



CONNOR Y.H. WU

PhD Student in Management Information Systems

PROFILE

Enthusiastic Researcher with 15+ years of experience in Health Geography. Taught 20+ on-campus and online courses (on the undergraduate and graduate level) in Business School and Geography, and published 20+ peer-reviewed papers in Information Systems and Health Geography

CONTACT

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Oklahoma State University,
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AREAS OF EXPERTISE

- Healthcare equity and accessibility
- Personal heat exposure measurement in heat waves
- Spatial analysis for estimating effects of climate change on public health
- Quantitative methods for examining the association between climate change on plague outbreaks
- Quantitative methods on transportation safety and behavior geography

EDUCATION

PhD in Management Information Systems Oklahoma State University, USA

2023-2027 (Expected)

- Interested topics on AI-induced healthcare inequity and accessibility.
- Teaching: MSIS 2301 Computer Programming for Business (3 credit)

PhD in Geography The University of Hong Kong, Hong Kong

2010-2014

- Dissertation – “Motorcycle safety in developing countries: A case study in Maoming, South China.” This dissertation developed a holistic view of motorcycle safety, which identified risk factors in driving behavior and evaluated transportation laws and their law enforcement. Quantitative methods to analyze questionnaire surveys and observational data were used.
- This research was awarded a 4-year Postgraduate Studentship by Research Grant Council, HKSAR (2010-2013)

MSc in Geomatics (GIS) Hong Kong Polytechnic University, Hong Kong

2007-2009

- Master thesis - “Quality checking for GIS data.” This thesis developed an efficient algorithm to check the spatial relationship among different elements on the map and applied it in ArcEngine and C# in the platform of GRASS.

BEng in Computer Science Beijing Normal University, China

2003-2007

- Undergraduate thesis-“Researching on the geodatabase management system of Yangjiang nuclear electrical power plant in Guangdong Province, South China.” This thesis elaborated on how to create and maintain an underground pipeline geodatabase by using ArcEngine and C# in the platforms of ArcGIS and Visual Studio.
- The Distinguished Undergraduate Thesis Award

WORK EXPERIENCE

Center of Geographic Analysis, Harvard University, Cambridge, MA Research Associate (Remote)

Oct 2022- Oct 2023

- Served as the Director of the *Spatiotemporal Innovation Lab for Big Data*, a virtual research consortium affiliated with the Future Data Lab and supported by CGA's Spatial Data Lab project (Lab website is <https://labsti.wixsite.com/bigdata>)
- Conducted sentiment analysis on Geo-tweet datasets
- Organized and taught spatial analysis and GIS skills in CGA's workshops and webinars

Troy University, Troy AL Assistant Professor (Tenure-track)

Aug 2018 – May 2023

- Published 12 peer-reviewed journal articles, with six of them as the first, sole, or corresponding author.
- Covered approximately 90% of the courses included in the GIS Major curriculum, receiving an average student evaluation of 6.87 (out of 7.0).
- Taught Geography & GIS courses, delivering 12-15 credits each Spring or Fall semester, including online and onsite sections.
- Introduced and annually organized GIS Day (<https://www.gisday.com>) at Troy University from 2019 to 2022, making Troy University the ONLY institution in Alabama to host this public but professional event.
- Conducted semesterly visits to local high schools to advocate for the GIS major in Alabama (the number of our GIS major students increased 500%+ between 2020 to 2022).
- Served as an elected voting member on the Troy University Undergraduate Academic Council (2021-2023).

