Zhan Wang

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Research Interests

Global, national and gridded impacts (e.g. international trade, climate change, transportation infrastructure) on the agriculture-land-environment system with general / partial equilibrium models and geospatial data; innovative approaches to facilitate economic education.

Education

Ph.D. in Agricultural Economics, Purdue University, USA	Aug 2018 – Jul 2023
Master of Environmental Management, Duke University, USA	Aug 2012 – May 2014
Bachelor of Science in Environmental Science Bachelor of Science in Psychology (Dual degree) Peking University, China	Sep 2008 – Jul 2012 Sep 2009 – Jul 2012
Professional Experience	
Assistant Professor Department of Food and Resource Economics University of Copenhagen, Denmark	Aug 2025 – Present
Post-Doctoral Research Associate Department of Agricultural Economics, Purdue University, USA	Aug 2023 – Jun 2025
Graduate Research Assistant Department of Agricultural Economics, Purdue University, USA	Aug 2018 – Jul 2023
Research Assistant Global Health Research Center, Duke Kunshan University, China	Dec 2014 – Apr 2017
Publications	

Peer-reviewed Journal Articles

- 1. **Wang, Zhan.** "GTAP-SIMPLE-G: Integrating Gridded Land Use, Crop Production and Environment Impacts into Global General Equilibrium Model of Trade." *Journal of Global Economic Analysis* 9, no. 2 (2024): 1-69. https://doi.org/10.21642/JGEA.090201AF
- 2. **Wang, Zhan***, Geraldo B. Martha Jr, Jing Liu, Cicero Z. Lima, and Thomas W. Hertel. "Planned expansion of transportation infrastructure in Brazil has implications for the pattern of agricultural production and carbon emissions." *Science of The Total Environment* 928 (2024): 172434. https://doi.org/10.1016/j.scitotenv.2024.172434
- 3. **Wang, Zhan**, and Thomas W. Hertel. "SMART Handout: An Innovative Tool to Empower Applied General Equilibrium Teaching." *Journal of Global Economic Analysis* 9, no. 1 (2024): 45-61. https://doi.org/10.21642/JGEA.090102AF

- 4. Xiong, Shangzhi, Gangjiao Zhu, Rahul Malhotra, Xinyue Chen, Enying Gong, **Zhan Wang**, Jian'An Zhang et al. "Community efficacy for non-communicable disease management (COEN): Conceptualization and measurement." PLOS Global Public Health 4, no. 8 (2024): e0003549. https://doi.org/10.1371/journal.pgph.0003549
- 5. Zhu, Gangjiao, Rahul Malhotra, Shangzhi Xiong, Xinyue Chen, Mingyang Zhang, You Wu, Enying Gong, **Zhan Wang**, Xiangyang Tian, Weixia Peng, Truls Østbye, and Lijing L Yan. "Community Efficacy for Non-Communicable Disease Management and Medication Adherence: The Sequential Mediating Role of Self-Efficacy and Depressive Symptoms." *Patient preference and adherence* (2023): 3421-3433. https://doi.org/10.2147/PPA.S436419
- 6. Chen, Shu, Lei Guo, **Zhan Wang**, Wenhui Mao, Yanfeng Ge, Xiaohua Ying, Jing Fang et al. "Current situation and progress toward the 2030 health-related Sustainable Development Goals in China: A systematic analysis." *PLoS medicine* 16, no. 11 (2019). https://doi.org/10.1371/journal.pmed.1002975
- 7. Li, Niying, **Zhan Wang***, and Keith Dear. "Violence against health professionals and facilities in China: evidence from criminal litigation records." *Journal of forensic and legal medicine* 67 (2019): 1-6. https://doi.org/10.1016/j.jflm.2019.07.006
- 8. **Wang, Zhan**, Enying Gong, Weixia Peng, Jiaying Chen, Xiangyang Tian, Shangzhi Xiong, and Lijing Yan*. "Community empowerment for the prevention and control of non-communicable diseases." (in Chinese) *Chinese General Practice* 22, no. 10 (2019): 1153.
- 9. **Wang, Zhan**, Niying Li*, Mengsi Jiang, Keith Dear, and Chee-Ruey Hsieh. "Records of medical malpractice litigation: a potential indicator of health-care quality in China." *Bulletin of the World Health Organization* 95, no. 6 (2017): 430. https://doi.org/10.2471/BLT.16.179143
- 10. **Wang, Zhan**, and Keith Dear*. "Region and firm level determinants of environmental regulation violations: An empirical study in Chongqing, China." *Journal of cleaner production* 141 (2017): 1011-1022. https://doi.org/10.1016/j.jclepro.2016.09.090
- 11. Liu, Feifei, Lijing Yan, **Zhan Wang**, Yuanan Lu, Yuanyuan Chu, Xiangyu Li, Yisi Liu, Dongsheng Rui, Shaofa Nie, and Hao Xiang*. "Metformin therapy and risk of colorectal adenomas and colorectal cancer in type 2 diabetes mellitus patients: A systematic review and meta-analysis." *Oncotarget* 8, no. 9 (2017): 16017. https://doi.org/10.18632/oncotarget.13762

