

Contact Information:	Department of Economics Middlebury College Warner Hall 502A Middlebury, VT 05753	(802) 443 2192 akhilr@middlebury.edu https://akhilrao.github.io Citizenship: USA
Research Fields:	Environmental and Resource Economics, Computational Economics	
Appointments:	Assistant Professor, Middlebury College (2019-current) Graduate Part-Time Instructor, University of Colorado Boulder (2017-2019) Teaching Assistant, University of Colorado Boulder (2014-2016)	
Education:	PhD Economics, University of Colorado Boulder, 2019 MA Economics, University of Colorado Boulder, 2016 BS Business Administration, University of California Riverside, 2012	
Working Papers:	<p>"Disease-economy trade-offs under alternative pandemic control strategies", with Thomas Ash, Antonio M. Bento, Daniel Kaffine, and Ana I. Bento (medRxiv preprint, github) <i>Under review at Nature Communications</i></p> <p>"Economic Principles of Space Traffic Control", latest draft (job market paper)</p> <p>"Open access to orbit and runaway space debris growth", with Giacomo Rondina (latest draft)</p> <p>"Elicitation and Corrective Taxation", with Brennan McConnell (mimeo)</p> <p>"The Economics of Orbital Transportation", latest draft</p>	
Publications:	<p>"An Integrated Debris Environment Assessment Model", with Francesca Letizia, in <i>8th European Conference on Space Debris Proceedings</i></p> <p>"Orbital-use fees could more than quadruple the value of the space industry", with Matthew Burgess and Daniel Kaffine, in <i>Proceedings of the National Academy of Sciences Jun 2020</i>, 117 (23)</p> <p>"The Economics of Orbit Use: Theory, Policy, and Measurement" (dissertation abstract), in <i>Journal of the Association of Environmental and Resource Economists 2020</i> 7:1, iii-iii</p> <p>"The CENKI Space Economic Simulator: Analytical Verification of an Agent-Based Modeling Engine", with Trevor Bennett, Charles Cain, Nicholas Campbell, Andrew Gerner, John Marino, and Tobias Niederwieser, in <i>2018 IEEE Aerospace Conference Proceedings</i></p> <p>"The CENKI Space Economic Simulator: Demonstrating Agent-Based Modeling on Satellite Market Data", with Trevor Bennett, Charles Cain, Nicholas Campbell, Andrew Gerner, John Marino, and Tobias Niederwieser, in <i>2018 IEEE Aerospace Conference Proceedings</i></p>	
Works in progress:	<p>"International cooperation and competition in orbit-use management", with Aditya Jain</p> <p>"Framing the Colliders Debate", with James Wells</p> <p>"The great orbit war: a dynamic Cournot-Nash analysis of orbit use", with</p>	

Sébastien Rouillon and Julien Guyot

“Understanding the differential economic effects of peacekeeping in post-conflict states”, with Timothy Passmore

“Malthusian Limits to Capital Growth: Alaskan Reindeer from 1900 to 1940”, with Ann Carlos and Catherine Massey

“Space Stations as a Backstop Technology”, with Doyoung Park

“Green Fiscal Policy in a Warming Economy”, with Andrew Fieldhouse

“Natural disasters and political polarization”, with Raphaelle G. Coulombe

Teaching
Experience:

Assistant Professor, Middlebury College:

- Space Economics (F 2021)
- Environmental Economics (F 2019, S 2020, S 2021, F 2021)
- Economic Statistics (F 2019, S 2020, F 2021)
- Independent Study (W 2020 with Aditya Jain, W 2021 with Collin Wilson, S 2021 with Gordon Lewis)

Graduate Part-Time Instructor, University of Colorado Boulder:

- Math Tools for Economists 1 (F/S 2018, F/S 2017)

Teaching Assistant, University of Colorado Boulder:

- Principles of Microeconomics (S 2019, F 2016, F 2015, F 2014)
- Principles of Macroeconomics (S 2016, S 2015)

Professional
Experience:

Red9 Corporation, Data Analyst (2013-2015)

Seminars and
Conference
Presentations:

2021

- 8th European Conference on Space Debris
- IASC Commons in Space
- From Measurements to Understanding: MASTER Modelling Workshop

2020

- CODER 2020 workshop
- Astronomics Society Workshop on the Economics and Law of Space (postponed due to COVID-19)
- Secure World Foundation DC Workshop on Relevance of Economic Models to Space Debris Policy
- AERE Virtual Conference
- GOSEE Conference
- National Space Council Lunar Polar Resources Roundtable

2018

- Western Economic Association International AERE Session
- IEEE Aerospace Conference
- CU Algorithmic Economics Seminar
- CU Macroeconomics Seminar
- CU Environmental Economics Seminar
- Pacific Council PolicyWest

2017

- Heartland Environmental and Resource Economics Workshop at Illinois
- CU Environmental and Resource Economics Workshop
- CU Environmental Economics Seminar
- CU Macroeconomics Seminar

2016
• CU Environmental Economics Seminar

2015
• CU Environmental Economics Seminar

Non-academic writing: **"Humans or Robots First?"**, in *Politico: The Agenda*, 6/13/19 ([link](#))
"K-Town: Portrait of a Thousand-Person Mars Colony", with Jeff Greenblatt

Grants, Awards, and Fellowships: 2020 ProQuest CGS Distinguished Dissertation Award in Social Sciences
2019 Wallace E. Oates Outstanding Doctoral Dissertation Award
2018 Sieglinde Talbott Haller Fellowship in Economics
2018 Graduate School Domestic Travel Grant
2018 Center to Advance Research and Teaching in the Social Sciences Spring Graduate Student Award
2018 Summer Graduate School Dissertation Fellowship
2017 Reuben A. Zubrow Fellowship in Economics
2013 Coro Southern California Fellows Program in Public Affairs

Membership in Professional Associations: American Economic Association
Association of Environmental and Resource Economists

Professional service: Co-organizer, IASC Commons in Space virtual conference
Reviewer: *Acta Astronautica*, *Space Policy*, *EcoHealth*
Advisory Board member, EU study on Space Traffic Management

College Service: Academic Advisor - 18 students ongoing
Thesis Advisor - 1 student in 2021-2022, 2 students in 2019-2020