Virginia Tech, Blacksburg VA Postdoctoral Fellow

Feb 2016- Jun 2018

- Developed GIS models (using C# and Python) and used MODIS satellite data to examine the association between heat waves and adverse health outcomes (e.g., preterm birth and non-accidental death). This study is under the NIH-funded project "Environmental exposures across urban and rural communities in the Deep South" with the PI of Dr. Julia M. Gohlke.
- Applied qualitative methods (e.g., the focus group) to investigate environmental health priorities in rural and urban communities in AL, USA. This study is under the NIH-funded project "Environmental exposures across urban and rural communities in the Deep South" with the PI of Dr. Julia M. Gohlke.
- Built spatial analysis models to assess the effects of mining disturbances on adverse health outcomes in VA Appalachia
- Developed GIS approaches to assess the association between radon test values and rock types in southwest Virginia

The University of Hong Kong, Hong Kong Research Associate

Jan 2014- Jan 2016

- Developed GIS models and statistical models on the platforms of ArcGIS and SAS to examine the association between climate change and plague outbreaks in pre-industrial Europe
- Built GIS and statistical models on ArcGIS, SPSS, and R to examine the relationship between volcanic eruptions worldwide and plague outbreaks in Europe
- Developed GIS and statistical models by using panel data to evaluate the contribution of climate change on cannibalism in China
- Applied GIS and wavelet analysis in Matlab to examine the association between plague outbreaks and environmental factors in Northwest China

Apr 2009- Dec2009

- Collected and analyzed traffic crash data from the Department of Transportation
- Launched an investigation on the effects of the *Probationary Driving License Scheme on Motorcycle Safety in Hong Kong*

The University of Hong Kong, Hong Kong Teaching Assistant

Jan 2010- Dec 2013

- Designed and conducted the undergraduate course on transportation geography- GEO 2018
- Provided technical support to more than 30 undergraduate students to design and build websites
- Assisted in organizing academic conferences (e.g., the 17th and 18th International Conference of Hong Kong Society for Transportation Studies) and the Transportography Workshop
- Created and undertook observational surveys on roads for more than 600,000 road users

- Designed a questionnaire survey with an additional observational portion and managed a 48-member team to conduct the survey among more than 3,000 motorcyclists
- Developed a computer program in the Visual Basic language that is used in more than ten elderly centers in Hong Kong to help local academicians investigate how the elderly cross roads

