

# Stefan Bucher

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## Employment

Assistant Professor, University of Cambridge (Faculty of Economics) 2025–  
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 (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  
Schulze, Aka, Bartels, **Bucher**, Embrey, Gureckis, Haeubl, Ho, Krajbich, Moore, Oettingen, Ongchoco, Oprea, Reinholtz, and Newell (2024): When and How Do Cognitive Costs Affect Decision Making? An Interdisciplinary Synthesis

### Work in Progress

Rational Inattention in (Tiered) Matching Markets  
with Andrew Caplin  
Neurally Revealed Preference and Beliefs over Resolving Uncertainty  
with Zih-Yun Yan\*, Bo Shen, Peter Dayan\*, and Paul Glimcher\*

Clear Disclosures  
with Andrew Caplin, Ryan Oprea, and Eric Spurlino

Value Capture  
with Rahul Bhui

## Journal Publications

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]

## 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]

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).

## 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

	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

	ESIF Economics and AI+ML Meeting (Cornell University)
	EC Workshop on Computational Methods for Economic Dynamics (Yale University)
2024	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)

	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)
<b>2023</b>	MIT Conference on Digital Experimentation (spotlight)
	Society for Neuroeconomics (poster)
	Marketplace Innovation Workshop (poster)
	AMA Summer Academic Conference (poster)
	Swiss Economists Abroad
	ASSA Meeting
<b>2022</b>	Society for Neuroeconomics (poster)
	ISMS Early-Career Scholars Camp (Duke University, Fuqua School of Business)
	Cosyne (poster)
<b>2021</b>	Society for Neuroeconomics (poster)
	Society for Neuroscience (poster)
	Swiss Economists Abroad
	Society for Neuroeconomics
<b>2020</b>	NYU Economics Micro Theory Seminar
	International Conference on Mathematical Neuroscience (poster)
	Workshop on the Cognitive Foundations of Economic Behavior
<b>2019</b>	NYU Shanghai Neuroeconomics Summer School
	Society for Neuroeconomics (poster)
	Society for Neuroscience (poster)
	Columbia Student Workshop in Experimental Economics Techniques
<b>2018</b>	Society for Neuroeconomics (poster)
	Society for Neuroscience (poster)
	Swiss Economists Abroad

## 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: Nature Human Behavior, National Science Foundation	

## Teaching Experience

Machine Learning for Economics, Cambridge MPhil in Economics & Data Science	Lent 2025
Firms & Markets (Microeconomics), NYU Stern Executive MBA, TA	Spring 2021
NYU Shanghai Neuroeconomics Summer School (PhD), TA	Summer 2020

Applied Statistics & Econometrics II, NYU Master's, TA  
Applied Statistics & Econometrics I, NYU Master's, TA  
Macroeconomic Analysis, NYU Undergraduate, TA

Spring 2019  
Fall 2018  
Spring 2017

## **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.