

SHUAI ZHOU

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EDUCATION

2023 (EST.) Ph.D. Rural Sociology and Demography, The Pennsylvania State University
2019 M.S. Rural Sociology and Demography, The Pennsylvania State University

RESEARCH INTERESTS

Planned Relocation; Environmental Migration; Public Health; Spatial Demography;
Computational and Spatial Social Science

ACADEMIC EXPERIENCE

2017 – present Research assistant, Department of AESE, Pennsylvania State University
2015 Part-time lecturer, Beijing City University

PUBLICATIONS

Peer reviewed articles

- 2022 Zhou, Shuai and Guangqing Chi. 2022. "Farmland Rental: The Impacts of Household Demographics and Livelihood Strategies in China." *Land*. 11(8): 1318.
- 2022 Li, Yanling, Zita Oravecz, Shuai Zhou, Yosef Bodovski, Ian J. Barnett, Naomi P. Friedman, Guangqing Chi, Scott I. Vrieze, and Sy-Miin Chow. 2022. "Bayesian Forecasting with a Regime-Switching Zero-Inflated Multilevel Poisson Regression Model: An Application to Adolescent Alcohol Use with Spatial Covariates." *Psychometrika*. 87(2): 376–402.
- 2021 Zhou, Shuai, Yanling Li, Guangqing Chi, Junjun Yin, Zita Oravecz, Yosef Bodovski, Naomi P. Friedman, Scott I. Vrieze, and Sy-Miin Chow. 2021. "GPS2space: An Open-source Python Library for Spatial Measure Extraction from GPS Data." *Journal of Behavioral Data Science*. 1(2): 127–155.
- 2021 Moss, Jennifer L., Siddhartha Roy, Karl T. Clebak, Julie Radico, Jarrett Sell, Christina Scartozzi, Shuai Zhou, Guangqing Chi, and Tamara Oser. 2021. "Area- and

Individual-Level Correlates of Self-Rated Health: Implications for Geographic Health Disparities.” *Journal of Primary Care and Community Health*. 12: 1–8.

Under review

- 2022 Zhou, Shuai and Guangqing Chi. “How Do Environmental Changes and Variations Influence Migration? A Meta-regression Analysis of the Environmental Migration Literature.”
- 2022 Zhou, Shuai, Guangqing Chi, Huanguang Qiu, Zhen Lei, Erica A.H. Smithwick, and Jiquan Chen. “Subsidized Relocation and the Willingness to Move: Evidence from the Targeted Poverty Alleviation Project in China.”
- 2022 Anderson, Cory, Shuai Zhou, and Guangqing Chi. “Population-Wide Vaccination Hesitancy among the Amish: A County-Level Study of COVID-19 Vaccine Adoption”

Manuscripts in development

- 2022 Zhou, Shuai, Guangqing Chi, and Brian C. Thiede. “Climate Variability and County-Level Migration in the United States, 1970 – 2010”
- 2022 Zhou, Shuai and Guangqing Chi. “Migratory Responses to Environmental Variability in the United States: A Multi-level Analysis of Microdata from the American Community Survey, 2010 – 2020.”
- 2022 Anderson, Cory, George M. Hayward, Shuai Zhou, Guangqing Chi, and Mary Shenk. “Persistently High Fertility in a Low Fertility Context: How Do America’s Amish Heterogeneously Respond to Fertility-Reducing Structural Incentives?”
- 2022 Chi, Guangqing, Ann Tickamyer, Megan Mucioki, Shuai Zhou, Lara Fowler, Kathleen E. Halvorsen, Davin Holen, Lance Howe, Ekrem Korkut, Jessica Miller, Heather Randell, and Junjun Yin. “Climate Impacts on Arctic Migration: Existing Evidence and Research Agenda.”

Book reviews

- 2018 Zhou, Shuai. “International Migration of China: Status, Policy and Social Responses to the Globalization of Migration” by Lu Miao and Huiyao Wang (Singapore: Springer, 2017. 135 pp. ISBN: 978-981-10-6073-1). *Rural Sociology*, 83(3): 700–702.

Other publications

- 2020 Zhou, Shuai and Matthew M. Brooks. 2020. “Pennsylvania Pomp and Circumstance:

Trends in High School Drop Outs.” *Pennsylvania Population Network Briefs* 3: 1–4.

CONFERENCE PARTICIPATION (* Indicates presenter)