SELECTED PEER-REVIEWED JOURNAL PAPERS

22. Siqin Wang, Wenhui Cai, Qian Chayn Sun, **Connor Y.H. Wu**, Xiao Huang, Ioannis Giannopoulos, Negar Alinaghi, Zhihang Liu (2025). "Human-perceived vs Actual Built Environment: Using Human-Centred GeoAI and Street View Images to Support Urban Planning in Australia". *Journal of Environmental Management*. (IF=8.0) [This journal was at the "A" level on the 2025 Australian Business Deans Council (ABDC) Journal Quality List and "Q1" in Scientific Journal Ranking (SJR)]
21. Wenting Jiang, Mengxi Zhang, **Connor Y.H. Wu ***, Weichuan Dong (2024). "Rural-Urban Differences in the Determinants of Subjective Well-being among X/Twitter Users in the United States". *Population, Space and Place*. doi: 10.1002/psp.2861 (IF=2.6) [This journal was at the "A" level on the 2024 Australian Business Deans Council (ABDC) Journal Quality List and "Q1" in Scientific Journal Ranking (SJR)]
20. Zhihang Liu, Jinlin Wu, **Connor Y.H. Wu**, Xinming Xia (2024). Shifting Sentiments and Pandemic Fatigue: Unveiling Public Reaction to COVID-19 Containment Policies in Wuhan and Shanghai Through Weibo Data. *Humanities & Social Sciences Communications*. <https://doi.org/10.1057/s41599-024-03592-3> (IF=3.7) [This journal was "Q1" in Scientific Journal Ranking (SJR) and ranked #10 in the Category of Social Sciences (general) to Google Scholar Metrics in 2024]
19. Xiao Huang, Siqin Wang, Di Yang, Tao Hu, Meixu Chen, Mengxi Zhang, Guiming Zhang, Filip Biljecki, Tianjun Lu, Lei Zou, **Connor Y.H. Wu**, YooMin Park, Xiao Li, Yuzhe Liu, Hongchao Fan, Jessica Mitchell, Zhenlong Li and Alexander Hohl (2024). Crowdsourcing Geospatial Data for Earth and Human Observations: A Review. *Journal of Remote Sensing*. DOI:10.34133/remotesensing.0105. [This journal received a Journal Impact Factor (JIF) of 8.8 and ranked #8 among 253 journals in Geosciences, multidisciplinary in 2023]
18. Xinming Xia, Yi Zhang, Wenting Jiang, and **Connor Y.H. Wu*** (2023). Staying Home, Tweeting Hope: Mixed Methods Study of Twitter Sentiment Geographical Index during US Stay-at-Home Orders. *Journal of Medical Internet Research*. 2023;25:e45757. doi: 10.2196/45757 (IF=7.4) (This journal ranked #1 in the Category of Medical Informatics according to Google Scholar Metrics in 2023)
17. Wang, S., **Connor Y.H. Wu**, Austin E., Davis M., & Gohlke, J. M. (2022). Healthcare Visits and Summertime Heat Index in Virginia: An Analysis of Syndromic Surveillance Data Collected From 2015–2020. *Journal of Environmental Health*.
16. Yan, Wei, S.C. Wong, Becky P.Y. Loo, **Connor Y.H. Wu**, Helai Huang, Xin Pei, & Fanyu Meng (2022). An assessment of the effect of green signal countdown timers on drivers' behavior and on road safety at intersections, based on driving simulator experiments and naturalistic observation studies. *Journal of Safety Research* (IF=3.487) [This journal was at the "A" level on the 2022 Australian Business Deans Council (ABDC) Journal Quality List]
15. **Wu, Connor Y. H.*** (2021). Heat waves and road traffic collisions in Alabama, United States. *Annals of the American Association of Geographers*. doi:10.1080/24694452.2021.1960145 (IF=4.683) (This journal ranked #4 in the Category of Geography & Cartography according to Google Scholar Metrics in 2021)
14. Wang, S., **Connor Y.H. Wu**, Richardson, M. B., Zaitchik, B. F., & Gohlke, J. M. (2021). Characterization of heat index experienced by individuals residing in urban and rural settings. *Journal of Exposure Science & Environmental Epidemiology*, 31 (4), 641-653. doi:10.1038/s41370-021-00303-x (IF=3.531) (This journal ranked #15 in the Category of Environmental & Occupational Medicine according to Google Scholar Metrics in 2021)
13. Wang, S., Richardson, M. B., **Connor Y.H. Wu**, Zaitchik, B. F., & Gohlke, J. M. (2020). Effect of an Additional 30 Minutes Spent Outdoors during Summer on Daily Steps and Individually Experienced Heat Index. *International Journal of Environmental Research and Public Health*, 17(20), 7558 (IF=2.849) (This journal ranked #1 in the Category of Public Health according to Google Scholar Metrics in 2021)
12. **Wu, Connor Y. H.***, Lee, H. F., & Liu, H. (2020). Effect of temperature and precipitation change on crime in the metropolitan area in Virginia, USA. *Asian Geographer*, 37(1), 17-31. doi:10.1080/10225706.2019.1678046 (IF=1.286)
11. Richardson, M. B., Chmielewski, C., **Connor Y.H. Wu**, Evans, M. B., McClure, L. A., Hosig, K. W., & Gohlke, J. M. (2019). The effect of time spent outdoors during summer on daily blood glucose and steps in women with type 2 diabetes. *Journal of Behavioral Medicine*, 43(5), 783-790. doi:10.1007/s10865-019-00113-5 (IF=2.868)
10. Wang, S., Richardson, M. B., **Connor Y.H. Wu**, Cholewa, C. D., Lungu, C. T., Zaitchik, B. F., & Gohlke, J. M. (2019). Estimating Occupational Heat Exposure From Personal Sampling of Public Works Employees in Birmingham, Alabama. *Journal of occupational and environmental medicine*, 61(6), 518-524. doi:10.1097/JOM.0000000000001604 (IF=1.355) (This journal ranked #13 in the Category of Environmental & Occupational Medicine according to Google Scholar Metrics in 2019)

