

Arnav Sood

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Ph.D. Student in Economics, Carnegie Mellon University

Personal

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Citizenship: US Citizen, Canada PR

Interests

Computation, Statistical Learning, Machine Learning, Information Economics, Game Theory

Computational Skills

Julia, Python/Torch, Shell Scripting, Docker

Employment

Predoc, University of British Columbia 2018–2020

– Member of [Centre for Artificial Intelligence Design and Action](#)

Lead Developer, QuantEcon 2019–2020

Prior Experience 2014–2018

- Research Assistant to Laura Veldkamp
- Research Intern, Office of the Comptroller of the Currency
- Intern, Morgan Stanley
- Treespace Math/Bio REU (NSF Grant #14-61094)

Education

(In-Progress) Ph.D. Economics, Carnegie Mellon University 2021-2027

M.S. Economics, Carnegie Mellon University 2021-2023

B.A. Mathematics, New York University 2014-2018

Dual-Enrolled Math Student, Princeton University 2013

Working Papers

Ebrahimi Kahou, M., Fernández-Villaverde, J., Perla, J. & **Sood, A.** *Exploiting Symmetry in High-Dimensional Dynamic Programming* Working Paper 28981 (National Bureau of Economic Research, July 2021). <http://www.nber.org/papers/w28981>.

Works in Progress

Sood, A. & Best, J. *Frequentist Persuasion*

Software

[Expectations.jl](#): Expectation operators for distribution objects using Gaussian quadrature.

[InstantiateFromURL.jl](#): Bind Jupyter notebooks to web-hosted dependency TOML.

Other Writing

[Optimal Stopping and Linear Complementarity](#). (With Jesse Perla.) QuantEcon Notes.

– [Computational Appendix](#).

[Customer Feedback \(Secondhand Alchemical Goods\)](#). Daily Science Fiction.

Grants and Awards

William Larimer Mellon Fellowship, Carnegie Mellon	2021
Presidential Honors Scholar, New York University	2014
National Merit Scholarship Finalist	2014
Top 16, US National Science Bowl	2013
NJ Governor’s School of Engineering & Technology	2013

Talks, Panels, and Presentations (Invited Meetings[†])

2020: JuliaCon (poster and talk, VIRTUAL)

2022: ASSA “What Can AI Do in Economics?” (VIRTUAL), DSE Empirical Market Design[†] (MIT)

2023: PETCO (poster, PENN STATE), DSE Deep Learning[†] (U. LAUSANNE)

Teaching

TA (CMU)	PhD Computational Methods	2023
TA (CMU)	MBA Statistics, Econ, Optimization Classes	2023-2024
TA (CMU)	PhD Metrics Sequence	2022-2023
TA (CMU)	PhD Macro Sequence	2022-2023

Other Activities

Volunteer Tech Support, Free Geek Vancouver

Volunteer Teacher, Splash! (Various Universities)

Mentor, Lumiere Education