Brenden Eum

PhD Candidate · Social & Decision Neuroscience

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Education

California Institute of Technology — *Pasadena, CA*

PhD Social & Decision Neuroscience — *2019 - present*

- Advisor: Prof. Antonio Rangel

Columbia University — *New York, New York*

MA Economics — *2016 - 2017*

- Advisor: Prof. Brendan O'Flaherty

New York University — *New York, New York*

BA Economics, Magna Cum Laude — *2014 - 2016*

- Minor in Mathematics

Awards, Fellowships, & Grants

2022	**Chen Graduate Innovator Grant**, T&C Chen Center for Social & Decision Neuroscience	*$ 10,000*
2021	**Brass Division Teaching Award**, Humanities and Social Sciences, Caltech	*$ 1,500*
2019	**Chen Graduate Fellowship**, T&C Chen Center for Social & Decision Neuroscience	
2016	**NYU Founder's Day Scholar Award**, New York University	
2014	**Parliamentary Debate Gold Medalist**, Pacific Southwest Collegiate Forensics Tournament	

Publications

In Review

Eum, B., Dolbier, S., & Rangel, A. (2022). Peripheral visual information halves attentional choice biases. (*R&R Psychological Science*)

Work in Progress

Manipulation of signal weights from the Bayesian efficient coding hypothesis (with Antonio Rangel & Michael Woodford)

Value signals in the orbitofrontal cortex incorporate reference-dependent surprise utility (with Antonio Rangel)

Attentional biases in gains, attentional anomalies in losses (with Stephen Gonzalez & Antonio Rangel)

Using belief elicitation in the lab to evaluate models of choice processing (with Antonio Rangel)

Presentations

Posters

Eum, B., Dolbier, S., & Rangel, A. "Peripheral visual information halves attentional choice biases" 2022. Cognitive Computational Neuroscience, San Francisco, California.

Eum, B., Dolbier, S., & Rangel, A. "Peripheral visual information halves attentional choice biases" 2022. Chen Institute Retreat, Pasadena, California.

Eum, B., Dolbier, S., & Rangel, A. "Peripheral visual information halves attentional choice biases" 2022. The Neurobiology of Reward and Decision-Making, Lake Arrowhead, California.

Teaching Experience

2021-2022 **Bayesian Statistics**, Teaching Assistant for Prof. Antonio Rangel
2020-2021 **Social & Decision Neuroscience Bootcamp**, Instructor, Economics & Statistics
2020 **Introduction to Economics**, Teaching Assistant for Prof. Charles Plott

Mentoring

2021 **Trinity Pruitt**, WAVE Fellowship Program, Co-Mentor with Prof. Antonio Rangel

Professional Experience

2017-2019 **Predoctoral Fellowship**, The Economics Division, Columbia Business School
2016 **Economic Research Assistant**, Haver Analytics
2014-2015 **White Collar Criminal Justice Legal Assistant**, Varghese & Associates, PC
2013 **Intern to Market Analyst**, Harvey & Company LLC

Professional Development

Service and Development

2021-2022 **Caltech Graduate Student Council**, Department Representative
2020-2021 **Social & Decision Neuroscience Bootcamp**, Co-Organizer with Marcos Gallo
2020 **Chen Institute Seminar**, Question Curator for Prof. Colin Camerer and Prof. Dean Mobbs
2016 **NYU Economics Review**, Co-Founder and Managing Editor

Training Courses Attended

2022 Summer School on the Cognitive Foundations of Economic Behavior

Memberships

Society for Neuroeconomics, Society for Judgement and Decision Making, Phi Beta Kappa

Coding

R, Python (+PsychoPy), MATLAB (+PsychToolbox), Stata, LaTeX, MS-Office

Hobbies

rock climbing, snowboarding, cycling, hiking, backpacking, DJing