9. **Wu, Connor Y. H.**, Bennett, M., Fox, K., Hubbard, A., Parkhurst, L., Sherrod, R., . . . Marmagas, S. W. (2019). Geological data and outreach methods for designing targeted home radon testing programs. *Environmental Earth Sciences*, 78(4), 120. doi:10.1007/s12665-019-8123-5 (IF=2.180)
 8. **Wu, Connor Y. H.**, Zaitchik, B. F., Swarup, S., & Gohlke, J. M. (2019). Influence of the Spatial Resolution of the Exposure Estimate in Determining the Association between Heat Waves and Adverse Health Outcomes. *Annals of the American Association of Geographers*, 109(3), 875-886. doi:10.1080/24694452.2018.1511411 (IF=4.082) (This journal ranked #4 in the Category of Geography & Cartography according to Google Scholar Metrics in 2019)
 7. **Wu, Connor Y. H.**, Zaitchik, B. F., & Gohlke, J. M. (2018). Heat waves and fatal traffic crashes in the continental United States. *Accident Analysis & Prevention*, 119, 195-201. doi:10.1016/j.aap.2018.07.025 (IF=3.593) [This journal was at the "A*" level on the 2019 Australian Business Deans Council (ABDC) Journal Quality List]
 6. Yue, R. P. H., Lee, H. F., & **Connor Y.H. Wu**. (2017). Trade routes and plague transmission in pre-industrial Europe. *Scientific Reports*, 7(1), 12973. doi:10.1038/s41598-017-13481-2 (IF=5.228) (This journal ranked #5 in the Category of Life Sciences & Earth Sciences according to Google Scholar Metrics in 2017)
 5. Jian, Y., **Connor Y.H. Wu**, & Gohlke, J. M. (2017). Effect Modification by Environmental Quality on the Association between Heatwaves and Mortality in Alabama, United States. *International Journal of Environmental Research and Public Health*, 14(10), 1143. doi:10.3390/ijerph14101143 (IF=2.145) (This journal ranked #1 in the Category of Public Health according to Google Scholar Metrics in 2021)
 4. **Wu, Connor Y. H.**, Evans, M. B., Wolff, P. E., & Gohlke, J. M. (2017). Environmental health priorities of residents and environmental health professionals: implications for improving environmental health services in rural versus urban communities. *Journal of environmental health*, 80(5), 28.
 3. **Wu, Connor Y. H.**, & Loo, B. P. Y. (2017). Changes in novice motorcyclist safety in Hong Kong after the probationary driving license scheme. *Transportmetrica A: Transport Science*, 13(5), 435-448. doi:10.1080/23249935.2017.1289277 (IF=1.477) [This journal was at the "B" level on the 2016 Australian Business Deans Council (ABDC) Journal Quality List]
 2. Yue, R. P. H., Lee, H. F., & **Connor Y.H. Wu**. (2016). Navigable rivers facilitated the spread and recurrence of plague in pre-industrial Europe. *Scientific Reports*, 6(1), 34867. doi:10.1038/srep34867 (IF=4.259) (This journal ranked #5 in the Category of Life Sciences & Earth Sciences according to Google Scholar Metrics in 2016)
 1. **Wu, Connor Y. H.**, & Loo, B. P. Y. (2016). Motorcycle safety among motorcycle taxi drivers and nonoccupational motorcyclists in developing countries: A case study of Maoming, South China. *Traffic Injury Prevention*, 17(2), 170-175. doi:10.1080/15389588.2015.1048336 (IF=1.683)
- * is used to denote the Corresponding Author

