

Stefan Bucher

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Employment

Assistant Professor, University of Cambridge (Faculty of Economics) 2025–
PI, Computational Cognitive Economics Lab

Postdoctoral Associate, MIT Sloan School of Management 2024
Supervisor: Rahul Bhui

Postdoctoral Researcher, Tübingen AI Center & Max Planck Institute for Biological Cybernetics 2021–2024
Supervisor: Peter Dayan

Education

PhD in Economics, New York University 2015–2021
Committee: Andrew Caplin, Paul Glimcher, Adam Brandenburger,
Michael Woodford, Andrew Schotter, Eero Simoncelli

MSc in Economics, London School of Economics and Political Science 2015

MSc in Computational Science and Engineering, ETH Zürich (Dept. of Mathematics) 2013
Semester at Ecole Polytechnique Fédérale de Lausanne (Blue Brain Project)

BSc in Computational Science and Engineering, ETH Zürich (Dept. of Mathematics) 2013
Semester at Ecole Normale Supérieure Paris (Dept. of Cognitive Science)

Publications

Working Papers

Bucher & Dayan (2024): Algorithmic Choice Architecture for Boundedly Rational Consumers

Bucher, Caplin, Chang, Oprea, Spurlino (2025): Quantifying the Clarity of Policy Language Using Cognitive Economic Curves

Bucher & Caplin (2021): Inattention and Inequity in School Matching
[NBER] [Online Appendix]

Bucher & Glimcher (2022): Dynamics of Base-Rate Neglect: Disregarding Prior Probabilities while Accumulating Evidence

Kurtz-David, Alladi, Sinha, **Bucher**, Brandenburger, Louie, Glimcher (2024): A Tale of Two Environments: Divisive Normalization and the (In)Flexibility of Choice

Work in Progress

Rational Inattention in (Tiered) Matching Markets
with Andrew Caplin

Neurally Revealed Preference and Beliefs over Resolving Uncertainty
with Bo Shen, Zih-Yun Yan, Peter Dayan*, and Paul Glimcher*

Value Capture and the Overreliance on Metrics
with Rahul Bhui

Personalized Labels and Optimal Information Design in Multi-Attribute Settings
with Guy Aridor and Sam Goldberg

Learning from Peer Outcomes
with Alex Platt and Peter Dayan

Journal Publications

Schulze, Aka, Bartels, **Bucher**, Embrey, Gureckis, Haeubl, Ho, Krajbich, Moore, Oettingen, Ongchoco, Oprea, Reinholtz, and Newell (2025): A Timeline of Cognitive Costs in Decision Making. *Trends in Cognitive Sciences*, 29(9). [PDF]

Bucher & Brandenburger (2022): Divisive Normalization is an Efficient Code for Multivariate Pareto-Distributed Environments. *Proceedings of the National Academy of Sciences*, 119(40):e2120581119. [PDF] [Video Summary] [Code]

Conference Proceedings

Kurtz-David, Alladi, **Bucher**, Brandenburger, Louie, Glimcher (2023): Choosers Adapt Value Coding to the Environment, but Do Not Attain Efficiency. *Proceedings of the Annual Meeting of the Cognitive Science Society*, 45(45).

Peer-Reviewed Conferences

Bucher & Dayan (2023): Cognitive Information Filters: Algorithmic Choice Architecture for Boundedly Rational Choosers. *NeurIPS Workshop on Information-Theoretic Principles in Cognitive Systems*. [Video Summary]

Honors, Fellowships, and Grants

NSF Doctoral Dissertation Research Improvement Grant (\$40k)	2020
NYU GSAS Dean's Dissertation Fellowship	2020–2021
NYU GSAS Henry M. MacCracken Fellowship	2015–2020
Fulbright Scholarship	2015–2016
Ecole Normale Supérieure Sélection Internationale, ranked 7th (of 98)	2013
Swiss Study Foundation	2009–2019

Invited Seminars

2025	University of Cambridge Department of Engineering (Information Theory Seminar) – scheduled
	UK Financial Conduct Authority – scheduled
	Warwick Business School (Behavioural Science Group)
	University of Cambridge Judge Business School (Marketing Group)

