# Weiliang Tan

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Website: www.weiliangtan.com Citizenship: Singapore, US F1 Visa

#### **EDUCATION**

Cornell University

Ithaca, NY, USA

Ph.D. Applied Economics and Management (GPA: 3.90/4)

2025 (expected)

Dissertation: Essays on the Spatial and Network Aspects of Innovation and Climate Change

Advisor: Prof. Ivan Rudik

Yale University

New Haven, CT, USA

IvyPlus Exchange Scholar, Department of Economics

2023 - 2025

Advisor: Prof. Samuel Kortum

Yale-NUS College

Singapore

B.A. Environmental Studies, minor in Economics (summa cum laude, GPA: 4.90/5)

2018

Yale University

New Haven, CT, USA

Visiting International Student Program (GPA: 3.91/4)

Spring 2017

# RESEARCH FIELDS/INTERESTS

Primary: International and Spatial Economics; Urban Economics

Secondary: Macroeconomics; Empirical Innovation; Environmental Economics

#### Data Access

US Census Special Sworn Status (since Jan 2023)

#### References

#### Prof. Ivan Rudik

Associate Professor (on leave),

Cornell University

Chief Environmental Economist, White House

Office of Science and Technology Policy

Email: irudik@cornell.edu

#### Prof. Peter Schott

Juan Trippe Professor of Economics,

Yale University

Executive Director, Yale Branch of the New York

Federal Statistical Research Data Center

Email: peter.schott@yale.edu

#### Prof. Samuel Kortum

James Burrows Moffatt Professor of Economics,

Yale University

Director, Cowles Foundation for Research

in Economics

Email: samuel.kortum@yale.edu

#### Prof. Nancy Chau

Professor, Cornell University

Email: hyc3@cornell.edu

#### Working Papers

- 1. Tan, Weiliang (2024). The Geography of Innovation in the United States. [Link] Job Market Paper.
  - Research question: What drives the rising spatial concentration of innovation in high-skill cities from 1990 and what are the aggregate consequences?
  - Methodological contribution: Introduce endogenous, directed, and microfounded innovation in a dynamic spatial model
- 2. Rudik, Ivan, Gary Lyn, **Weiliang Tan**, and Ariel Ortiz-Bobea (2022). The Economic Effects of Climate Change in Dynamic Spatial Equilibrium. [Link] *Revise and Resubmit, Journal of Political Economy: Macroeconomics* 
  - Research question: What are the welfare effects of general equilibrium adaptation via trade, migration, and capital accumulation in response to climate change?
  - Methodological contributions: (i) Model-consistent estimating equations to identify climate impacts on productivity and amenities from temperature shocks; (ii) Quantitative decomposition of general equilibrium adaptation channels (trade, migration, industry switching, capital accumulation) to shocks in fundamentals in a dynamic spatial model

#### SELECTED WORKS IN PROGRESS

- 3. The Geography and Spatial Networks of Innovation
  - Research question: What drives the rising intensity and changing geography of cross-region coinventor collaborations, and what are the implications on local and aggregate innovation in the United States?
- 4. The Geography of Technology Vintages (with Bernardo Ribeiro)
  - Research question: Why are newer technology vintages concentrated in big cities?
  - Methodological contribution: Introduce technology vintages in a dynamic spatial model with endogenous innovation

#### Non-Academic Publications

1. Addicott, Ethan, Alhasan Badahdah, Luke Elder and **Weiliang Tan** (2019). Internal Carbon Pricing: Policy Framework and Case Studies. Yale Center for Business and the Environment: Research. [Link]

#### Referee Service

Journal of the European Economic Association; Journal of the Association of Environmental and Resource Economists (x2)

#### Research Experience

## Cornell University

Research Assistant to Prof. Ivan Rudik Research Assistant to Prof. Todd Gerarden Fall 2020 – Spring 2021, Spring 2022

Summer 2020

#### Yale University

Herb-Scarf Summer Research Assistant to Prof. Mushfiq Mobarak

Summer 2017

### Yale-NUS College

Participant, Summer Research Program
Research Assistant to Prof. Lei Yu-Hsiang
Research Assistant to Prof. Guillem Riambau
Participant, Enviro-Lab Asia (joint with Claremont Colleges)

Summer 2017 Winter 2016

Winter 2016

Jan 2016, May 2018

# TEACHING EXPERIENCE

Yale University		
Teaching Assistant, ECON 184 International Economics (undergraduate)		Spring 2023
Cornell Univers	ity	
Teaching Assistant, AEM 6510 Environmental Economics (masters)		Fall 2021
Teaching Assistant, AEM 4500 Resource Economics (upper-level undergraduate)		Spring 2020
Teaching Assistant, AEM 7010 Applied Microeconomics (first-year Ph.D.)		Fall 2019
Yale-NUS Colle	${f ge}$	
Peer Tutor, Economics		Spring 2018
FELLOWSHIPS, HC	NORS, AND AWARDS	
Yale-NUS Overseas Graduate Scholarship		2018
Yale-NUS Outstanding Capstone Prize in Environmental Studies		2018
Singapore Ministry of Education-Autonomous University Midterm Scholarship		2017
Singapore National Environment Agency EcoFriend Award		2017
Santander International Experience Scholarship		2016
Yale-NUS Social Impact Fellowship		2015
Volunteering		
Co-founder & Chairman, Singapore Sustainable Solutions Network		2015 - 2016
President, I'dECO: Yale-NUS Sustainability Movement		2014 - 2016
Poster Session Presenter, UNFCC COP 21 Global University Climate Forum		2015
Miscellaneous		
Programming	R, STATA, Julia, Python, Matlab	
Languages	English (native), Standard Chinese (limited), Spanish (basic)	
Other	World Chess Federation (FIDE) Candidate Master	
Otner	World Chess Federation (FIDE) Candidate Master	

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