GRANTS

11. 2025 Expense Support Grant (\$3,600) offered by Institute for Humane Studies at George Mason University: This grant is awarded through a competitive review process and is designed without ideological conditions to support health inequity research from top research institutions.
10. 2023 Paper Presentation Grant at Troy University (\$370): This grant aimed to support the presentation – "Twitter sentiments on the stay-at-home orders in the United States" in the 2023 AAG Annual Meeting, Virtual, March 2023.
9. 2022 Grant Writing Fund at Troy University (\$3,000, October 2022 - September 2023): This grant aimed to support the proposal - "Identifying vulnerable autism communities impacted by COVID-19".
8. 2022 Paper Presentation Grant at Troy University (\$315): This grant aimed to support the presentation-" Effects of heat waves on traffic collisions: A case study in Alabama, United States" in the 2022 AAG Annual Meeting, Virtual, February 2022.
7. 2021 Grant Writing Fund at Troy University (\$3,000, October 2021 - September 2022): This grant aimed to support the proposal - "The inter-relationship between the cancer mortality rates and the COVID-19 death rates: a study from the spatial perspective in the United States"
6. 2021 Paper Presentation Grant at Troy University (\$300): This grant aimed to support the presentation-" Heat exposure of farmworkers in the hand-harvest fields in Alabama, the US" in 2021 AAG Annual Meeting, Virtual, April 2021.
5. 2020 Research Grant at Troy University (\$1,900, October 2020 - September 2021): This study aims to assess the Wet Bulb Globe Temperature (WBGT) in different hand-harvested crop fields (i.e., sweet corn and watermelons) in Alabama.
4. 2020 Paper Presentation Grant at Troy University (\$1,000): This grant aimed to support the presentation-"Temperature assessment of hand-harvested crop fields in Alabama, the US" in the 2020 AAG Annual Meeting, Denver, CO, April 2020.
3. 2019 Research Grant at Troy University (\$2,500, October 2019 - September 2020): This study aims to assess the heat exposure of farmworkers in different hand-harvested crop fields (i.e., sweet potatoes, tomatoes, sweet corn, and watermelons) in Alabama

2. 2019 Paper Presentation Grant at Troy University (\$750): This grant aimed to support the presentation- "Heat Waves and Fatal Traffic Crashes in the Continental United States" in the 2019 AAG Annual Meeting, Washington D.C., April 2019.
1. 2018 Research Grant of Troy University (\$1,600, October 2018 - September 2019): This research focuses on the association between heat waves and traffic crashes in the continental United States

AWARDS

10. 2025 Humane Studies fellowship (\$2,500) offered by Institute for Humane Studies at George Mason University: This fellowship is awarded through a strict review process to support PhD students completing major research projects, presenting their work at top conferences, and publishing their work in major journals.
9. 2025 Top-tier scholarship (\$500) offered by Institute for the Study of Free Enterprise (ISFE) at Oklahoma State University: This scholarship is awarded through a blind review process to top-tier participants selected to present at the 2025 Idea & Paper Development Workshop.
8. 2024 The First Place Winner in the SSB Three Minute Thesis (3MT) Competition at Oklahoma State University
7. 2024-2025 ISFE Doctoral Scholar (\$1,000): This scholarship is awarded for excellent research on topics such as competitive markets, public policy, regulation, and the role of business in a free society.
6. 2024 Edward Jones Scholar (\$2,500): The scholarship is awarded annually to one candidate who shows excellence in leadership, work experience or successes in current or past employment, performance in each field of course work or extracurricular activities, thought leadership and program implementation, volunteerism and civic involvement (2024).
5. 2024 Travel Award offered by the Graduate and Professional Student Government Association (GPSGA) at Oklahoma State University (\$600): This award supports my presentation at the 2024 China Summer Workshop on Information Management in Xiamen, China (2024).
4. 2023 1890 First-Generation Scholarship (\$1,890): This award recognizes my unique journey and contribution as a first-generation college student at Oklahoma State University
3. 2023 SSB PhD Scholarship (Full tuition waiver + Stipend for 4 years) at Oklahoma State University
2. Teratology Society Student and Postdoctoral Fellow Travel Award (\$500) for presenting research on heat waves and preterm birth in Teratology Society 58th Annual Meeting (2018).
1. 4-year Postgraduate Studentship provided by Research Grant Council, HKSAR (2010-2013).