MIT Sloan School of Management (Marketing Group)
 Goethe University Frankfurt (Department of Marketing)
 Bocconi University (Department of Marketing)
2024 University of British Columbia (Vancouver School of Economics)
 Warwick Business School (Behavioural Science group)
 University of Cambridge (Faculty of Economics)
 Institut Polytechnique Paris (CREST Department of Economics)
 Gershman Lab (Harvard University Department of Psychology and Center for Brain Science)

Conference Presentations

2025 Society for Neuroeconomics, MIT – scheduled
 RLDM Conference on Reinforcement Learning and Decision Making, Trinity College Dublin (poster)
 BSE Summer Forum: Computational and Experimental Economics, Barcelona School of Economics
 Workshop on Computational Complexity and Economic Decision Making, University of Cambridge

2024 ESIF Economics and AI+ML Meeting, Cornell University
 EC Workshop on Computational Methods for Economic Dynamics, Yale University
 Foundations of Utility and Risk Conference, University of Queensland
 St. Gallen Workshop on Dynamic Contracts and Learning, University of St. Gallen
 Behavioral Decision Research in Management Conference, University of Chicago Booth

2023 Conference on Rational Inattention, University of Chicago Becker Friedman Institute
 Triennial Invitational Choice Symposium, INSEAD
 NeurIPS Workshop on Information-Theoretic Principles in Cognitive Systems (spotlight)
 MIT Conference on Digital Experimentation (spotlight)
 Society for Neuroeconomics (poster)
 Marketplace Innovation Workshop (poster)
 AMA Summer Academic Conference (poster)
 Swiss Economists Abroad

2022 ASSA Meeting
 Society for Neuroeconomics (poster)
 ISMS Early-Career Scholars Camp (Duke University, Fuqua School of Business)

2018-2021 NYU Economics Micro Theory Seminar
 Workshop on the Cognitive Foundations of Economic Behavior
 Columbia Student Workshop in Experimental Economics Techniques
 Society for Neuroeconomics (1x talk, 3x poster)
 Cosyne (poster)
 Society for Neuroscience (3x poster)
 International Conference on Mathematical Neuroscience (poster)
 Swiss Economists Abroad (2x talk)

Other Presentations

2025 Neuroeconomics Summer School, INSEAD Paris
University of Cambridge Judge Business School (Impact Forum)

Teaching Experience

Machine Learning for Economics, Cambridge MPhil in Economics & Data Science	Lent 2025
Seminar Series & Case Studies, Cambridge MPhil in Economics & Data Science	Easter 2025
Firms & Markets (Microeconomics), NYU Stern Executive MBA, TA	Spring 2021
NYU Shanghai Neuroeconomics Summer School (PhD), TA	Summer 2019
Applied Statistics & Econometrics II, NYU Master's, TA	Spring 2019
Applied Statistics & Econometrics I, NYU Master's, TA	Fall 2018
Macroeconomic Analysis, NYU Undergraduate, TA	Spring 2017

Supervision

Alex Platt, Max Planck School of Cognition (PhD student)
Atahan Özer, Tübingen AI Center (research assistant)
Maren Reiber, University of Tübingen (research assistant)

Professional Service

Tübingen AI Center Council (elected representative)	2023–2024
Reinforcement Learning Algorithms Club (founder & organizer)	2023–2024
NYU GSAS Committee on Graduate Curriculum and Financial Aid (member)	2020
Workshop on PhD applications, Computation & Cognition Tübingen Summer Internship	2022–2023

Refereeing: Management Science, Nature Human Behavior, National Science Foundation, Oxford Bulletin of Economics and Statistics, Cognitive Science Society

Other Employment

Swiss National Bank, Money Market and Foreign Exchange Unit	2014
ETH Zurich Center for Law & Economics, RA to Prof. Daniel Chen (assisted in the development of the oTree.org platform for behavioral experiments)	2013–2014

References

References are available upon request.