

# Alice Tianbo Zhang

## Curriculum Vitae

May, 2022

Washington and Lee University  
Williams School of Commerce,  
Economics, and Politics  
Huntley 304, Lexington, VA 24450

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## Academic Positions

Washington and Lee University

Affiliate Faculty of Environmental Studies, 2021 -

Assistant Professor of Economics, 2020 -

Federal Reserve Bank of Minneapolis, Summer Economics Fellow, 2022

Princeton University, Postdoctoral Research Associate, 2019 - 2020

Columbia University

Research Affiliate, Earth Institute, 2019 -

Fellow, Center for Development Economics and Policy, 2018 -

Graduate Research Fellow, 2017-2018

Teaching Fellow, 2014-2017

## Professional Experience

Energy Policy Research, Center on Global Energy Policy, Columbia University, 2014

Public Policy Analysis, Council Member Gordon Wozniak's Office, City of Berkeley, 2012-2013

Financial Management, Global Growth and Operations, General Electric, 2012

Undergraduate Research, Berkeley Roundtable on the International Economy, UC Berkeley, 2011

Climate Activism, California Public Interest Research Group, 2010

Corporate Banking, Bank of China, 2010

## Education

Ph.D. Sustainable Development, Columbia University, 2019

Dissertation: "When Nature Meets Human Nature: Essays on the Social Impacts of Energy Infrastructure and Environmental Policy" [\[Link\]](#)

Advisors: Rodrigo R. Soares, Wolfram Schlenker, Geoffrey M. Heal

M.A. Sustainable Development, Columbia University, 2016

Thesis: "Nonlinear Impact of Temperature on Mortality: Evidence from Monthly Weather Variations in France"

Advisor: Matthew Neidell

Training: Summer Workshop in Climate Change Economics, UC Berkeley, 2015

B.A. Economics, Statistics, Public Policy Minor, *Cum Laude*, University of California, Berkeley, 2013

## Research & Teaching Interests

Environmental and Energy Economics | Development Economics | Political Economy

Climate Change Impact, Adaptation, Mitigation | Natural Hazards | Migration | Social Justice

## Research

[Google Scholar](#) | [ORCID](#) | \* lead author \* equal contribution

### *Peer-Reviewed Publications*

(author names in alphabetical order, unless otherwise noted)

1. Zhang, Alice Tianbo\*, Sasmita Patnaik, Shaily Jha, Shalu Agrawal, Carlos Gould, Johannes Urpelainen. 2022. "Evidence of Multi-Dimensional Gender Inequality in Energy Services from a Large-Scale Household Survey in India"  
*Forthcoming*. **Nature Energy**  
[\[Data\]](#) [\[Code\]](#)
2. Carleton, Tamma, Amir Jina, Michael Delgado, Michael Greenstone, Trevor Houser, Solomon Hsiang, Andrew Hultgren, Robert Kopp, Kelly McCusker, Ishan Nath, James Rising, Ashwin Rode, Hee Kwon Seo, Arvid Viaene, Jiacan Yuan, Alice Tianbo Zhang. 2022. "Valuing the Global Mortality Consequences of Climate Change Accounting for Adaptation Costs and Benefits."  
*Forthcoming*. **The Quarterly Journal of Economics**  
[\[Published\]](#) [\[NBER Working Paper 27599\]](#)
3. Urpelainen, Johannes\* and Alice Tianbo Zhang\*. 2022. "Electoral Backlash or Positive Reinforcement? Wind Power and Congressional Elections in the United States."  
*Forthcoming*. **The Journal of Politics**.  
[\[Published\]](#)
4. Guo, Dong\*, Anyi Wang\*, and Alice Tianbo Zhang\*. 2020. "Pollution Exposure and Willingness to Pay for Clean Air in Urban China." **Journal of Environmental Management** 261 (May): 110174.  
[\[Published\]](#)

