Ionatan Kuperwajs **Curriculum Vitae**

Contact Information

Postdoctoral Research Associate
Princeton University
Department of Computer Science

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Employment

Princeton University, Princeton, NJ — 2024-Present
Postdoctoral Research Associate
Department of Computer Science
Advisor: Thomas Griffiths

Education

New York University, New York, NY — 2018-2024
Ph.D. in Neural Science
Thesis: Cognitive mechanisms of complex planning
Advisor: Wei Ji Ma

Macalester College, St. Paul, MN — 2014-2018
B.A. in Neuroscience, Computer Science, and Mathematics
Honors in Mathematics, Magna Cum Laude
Advisor: Andrew Beveridge

Publications

I Kuperwajs, HH Schütt, and WJ Ma (2023). Using deep neural networks as a guide for modeling human planning. *Scientific Reports*. pdf

B van Opheusden, **I Kuperwajs**, G Galbiati, Z Bnaya, Y Li, and WJ Ma (2023). Expertise increases planning depth in human gameplay. *Nature*. pdf

In Prep

I Kuperwajs, MK Ho, and WJ Ma. Deriving principles for thinking ahead with an abstracted model of meta-planning.

Conference Proceedings

I Kuperwajs, HH Schütt, and WJ Ma (2022). Improving a model of human planning via large-scale data and deep neural networks. *Proceedings of the 44th Annual Meeting of the Cognitive Science Society*. pdf

I Kuperwajs and WJ Ma (2022). A joint analysis of dropout and learning functions in human decision-making with massive online data. *Proceedings of the 44th Annual Meeting of the Cognitive Science Society*. pdf

I Kuperwajs and WJ Ma (2021). Planning to plan: a Bayesian model for optimizing the depth of decision tree search. *Proceedings of the 43rd Annual Meeting of the Cognitive Science Society*. pdf

I Kuperwajs, B van Opheusden, and WJ Ma (2019). Prospective planning and retrospective learning in a large-scale combinatorial game. *Cognitive Computational Neuroscience*. pdf

Awards and Fellowships

NSF Graduate Research Fellowship — 2020-2023
CCN Trainee Travel Grant — 2019
Henry Mitchell McCracken Fellowship — 2018
Phi Beta Kappa National Honor Society — 2018

	Macalester College Neuroscience Outstanding Graduate	2018
	Macalester College Dean's List	2014-2018
	Cosyne Undergraduate Travel Grant	2018
	MIAC Men's Soccer Academic All-Conference Team	2015-2017
	Macalester College DeWitt Wallace Distinguished Scholar	2014
Summer Schools and Internships	**IBRO-Simons Computational Neuroscience**, Cape Town, South Africa	2018
	HHMI Janelia Undergraduate Scholars Program, Ashburn, VA	2017
	NYU Center for Neural Science NSF REU, New York, NY	2016
Invited Talks	Parallel Distributed Processing Seminar, Princeton University	2024
	Computational Cognitive Neuroscience Lab, UC Berkeley	2023
	Computational Cognitive Science Lab, Princeton University	2023
	Cognitive Science Society, Toronto, Canada (2 talks)	2022
	Cognitive Science Society, University of Vienna	2021
	Center for Neural Science Seminar, New York University	2020
	Concepts and Categories Seminar, New York University	2019
	Artificial and Biological Computation Lab, New York University	2019
	Sensorimotor Learning Group, Columbia University	2019
Poster Presentations	AAAI Collaborative AI and Modeling of Humans, Vancouver, Canada	2024
	Cognitive Computational Neuroscience, Oxford University	2023
	Minds, Brains, and Machines, New York University	2023
	Reinforcement Learning and Decision Making, Brown University (3 posters)	2022
	Scaling Cognitive Science, Princeton University	2019
	Cognitive Computational Neuroscience, Technical University of Berlin	2019
Teaching	**New York University**, Teaching Assistant	
	NEURL-GA 2201: Mathematical Tools for Neural and Cognitive Science	F 19
	Macalester College, Teaching Assistant	
	COMP 221: Algorithm Design and Analysis	F 17, S 18
	PSYC 180: Brain, Mind, and Behavior	F 16
	COMP 123: Core Concepts in Computer Science	S 16, F 16
Professional Activities	Ad Hoc Reviewing	
	Cognitive Computational Neuroscience	
	Cognitive Science Society	
	Advocacy and Outreach	
	President, Scientist Action and Advocacy Network (ScAAN)	2018-2023
	Climate Crisis Workshop, Cognitive Computational Neuroscience	2023
	Environmental Justice Workshop, Ocean Sciences Meeting	2022
	Evidence-Based Advocacy Workshop, American Geophysical Union	2021
	Science Activism Workshop, Science and Education Policy Association	2021
	Science Activism Panel, Growing Up in Science	2020
References	**Thomas Griffiths**, Professor, Princeton University	
	Wei Ji Ma, Professor, New York University	
	Heiko Schütt, Associate Professor, University of Luxembourg	
	Mark Ho, Assistant Professor, Stevens Institute of Technology	