Arnav Sood October 2023

Ph.D. Student in Economics, Carnegie Mellon University

Personal

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Citizenship: US Citizen, Canada PR

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Interests

Learning, Game Theory, Macro, Computational

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[†] (міт)

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

Teaching

| TA (CMU) | PhD Computational Methods | 2023 |
|----------|------------------------------|------------|
| TA (CMU) | MBA Statistics Classes | 2023 |
| TA (CMU) | PhD Metrics, Macro Sequences | 2022, 2023 |

Other Activities

Volunteer Tech Support, Free Geek Vancouver

Volunteer Teacher, Splash! (Various Universities)

Mentor, Lumiere Education