### *Accepted and Working*

5. Within but Without: Involuntary Displacement and Economic Development. SSRN Working Paper #3358089, September 2018. [\[Working Paper\]](#)
6. Global Dam Tracker (GDAT): A Global Database of More Than 35,000 Dams with Location and Attribute Information\* (with Xinyi Gu)  
*Under Revision*
7. Variability in the Household Use of Cooking Fuels: The Importance of Dishes Cooked, Non-Cooking End Uses, and Seasonality in Understanding Fuel Stacking in Rural and Urban Slum Communities in Six North Indian States (with C. Gould, S. Jha, S. Patnaik, S. Agrawal, S. Saluja, V. Nandan, J. Urpelainen)  
*Conditionally Accepted*, **World Development**

### *Selected Work in Progress*

Anticipation or Adaptation: Household Response to Extreme Events in the United States (with T. Bearpark and M. Oppenheimer)

Hurricane Harvey and Business Recovery (with E. Kalhor, S. Lackner and M. Oppenheimer)

Natural Disasters and Homeowner Mobility in the United States

Dynamic Incentives for Pollution Abatement

Estimating Hurricane Damages using Satellite Data and Machine Learning

### *Book Chapters and Policy Articles*

Zhang, Alice Tianbo. 2019. "Development and Displacement." Phenomenal World, Blog of the Jain Family Institute. [\[Link\]](#)

Zhang, Alice Tianbo, Johannes Urpelainen, and Wolfram Schlenker. 2018. "Power of the River: Introducing the Global Dam Tracker (GDAT)." Faculty Grant Program Research Report. Center on Global Energy Policy. [\[Link\]](#)

Lu, Yao, and Alice Tianbo Zhang. 2016. "The Link between Migration and Health." In Handbook on Migration and Health, edited by Felicity Thomas. Edward Elgar Publishing. [\[Link\]](#)

## Original Data

Global Dam Tracker (GDAT)

**Description:** Global dam database (n = 35,140) with validated geo-coordinates and attributes.

**Status:** Pending

The Gender Perception Survey for Energy Access and Use

**Description:** Survey with 2,312 rural and urban slum households (n = 4,624) across 6 Indian states.

**Status:** Data available on Harvard Dataverse [\[Link\]](#)

Henan Urban Sustainability Survey (HUSS)

**Description:** Survey with 3,020 respondents across 3 Chinese cities in Henan province.

**Status:** Data available

## Awards, Honors, and Grants

CSWEP Summer Economics Fellowship, American Economic Association, 2022

Nominated by Dean and Provost, ACS Summer Teaching and Learning Workshop, 2022

Summer Research Scholar Program Grant, Washington and Lee University, 2021, 2022

Lenfest Summer Fellowship Award, Washington and Lee University, 2020, 2021, 2022

CSWEP CeMENT Workshop Mentee, American Economic Association, 2021

Winter Research Scholar Program Grant, Washington and Lee University, 2020-2021

Data-Driven Social Science Initiative Large-Scale Grant, Princeton University, 2020-

Keynote Speaker, "2019 Henan Urban Sustainability Ranking Report" Press Conference, 2020

Zhongyuan Development Research Innovation Award, 2020

Dissertation Fellowship, Columbia University, 2018-2019

National Academy of Sciences, Sackler Colloquium Travel Award, 2018

Research Grant for "A Global Database of Dams," Columbia University, 2017-2018

Student Fellow, Initiative for Sustainable Energy Policy, Johns Hopkins University, 2017-2019

Dean's Fellowship, Columbia University, 2013-2018

Omicron Delta Epsilon, UC Berkeley Chapter, 2011-2013

Dean's Honors List, University of California, Berkeley, 2011-2013

## Teaching

### *Washington and Lee University*

Climate and Society (Undergraduate, Economics), Instructor: Winter 2022

Introduction to Economics (Undergraduate, Economics), Instructor: Winter 2021, 2022

