology Data Science Club Club Leader	*May 2019 - present*
UCSD Psychology Student Speaker Series Graduate Student Officer	*May 2019 - present*
UCSD Graduate Students GradAMP Mentor	*Sep. 2020 - Mar. 2021*
UCSD Psychology Colloquium Series Graduate Student Officer	*May 2019 - May 2020*
Stanford Symbolic Systems Student Society Founder	*2013*
Stanford Symbolic Systems Department Undergraduate Advising Fellow	*2013, 2014*

RESEARCH EXPERIENCE

UC San Diego Computational Cognition Lab *Sep. 2018 - present*
Ph.D. Research

· Bayesian computational modeling and behavioral research on adversarial reasoning, numerical cognition (PI: Edward Vul)

UC San Diego Early Learning & Cognition Lab *Sep. 2018 - present*
Ph.D. Research

· Behavioral research on hypothesis generation, relational reasoning, and explanation (PI: Caren Walker)

Stanford Virtual Human Interaction Lab *June 2013 - June 2014*
Master's Research

· Master's thesis on learning in virtual environments (Advisors: Jeremy Bailenson, Daniel Schwartz)

JOURNAL ARTICLES

Brockbank, E., Vul, E. & Barner, D. (in press). 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.*

MANUSCRIPTS

Brockbank, E., & Walker, C. (in review). Explanation Impacts Hypothesis Generation, but not Evaluation, During Learning.

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

Brockbank, E., & Vul, E. (in prep). Rock, paper, scissors reveals limits of a "behaviorist" theory of mind.

CONFERENCE PROCEEDINGS

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. (in revision). Sampling Data, Beliefs, and Actions. *In Fiedler, K., Juslin, P., & Denrell, J. (Eds), Sampling in Judgment and Decision Making.*

CONFERENCE PRESENTATIONS

Brockbank, E., & Vul, E. (2021, November). 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, July). 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, July). 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, November). Modeling Adaptive Reasoning in Rock, Paper, Scissors. Poster presented at the 61st Annual Meeting of the Psychonomic Society.

Brockbank, E., & Vul, E. (2020, July). 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, July). 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, July). Formalizing interdisciplinary collaboration in the CogSci community. Talk at the 42nd Annual Conference of the Cognitive Science Society.

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

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

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

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

INVITED TALKS

Brockbank, E. (2021, November) How do people judge the competence of learning agents? Invited talk at the Stanford Social Learning Lab. Remote.

Brockbank, E. (2020, October) Behaviorist theory of mind: Human adaptive reasoning in the rock, paper, scissors game. Invited talk at the UCSD cogtools Lab. San Diego, CA.

Brockbank, E. (2020, October) Behaviorist theory of mind: Human adaptive reasoning in the rock, paper, scissors game. Invited talk at the UCSD cognitive brown bag. San Diego, CA.

TEACHING EXPERIENCE

Teaching Assistant Research Methods in Psychology	*Sep. - Dec. 2021*
Teaching Assistant Computational Social Science Foundations (python)	*Aug. 2021*
Teaching Assistant Psychology: Cognitive Foundations	*Mar. - Jun. 2021*
Teaching Assistant Introduction to Psychology	*Sep. - Dec. 2020*
Teaching Assistant Psychology of Parenting	*Mar. - June 2020*
Teaching Assistant Introduction to Psychology	*Sep. - Dec. 2019*
Teaching Assistant Industrial & Organizational Psychology	*Jul. - Aug. 2019*

Teaching Assistant Developmental Psychology *Jan. - Mar. 2019*
Teaching Assistant Media Economics *Mar. - June 2014*
Teaching Assistant Introduction to Cognitive Science *Jan. - Mar. 2014*
Teaching Assistant Introduction to Cognitive Psychology *Sep. - Dec. 2012*

TECHNICAL SKILLS

Languages	Python; Golang; experience with Java, C++, C
Analytics	R; Python (pandas); Matlab; Excel
Web	HTML; CSS; Typescript; Javascript (jQuery, Flask, node.js, socket.io, D3.js)
Databases	MySQL; HiveQL
Tools	github, Anaconda/Jupyter, AWS
Other	Spanish (fluent)