Conference proceedings

- 1. Haqiqi, Iman, **Zhan Wang**, Srabashi Ray, Uris Baldos, Jing Liu, and Thomas Hertel. "Market-Mediated Effects: What Are they? And why are They Important for Geospatial Analysis of Sustainability Policies." *I-GUIDE Forum 2023 Harnessing the Geospatial Data Revolution for Sustainability Solutions* (2023). https://doi.org/10.5703/1288284317682
- 2. Fraysse, Elizabeth A., Thomas W. Hertel, **Zhan Wang**, and Iman Haqiqi. "SIMPLE-G In the Classroom and the Cloud." *I-GUIDE Forum 2023 Harnessing the Geospatial Data Revolution for Sustainability Solutions* (2023). https://doi.org/10.5703/1288284317668

Commentary

1. Dear, Keith*, and **Zhan Wang**. "Climate and health: mortality attributable to heat and cold." The Lancet 386, no. 9991 (2015): 320-322. https://doi.org/10.1016/S0140-6736(15)60897-2

Book chapters

- 1. **Wang, Zhan**. "Chapter 15: The Role of Transportation Infrastructure Expansion in the Transmission of Global Price Shocks to the Brazilian Economy." in *SIMPLE-G: A Gridded Economic Approach to Sustainability Analysis of the Earth's Land and Water Resources*. Haqiqi and Hertel (eds). Springer Publishing, 2024. https://link.springer.com/book/10.1007/978-3-031-68054-0
- 2. Wang, Zhan, Jiwei Chen, Yujiao Jiang, Yunyi Li, Lina Song, Yuanqing Zhu, Jialiang Liang. "The life condition of ecological migrants in Ordos, Inner Mongolia." in Environment Watch: The fifth anniversary collection of students' social practices from the College of Environmental Science and Engineering, Peking University (in Chinese), The editorial board of social practices from the College of Environmental Science and Engineering, Peking University (eds). The Publishing House of Electronics Industry, 2013.

Teaching Experience

Teaching assistant AGEC618 (PhD level) "Applied General Equilibrium Analysis" Purdue University	2023
Instructor Short Course in Multi-scale Analysis of Sustainability Purdue University	2022, 2024
Statistics Lab instructor Biostatistics and Epidemiology for Global Health (Master level) (on data analysis with STATA), Duke Kunshan University	2015 – 2017
Conference Presentations	
AERE Summer Conference, Santa Ana Pueblo, NM, USA AAEA Annual Meeting, New Orleans, LA, USA GTAP 27th Annual Conference, Fort Collins, CO, USA I-GUIDE forum, New York, NY, USA AAEA Annual Meeting, Washington, D.C, USA AGU Fall Meeting 2022, Chicago, IL (poster), USA AAEA Annual Meeting, Anaheim, CA, USA GTAP 25th Annual Conference, online AAEA & WAEA Joint Annual Meeting, online GTAP 24th Annual Conference, online	2025 2024 2024 2023 2023 2022 2022 2022 2021 2021

Webinar Presentations

GLASSNET Webinar: SIMPLE-G-Brazil - Transportation Infrastructure Expansion in Brazil. Online. March 23, 2023.

https://www.youtube.com/watch?v=qSA31yOgTeg

GTAP Virtual Seminar Series: SMART Handout: An Innovative Tool to Empower Applied General Equilibrium Teaching. Online. October 15, 2024. https://www.youtube.com/watch?v=IBbsa6mUz50

Reviewer for Journals and Conferences

Nature Food; Food Policy; Journal of the Agricultural and Applied Economics Association; China Agricultural Economic Review; Journal of Global Economic Analysis; Global Food Security; Environment, Development and Sustainability; Agribusiness: an International Journal; Journal of Forensic and Legal Medicine; Human Resources for Health; GTAP Annual Conferences (2022 - 2025)

Training / Workshops

I-GUIDE summer school, Boulder, CO	2023
NVIDIA Fundamentals of Deep Learning	2022
Trustworthy AI for Environmental Science	2021
Berkeley Sloan Summer School in Environmental and Energy Economics	2021

Awards and Honors

Grad Student Poster Competition (2 nd place) of AgEcon department, Purdue University	2022
Dean's Award for Special Contribution, Duke Kunshan University	2017
Degree Marshal for Nicholas School of the Environment, Duke University	2014
Outstanding Graduate of Beijing, Peking University	2012
Cyrus Tang Scholarship, Peking University 200	8 - 2012

Software Skills

R, GEMPACK, QGIS, Python

Language

Chinese (native), English (fluent)

(Last updated: August 2025)