Statistics for Economics (Undergraduate, Economics), Instructor: Fall 2020, 2021

### *Columbia University*

Microeconomics and Public Policy (Graduate, Public Policy), Tutor: Fall 2017

Microeconomics and Policy Analysis (Graduate, Public Policy), TA: Fall 2016

Introductory Statistics (Graduate, Public Policy), TA: Summer 2016

Introduction to Development Economics (Undergraduate, Economics), Grader: Spring 2016

Gender and Applied Economics (Undergraduate, Economics), TA: Spring 2016, 2017

Research Methods in Public Management & Policy (Graduate, Public Policy), TA: Fall 2015

Challenges of Sustainable Development (Undergraduate, Sustainable Development), TA: Spring 2015

Science for Sustainable Development (Undergraduate, Sustainable Development), TA: Fall 2014

## Advising and Mentoring

### 2021-2022

Ben McClure '24, Summer Research Scholar

Evan DiPaula '24, Summer Research Scholar

Oskar Mandelsloh '24, Summer Research Scholar

Independent research students (×3)

First-year advisees (×5)

Economics major advisees (×10)

Economics honors thesis reader (×1)

Environmental Studies senior capstone (×1)

### 2020-2021

Abbey Pinkerton '22, Winter & Summer Research Scholar, John McKenzie Gunn Scholarship

Carrie Morrison '22, Summer Research Scholar

Environmental Studies senior capstone (×1)

## Service

### *Profession*

Referee: *Ecological Economics; Climatic Change*

Organizer: Presidential Sessions (× 2), Southern Economic Association Conference 2022

Reviewer: AERE@ Southern Economic Association Conference 2020

*Washington and Lee University*

Advisory Board, The Roger Mudd Center for Ethics, 2021-2024

University Sustainability Committee, 2021-2024

Econ-DeLaney Proposal Development Committee, Economics Department, 2021

Econ 202 Review Task Force, Economics Department, 2021

Faculty Hiring Committee, Economics Department, 2020-2021

*Columbia University*

Student Committee, Sustainable Development Ph.D. Program, 2017-2018

Co-organizer, Sustainable Development Colloquium, 2015-2016

Student Representative, Earth Institute Faculty Meetings, 2015-2016

Co-organizer, Interdisciplinary Workshop in Sustainable Development, 2015

Co-organizer, Alliance Summer School in Science and Policy, Columbia – Sciences Po, 2014

**Presentations**

\* Scheduled

Princeton University (2019, 2020, 2022); New York State Department of Financial Services (2022); Seminar on Planetary Management (2022); Columbia University CEEP/SusDeveR Conference (2022\*); Southern Economic Association Annual Meeting (2020, 2022\*); Columbia Women in Economics Conference (2021); American Geophysical Union (2016, 2020); Princeton Research Day (2020); Central China Development Research Institute (2020); Henan University (2020); Johns Hopkins University, Initiative on Sustainable Energy Policy Workshop (2019); New York University, Institute for Policy Integrity (2019); Center for Global Development (2019); Wheaton College (2019); Washington and Lee University (2019); U.C. Santa Barbara Occasional Workshop (2018); Columbia University Development Seminar (2018); Columbia University Sustainable Development Seminar (2014, 2018); Sustainable Development Research Symposium (2016, 2018); National Academy of Science Sackler Colloquium on Economics, Environment and Sustainable Development (2018); University of Illinois, Urbana-Champaign, Heartland Environmental and Resource Economics Workshop (2017); Columbia University Development Colloquium (2017), Interdisciplinary Ph.D. Workshop in Sustainable Development (2016), Columbia University Sustainable Development Colloquium (2015, 2016, 2017)

**Miscellaneous**

United States Permanent Resident

Computing: Stata, R, Python, ArcGIS, QGIS, ENVI, Google Earth Engine, L<sup>A</sup>T<sub>E</sub>X, GitHub, Adobe Illustrator

Language: Chinese and English (bilingual); French (beginner)

Last updated: May, 2022