Yotam Sagiv

Princeton Neuroscience Institute A08 Princeton NJ 08540 (609) 906-1929 ysagiv@princeton.edu

Current position

PhD Candidate, Princeton Neuroscience Institute

Education

PhD in Neuroscience Princeton University Advisors: Nathaniel Daw, Ilana Witten

BSE in Computer Science, magna cum laude 2013-2018 Princeton University Senior thesis (Adv. Jonathan D. Cohen, Yael Niv): "Learn fast or multitask well: First steps toward a normative theory of multitasking"

2018-present

Publications (* denotes equal contribution)

- Sagiv Y., Akam T., Witten I. B., Daw N. D. Prioritizing experience replay when future goals are unknown. *In prep.*
- Lee R. S., **Sagiv Y.**, Engelhard B., Witten I. B., Daw N. D. (2023). A feature-specific prediction error model explains dopaminergic heterogeneity. *Under review at Nature Neuroscience.*
- Musslick S., Saxe A. M., Hoskin A. N., Sagiv Y., Reichman D., Petri G., Cohen J. D. (2023). On the Rational Boundedness of Cognitive Control: Shared Versus Separated Representations. *PsyArXiv.*
- Stone I.*, Sagiv Y.*, Park I., Pillow J. (2023). Spectral learning of Bernoulli latent dynamical systems models. Transactions of Machine Learning Research.
- Sagiv Y., Musslick S., Niv Y., Cohen J. D. (2020). Efficiency of learning vs. processing: Towards a normative theory of multitasking. arXiv: 2007.03124 [q-bio.NC]

Conference presentations

- Sagiv Y., Akam T., Witten I. B., Daw N. D. (2023). Prioritizing replay when future goals are unknown. Presented at the Society for Neuroscience Annual Meeting (SfN). [Poster]
- Sagiv Y., Akam T., Witten I. B., Daw N. D. (2023). Prioritizing replay when future goals are unknown. Presented at Computational and Systems Neuroscience (COSYNE). [Poster]
- Stone I.*, Sagiv Y.*, Park I., Pillow J. (2023). Spectral learning of Bernoulli latent dynamical systems models. Presented at Computational and Systems Neuroscience (COSYNE). [Poster]
- Sagiv Y., Akam T., Witten I. B., Daw N. D. (2022). Prioritizing replay when future goals are unknown. Presented at Reinforcement Learning and Decision Making (RLDM). [Spotlight Poster]

Sagiv Y., Musslick S., Niv Y., Cohen J. D. (2018). Rational approaches to multitasking at global and local timescales. Presented at Parallel Distributed Processing and the Emergence of an Understanding of Mind, Symposium at Princeton University. [Poster]	
Sagiv Y., Musslick S., Niv Y., Cohen J. D. (2018). Efficiency of processing: Towards a normative theory of multitasking. Pre 40th Annual Meeting of the Cognitive Science Society. Wisc [Contributed Talk]	f learning vs. occeedings of the consin, pp. 1002-07.
Awards, fellowships	
William A. Dippel '50 $*55$ Graduate Fellowship	2018-2019
Computational Modeling Prize for Higher Level Cognition Received at the 40th Annual Meeting of the Cognitive Science Sc for paper titled "Efficiency of learning vs. processing: Towards a normative theory of multitasking".	2018 ociety
Sigma Xi Research Honor Society	2018
Teaching	
Graduate Mentor	
Princeton University	_
Ashley Chung (2022-2023): Expanding feature-specific to pro- models of dopamine heterogeneity with actor-critic methods	ojection-specific
Assistant Instructor Princeton University	2019-2020
NEU501A: Neuroscience: From Molecules to Systems to Behavior (Fall) NEU202: Introduction to Cognitive Neuroscience, Head AI (Spring)	
Instructor	2019-2021
Princeton Neuroscience Institute Graduate Bootcamp	
How to write "good" code: Language-agnostic principles of code design (2019) Introduction to probabilistic models (2020, 2021)	
Undergraduate Laboratory Teaching Assistant	2015-2017
Princeton University, Department of Computer Science	
COS109: Computers in Our World COS126: Computer Science: An Interdisciplinger: Approach	
COS120: Computer Science: An Interdisciplinary Approach COS217: Introduction to Programming Systems	
COS226: Algorithms and Data Structures	
Predoctoral experience	
Undergraduate researcher	2016-2018
Neuroscience of Cognitive Control Lab, PI: Jonathan D. Cohen Princeton University	
Research assisstant	May-August 2015
Computational Intelligence Group, PI: Agoston E. Eiben Vrije Universiteit Amsterdam	

June-August 2014

Software engineering intern PND Metrics Team TomTom International BV

Miscellaneous

Programming languages: Python, Julia, MatLab