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 Graduate Students GradAMP Mentor	Sep. 2020 - Mar. 2021
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 Colloquium Series Graduate Student Officer	May 2019 - present
UCSD Psychology Student Speaker Series Graduate Student Officer	May 2019 - present
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

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

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. & Barner, D. (in review). Ongoing dynamic calibration produces unstable number estimates.

Schneider, R., **Brockbank**, E., Feiman, R., & Barner, D. (in prep). Impacts of language on children's understanding of equality.

CONFERENCE PROCEEDINGS

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 prep) An expected utility framework for sampling in decision making. In Fiedler, K., Juslin, P., & Denrell, J. (Eds), Sampling in Judgment and Decision Making.

CONFERENCE PRESENTATIONS

Brockbank, E., & Vul, E. (2020, November). Modeling Adaptive Reasoning in Rock, Paper, Scissors. Poster presented at the 61st Annual Meeting of the Psychonomics 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. (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 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 (matplotlib); 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)