Mayank Agrawal

Ph.D. Student
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Education

Princeton University, Princeton, NJ 2018–
Ph.D. Psychology and Neuroscience
Advisors: Jonathan D. Cohen & Thomas L. Griffiths

Swarthmore College, Swarthmore, PA 2014–2018
B.A. Computer Science and Philosophy
Thesis: *An Application of Computational Learning Theory to Moral Epistemology*
Advisor: Alan R. Baker

Publications

Working Manuscripts

1. **Agrawal M**, Mattar MG, Cohen JD, Daw ND. The Temporal Dynamics of Opportunity Costs: A Normative Account of Cognitive Fatigue and Boredom.
2. Peterson JC, Bourgin DD, **Agrawal M**, Reichman D, Griffiths TL. Using large-scale experiments and machine learning to discover new theories of human decision-making.

Peer-Reviewed

3. **Agrawal M**, Peterson JC, Griffiths TL. (2020). Scaling up Psychology via Scientific Regret Minimization. *Proceedings of the National Academy of Sciences.*
4. Jas M, Achakulvisut T, Idrizović A, Acuna D, Antalek M, Marques V, Odland T, Garg RP, **Agrawal M**, Umegaki Y, Foley P, Fernandes H, Harris D, Li B, Pieters O, Otterson S, de Toni G, Rodgers C, Dyer E, Hamalainen M, Kording K, Ramkumar P. Pyglmnet: Python implementation of elastic-net regularized generalized linear models. *Journal of Open Science Software.*
5. **Agrawal M**, Peterson JC, Griffiths TL. (2019). Using Machine Learning to Guide Cognitive Modeling: A Case Study in Moral Reasoning. *Proceedings of the 41st Annual Conference of the Cognitive Society.*
6. Moraud, EM, Tinkhauser G, **Agrawal M**, Brown P, Bogacz R. (2018). Predicting Beta Bursts From Local Field Potentials to Improve Closed-loop DBS Paradigms in Parkinson's Patients. *40th Annual International Conference of the IEEE Engineering in Medicine and Biology Society*.

Conference Abstracts

7. **Agrawal M**. (2020). An Application of Computational Learning Theory to Moral Epistemology. *46th Annual Meeting of the Society for Philosophy and Psychology.* (Cancelled due to COVID-19.)
8. **Agrawal M**, Mattar MG, Daw ND, Cohen JD. (2020). The Temporal Dynamics of Opportunity Costs: A Normative Account of Mental Fatigue and Boredom. *'Mental Effort: One Construct, Many Faces?' Workshop, 42nd Annual Conference of the Cognitive Society.*

9. **Agrawal M**, Mattar MG, Daw ND, Cohen JD. (2019). Rational Arbitration of Hippocampal Replay. *2019 Conference on Cognitive Computational Neuroscience.*

Awards

Cognitive Science Graduate Student Fellow, *Princeton University* 2020

National Defense Science & Engineering Graduate Fellowship 2019

Center for Brains, Minds & Machines Summer School 2019

Computational Neuroscience Travel Grant, *Swarthmore College* 2017

John W. Nason Community Service Fellowship, *Swarthmore College* 2016

Philip Evans Scholar, *Swarthmore College* 2014

Teaching

PRINCETON UNIVERSITY

PSY 210: History of Psychology, *Teaching Assistant* 2021

PSY / COS 454: Probabilistic Models of Cognition, *Teaching Assistant* 2020

PRINCETON NEUROSCIENCE INSTITUTE

Introduction to Python, *Instructor* 2019

SWARTHMORE COLLEGE

PHIL 012: Logic, *Teaching Assistant* 2017

CPSC 021: Introduction to Computer Science, *Teaching Assistant* 2015

Invited Talks and Panels

1. Bioengineering Colloquium – PRINCETON, NJ 2020
2. Workshop on Scaling Cognitive Science – COGNITIVE SCIENCE CONFERENCE 2020
3. Scaling Cognitive Science Workshop – PRINCETON, NJ 2019