Arnav Sood February 2024

Ph.D. Student in Economics, Carnegie Mellon University

Personal

Email: arnavs@cmu.edu Phone: 609.285.7001 GitHub: arnavs Citizenship: US Citizen, Canada PR

Interests

Behavioral, Learning, Information, Game Theory, Computation

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	

Conferences and Talks (Workshops †)

2024: SAET (U. CHILE)

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

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

2020: JuliaCon (poster and talk, VIRTUAL)

Teaching

CMU (TA)	MBA Statistics, Econ, Optimization Classes	2023-2024
CMU (TA)	PhD Metrics, Computation, Macro Courses	2022-2024

Other Activities

Volunteer Tech Support, Free Geek Vancouver

Volunteer Teacher, Splash! (Various Universities)

Mentor, Lumiere Education