# Jacob Howard

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Fields of Research

International Trade, Production Networks, Innovation Economics, and Industrial Organization

# Employment

MITRE, 2020-Present Principal Economist: Commerce Department (2024-Present) Lead Economist: Transportation Performance and Economic Analysis (2020-2023)

University of Colorado, Boulder 2014-2020 Instructor and Teaching Assistant Research Assistant: McGuire Center for International Studies

NBER, 2016-2018 Research Assistant, NSF Grant: Trading, Institutions, Product Innovation, and Entrepreneurship

## Education

Ph.D. Economics, University of Colorado at Boulder, May 2020 Dissertation: Essays on Endogenous Production-Network Formation and the Consequences of Globalization Primary Advisor: Wolfgang Keller, Committee: Jeronimo Carballo, Keith Maskus, Sergey Nigai

M.A. Economics, University of Colorado at Boulder, 2016

M.A. Economics, University of Memphis, 2014

B.A. Economics, International Studies and Economics, University of Memphis, 2012 Minor: Mandarin; Study Abroad: Fudan University, Shanghai China 2011

# **Refereed Publications**

Regional Heterogeneity in Environmental Quality: The Role of Firm Production Networks and Trade (2024) Journal of the Association of Environmental and Resource Economists, University of Chicago Press, vol. 11(5), pages 1311-1349 Joint with Doyoung Park and William Ridley

# Working Papers

Derisking in the Time of Decoupling: U.S. Critical Supply Chains and Reliance on China *Joint with Aspen Underwood* 

The Impacts of Intellectual-Property Related Preferential Trade Agreements on Bilateral Patent Applications Joint with Keith Maskus and William Ridley, (Forthcoming)

Labor-Market Frictions and Endogenous Production-Network Formation

## Other Publications

Intellectual Property-Related PTAs and Patenting (2023) Beyond Trade: How Deep Trade Agreements Shape Non-Trade Outcomes CEPR Joint with Keith Maskus and William Ridley

De-Risking U.S. Supply Chains in the Era of Decoupling (2024) MITRE *Joint with Aspen Underwood* 

# Current Research

Business is in the Air: Air Travel and the Formation of Firm Relationships in the United States *Joint with Alex Luttmann* 

The Spatial Propogation of Wage Inequality Joint with Sergey Nigai

Uyghur Forced Labor Prevention Act and Global Trade in Textile Supply Chains Joint with Alex Luttmann

# Open Grants and Research Projects

Principal Investigator: The Impact of Offshoring and Outsourcing Firm Behaviors on Labor Market Outcomes FSRDC Census Project hosted at Georgetown's Massive Data Institute

This project proposes to answer the following questions: What role do supply chains play in shaping wage inequality? How do these supply chains vary by firm productivity levels, and is there a systematic differential response of these supply chains to an international trade shock? If wages are determined by supply chains, this implies that there will be nominal wage consequences for workers in all sectors of the importing economy. How much do changes, due to trade shocks, in firm-level supply-chains spillover into non-import competing sectors? Within all sectors are there heterogeneous responses to trade shocks that vary by firm size and what are the implications of this heterogeneity?

#### Clearances

Census Special Sworn Status, Department of Defense Top Secret, Department of Homeland Security Top Secret, Federal Aviation Administration Moderate (MBI)

#### Service

MITRE Technical Economics Seminar, Organizer (2023-Present)

MITRE Economic Research Steering Group (2022-Present)

MITRE External Economics Conference, Co-Organizer and Moderator for Building Resilient Global Supply Chains Session (2023) MITRE Economics Hiring Committee (2021-22, 2022-23, and 2023-24)

## Recent Conference and Seminar Activities, Including Upcoming

NBER Resilience in Supply Chains Conference (December 2024)-Panelist USITC Office of Economics International Trade Seminar Series (December 2024)-Presenter Southern Economics Association Annual Meeting (November 2024)-Presenter Midwestern International Trade and Economic Theory Conference (October 2024)-Presenter Federal Statistical Research Data Center Annual Conference (September 2024)-Presenter NBER Summer Institute (July 2024) NBER Corporate Partners Meeting (April 2024) Society of Government Economists Annual Meeting (April 2024) North American Empirical Investigations in International Trade Conference (October 2023)-Discussant MITRE Economics Conference (September 2023)-Moderator Midwestern International Trade and Economic Theory Conference (April 2023)-Presenter Washington Area International Trade Symposium (April 2023) World Bank Deep Trade Agreements Conference (June 2022)-Presenter

# Awards, Fellowships

MITRE Awards: Trailblazer Award 2024 Synergist Award 2024 Applause Awards, 2024, 2023, 2021 Spark Awards, 2024, 2023 (3x), 2021 (2x) Catalyst Award, MITRE Dollar Dominance Project, 2021 Project Recognition Award- Project Redacted, 2021

Software Skills

Julia, Linux, Matlab, Python, QGIS, R, STATA. Use of several distributed high-performance computing environments

# Teaching

University of Colorado, Boulder 2016-2020 Courses Taught: Principles of Microeconomics, Intermediate Microeconomics, Principles of Macroeconomics

#### Personal

Boy Scouts of America: Eagle Scout (2008) University of Memphis: Sigma Phi Epsilon, University of Memphis (2008, Brother Mentor 2011)

# References

Professor Wolfgang Keller Department of Economics University of Colorado Boulder (303)-735-5507 wolfgang.keller@colorado.edu

Professor Keith Maskus Department of Economics University of Colorado Boulder (303)-492-7588 keith.maskus@colorado.edu Professor Jeronimo Carballo Department of Economics University of Colorado Boulder (303)-735-7816 jeronimo.carballo@colorado.edu

Professor Sergey Nigai Department of Economics University of Colorado Boulder (303)-492-0748 sergey.nigai@colorado.edu

University of Colorado at Boulder:
Morris E. Garnsey Fellowship in Economics, 2018
Sieglinde Talbott Haller Economics Scholarship, 2017
Leslie Whittington Memorial Fellowship for Excellence in Economics, 2016
Yordon Prize in Microeconomics, 2016
University of Memphis, Presidential Scholarship, 2008-12