Conference presentations

- 2022 Zhou, Shuai* and Guangqing Chi. 2022. “Migratory Responses to Environmental Variability in the United States: A Multi-level Analysis of Microdata from the American Community Survey, 2010 – 2020.” 2022 Annual Meeting of the Rural Sociological Society, August 04 – 07, 2022, Westminster, CO.
- 2022 Anderson, Cory, George M. Hayward, Shuai Zhou, Guangqing Chi, and Mary K. Shenk. 2022. “Persistently High Fertility in a Low Fertility Context: How Do America’s Amish Heterogeneously Respond to Fertility-Reducing Structural Incentives?” 2022 Annual Meeting of the Population Association of America, April 6 – 9, 2022, Atlanta, GA.
- 2021 Zhou, Shuai* and Guangqing Chi. 2021. “How Do Environmental Changes and Variations Influence Migration? A Meta-regression Analysis of the Environmental Migration Literature.” 2021 Annual Meeting of the Rural Sociological Society, July 29 – August 01, 2021.
- 2019 Zhou, Shuai* and Guangqing Chi. 2019. “Land Rental in Rural China: The Impacts of Demographics, Household Economy, Land Endowment, and Social Welfare, 2012 – 2016.” 2019 Annual Meeting of the Rural Sociological Society, August 07 – 10, 2019, Richmond, VA.
- 2019 Zhou, Shuai*, Guangqing Chi, Brian C. Thiede, Zhen Lei, and Huanguang Qiu. 2019. “Subsidized Relocation and the Willingness to Move: Evidence from the Targeted Poverty Alleviation Project in China.” 2019 Annual Meeting of the Population Association of America, April 10 – 13, 2019, Austin, TX.
- 2018 Zhou, Shuai*, Guangqing Chi, Brian C. Thiede, Zhen Lei, and Huanguang Qiu. 2018. “Subsidized Relocation and the Willingness to Move: The First Look at the Targeted Poverty Alleviation Project in China.” 2018 Annual Meeting of the Rural Sociological Society, July 26 – 29, 2018, Portland, OR.
- 2017 Zhou, Shuai*. 2017. “Family Economy, Land Endowment, Social Security and Land Rent Behavior of Village Farmers: An Empirical Research Based on Logistic Model.” 2017 Annual Rural Studies Conference, October 27 – 28, 2017, University Park, PA.

Invited talks

- 2022 Zhou, Shuai. 2022. "Migration due to Climate Change." Geo-Resolution 2022—Geospatial Perspectives on Climate Change: Predicting and Mitigating Effects at Saint Louis University, September 28, 2022, St. Louis, MO.
- 2021 Zhou, Shuai and Yanling Li. 2021. "GPS2space: An Open-source Python Library for Spatial Measure Extraction from GPS Data." QuantDev Brownbag at Social Science Research Institute at Pennsylvania State University, February 10, 2021, University Park, PA.
- 2020 Zhou, Shuai. 2020. "Introduction to GPS2space." Intensive Longitudinal Health Behaviors Network Meeting (GPS Subgroup Meeting), October 21, 2020, University Park, PA.
- 2020 Zhou, Shuai. 2020. "Alaska Demographics and Data Sources." Pursuing Opportunities for Long-term Arctic Resilience for Infrastructure and Society (POLARIS) project, October 5, 2020, University Park, PA.

Conference posters

- 2022 Zhou, Shuai and Guangqing Chi. 2022. "Migratory Responses to Environmental and Sociodemographic Factors in the United States: A Multi-level Analysis, 2010 – 2020." Population and Climate Change: The Defining Relationship of the 21st Century, November 30 – December 2, 2022, Vienna, Austria. (Forthcoming)
- 2022 Zhou, Shuai, Guangqing Chi, and Brian C. Thiede. 2022. "Migration and Climate Change and Variability in the Contiguous United States at the County Level, 1970 – 2010." 2022 Annual Meeting of the Population Association of America, April 6 – 9, 2022, Atlanta, GA.
- 2020 Zhou, Shuai and Guangqing Chi. 2020. "Land Rental in Rural China: The Impacts of Demographics, Household Economy, Land Endowment, and Social Welfare, 2012 – 2016." 2020 Annual Meeting of the Population Association of America, April 22 – 25, 2020, Washington, DC. (Canceled due to COVID)

Panel moderation

- 2022 Health Access and Outcomes, 2022 Annual Rural Studies Conference, October 13 – 14, 2022, University Park, PA
- 2021 Agent-Based Modeling, 2021 Annual Population Research Institute Graduate Student

Methodology Workshop, May 11, 2021, University Park, PA

2019 Alternative Food Systems and Sustainable Agriculture, 2019 Annual Rural Studies Conference, November 7 – 8, 2019, University Park, PA

AWARDS

2022 The College of Agricultural Sciences (CAS) Graduate Student Travel Awards, The Pennsylvania State University

2022 Francena L. Miller and Michael F. Nolan Graduate Scholarship in Agricultural Economics and Rural Sociology, The Pennsylvania State University

2022 Rural Sociological Society (RSS) Graduate Student Travel Award, The Rural Sociological Society

TEACHING EXPERIENCE

Penn State University

2022 Co-mentor a master student in conducting empirical research in the social sciences

2021 Guest lecture, Using Social Explorer for Spatial Analyses, February 15, 2021

2020 Guest lecture, Introductory Rural Sociology, January 28, 2020

2020 Guest lecture, Introductory to Stata, September 28, 2020

Beijing City University

2015 Part-time lecturer, Social Survey Methods, March 2015 – July 2015

PROFESSIONAL TRAINING

2022 Summer Institute in Migration Research Methods, July 25 – August 2, 2022, University of California, Berkeley, Berkeley, CA

2019 Data Reproducibility Boot Camp, June 3 – 7, 2019, The Pennsylvania State University, University Park, PA

PROFESSIONAL MEMBERSHIP

2020 – present International Union for the Scientific Study of Population

2019 – present Population Association of America

2018 – present Rural Sociological Society

2017 – present Rural Sociology Graduate Association

STATISTICAL/PROGRAMMING LANGUAGE

Python	Advanced level
Stata	Advanced level
R	Preliminary level

OPEN-SOURCE PACKAGE

2021 GPS2pace A Python library for constructing buffer- and convex hull-based activity space and shared space from raw GPS data, and performing the nearest distance query to user-specified landmarks.

<https://pypi.org/project/gps2space/> (On PyPI)

<https://github.com/shuai-zhou/gps2space> (On GitHub)

<https://gps2space.readthedocs.io/en/latest/index.html> (Documentation)

REFERENCES

Available upon request.