Arnav Sood October 2023

## Ph.D. Student in Economics, Carnegie Mellon University

#### **Personal**

Email: arnavs@cmu.edu

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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, Univeristy 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	Expected May 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	

# Talks, Panels, and Presentations (Invited Meetings<sup>†</sup>)

2020: JuliaCon (poster and talk, VIRTUAL)

2022: ASSA "What Can AI Do in Economics?" (VIRTUAL), DSE Empirical Market Design<sup>†</sup> (міт)

2023: PETCO (poster, PENN STATE), DSE Deep Learning<sup>†</sup> (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