MARLENE D. BERKE

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EDUCATION

Yale University 2019 - Present

PhD in Cognitive Psychology in 2024 (anticipated)

Cornell University 2015 - 2019

BA in College Scholar: Computational Cognitive Neuroscience Minors in Statistics, Biology, Psychology, and Cognitive Science

HONORS AND AWARDS

Graduate Student Assembly Conference Travel Fellowship

 $Summer\ 2022$

To attend the International Conference on Machine Learning (ICML).

College Scholar Honors Thesis

Fall 2018 - Spring 2019

Awarded Summa Cum Laude

Tanner Dean Scholar

2015 - 2019

Granted a \$5000 research stipend for Summer 2018

PUBLICATIONS

Berke, M., Azerbayev, Z., Belledonne, M., Tavares, Z., & Jara-Ettinger, J. (under review). Learning a metacognition for object detection.

Berke, M., Walter-Terrill, R., Jara-Ettinger, J., & Scholl,. B. J. (*in press*). Flexible goals require that inflexible perceptual systems produce veridical representations: Implications for realism as revealed by evolutionary simulations. *Cognitive Science*.

Berke, M., & Jara-Ettinger, J. (2022). Integrating Experience into Bayesian Theory of Mind. Proceedings of the 44th Annual Conference of the Cognitive Science Society.

Berke, M., & Jara-Ettinger, J. (2021). Thinking About Thinking Through Inverse Reasoning. Proceedings of the 43rd Annual Conference of the Cognitive Science Society.

Berke, M., Belledonne, M., & Jara-Ettinger, J. (2020). Learning a metacognition for object perception. *NeurIPS SVRHM workshop*.

Berke, M. D., Field, D. J., & Cleland, T. A. (2017). The Sparse Structure of Natural Chemical Environments. Proceedings from the International Symposium on Olfaction and Electronic Nose (ISOEN).

SELECTED TALKS AND POSTERS

Berke, M. (presenter), Azerbayev, Z., Tavares, Z., Jara-Ettinger, J. (2022). MetaCOG: Learning a metacognition for what objects are actually there. Poster presented at ICLR Workshop – Beyond Bayes: Paths Towards Universal Reasoning Systems.

Berke, M. (presenter), (2022). Modeling Metacognition. Invited talk in the Human and Machine Cognition Lab's seminar on social learning and decision making at Max Planck Institute for Biological Cybernetics in Tübingen, Germany.

Berke, M. (presenter), Walter-Terrill, R., Jara-Ettinger, J., & Scholl,. B. (2021). Flexible goals require that inflexible perceptual systems produce veridical representations: Implications for realism as revealed by evolutionary simulations. Talk given at the 21st Annual Meeting of the Vision Science Society.

Berke, M. (presenter), & Jara-Ettinger, J. (2021). Thinking About Thinking Through Inverse Reasoning. Poster presented at the 47st Annual Meeting of the Society for Philosophy and Psychology.

TEACHING

Introduction to Statistics

Spring 2021 & 2022

Teaching Fellow (Yale University). Led discussion sections.

Multivariate Statistics

Fall 2020 & 2021

Teaching Fellow (Yale University). Delivered guest lectures.

Introduction to Statistics for Biology

Fall 2017 - Spring 2019

Teaching Assistant (Cornell University). Led discussion sections.

MENTORSHIP

Psychology SNEAK Peak Program Mentor

Fall 2020 - Present

Yale University. The program pairs individuals from an underrepresented background with a current PhD student to help guide them through applying to graduate school.

Psychology Graduate Student Peer Mentor

Fall 2020 - Present

Yale University

Peer Orientation Mentor

Summer 2020

Yale University

Undergraduates Research Assistants Mentored

Zhangir Azerbayev (December 2020 - May 2022), Tanushree Burman (January 2020 - Fall 2021), Bernardo Eilert Trevisan (January 2020 - Spring 2021), Ben Sterling (June 2022 - Present), Abi Tenenbaum (June 2022 - Present).

SERVICE

Reviews

Reviewed for Psychological Review and for the 43rd and 44th Annual Conference of the Cognitive Science Society.