

# Arnav Sood

February 2024

Ph.D. Student in Economics, Carnegie Mellon University

## Personal

Email: [arnavs@cmu.edu](mailto:arnavs@cmu.edu)

GitHub: [arnavs](#)

Phone: 609.285.7001

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. *Alternative Facts*

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 Seminars (Workshops<sup>†</sup>)

- 2024: SAET (U. CHILE), Theory Brown Bag (U. PITT.)  
2023: PETCO (poster, PENN STATE), DSE Deep Learning<sup>†</sup> (U. LAUSANNE)  
2022: ASSA “What Can AI Do in Economics?” (VIRTUAL), DSE Empirical Market Design<sup>†</sup> (MIT)  
2020: JuliaCon (poster and talk, VIRTUAL)

## Teaching

|          |  |           |
|----------|--|-----------|
| CMU      | Principles of Micro                        | 2024      |
| 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)