CONFERENCE PAPERS

19. **Connor Y.H. Wu**, Xiaojin Sun and Ramesh Sharda (2025). The Geography of AI in Healthcare: Spatial Spillover Effects and Health Equity Implications of Hospital AI Adoption. Paper presented at the 15th Annual Conference on Health IT and Analytics, Austin, TX.
18. **Connor Y.H. Wu**, Xiongying Chen, Chenzhang Bao, Xiao Luo, Wenting Jiang and Ramesh Sharda (2025). Managing the Heat Wave Aftermath: Temporal Patterns in Emergency Room Revisits Drive Dynamic Resource Planning. Paper presented at the 15th Annual Conference on Health IT and Analytics, Austin, TX.
17. **Connor Y.H. Wu**, Xinming Xia, Wenting Jiang, Yi Zhang, Lingbo Liu, and Kejie Zhou (2023). Twitter sentiments on the stay-at-home orders in the United States. Paper presented at the 2023 Association of American Geographers (AAG) Annual Meeting, Virtual.
16. **Connor Y.H. Wu**, and Abby L. Reed (2022). *Effects of heat waves on traffic collisions: A case study in Alabama, United States*. Paper presented at the 2022 Association of American Geographers (AAG) Annual Meeting, Virtual.
15. Wenting Jiang, **Connor Y.H. Wu**, and Ashish Gupta. (2022). Geographical Clustering of Cancer Mortality Rates and Their Relationship with the Covid-19 Pandemic: County-level Analysis in the United States. Presented at 2022 INFORMS Annual Meeting, Indianapolis, IN.
14. Long Ma, and **Connor Y.H. Wu** (2022). *The Impact of COVID-19 on Crime: A Study from the Spatial-temporal Perspective in the Montgomery County, AL*. Paper presented at the International Conference on Agents and Artificial Intelligence 2022: In Proceedings of the 14th International Conference on Agents and Artificial Intelligence - Volume 3: ICAART, ISBN 978-989-758-547-0, pages 532-539. DOI: 10.5220/0010856700003116.
13. **Connor Y.H. Wu** (2021). *Heat exposure of farmworkers in the hand-harvest fields in Alabama, the US*. Paper presented at the 2021 Association of American Geographers (AAG) Annual Meeting, Virtual.
12. **Connor Y.H. Wu** (2020). *Temperature assessment of hand-harvesting crop fields in Alabama, the US*. Paper presented at the 2020 Association of American Geographers (AAG) Annual Meeting in Denver, CO.
11. **Connor Y.H. Wu**, Benjamin Zaitchik, and Julia M. Gohlke (2019). *Heat waves and fatal traffic crashes in the continental United States*. Paper presented at the 2019 Association of American Geographers (AAG) Annual Meeting in Washington, D.C.
10. **Connor Y.H. Wu**, Anna A. Scott, Molly B. Richardson, Pranavi Ghugare, Samarth Swarup, Benjamin F. Zaitchik, Julia M. Gohlke (2018). *Improving heat stress-related health outcomes through adaptation and mitigation-advances*

in modeling heat stress hazards, exposure, and vulnerability. Paper presented at 2018 American Geophysical Union (AGU) Fall Meeting in Washington, D.C.

9. Suwei Wang, Molly B. Richardson, **Connor Y.H. Wu**, Carly D. Cholewa, Claudiu T. Lungu, Benjamin Zaitchik, Julia M. Gohlke (2018). *Estimating Occupational Heat Exposure from Personal Sampling of Public Works Employees in Birmingham, Alabama*. Paper presented at 2018 American Geophysical Union (AGU) in Washington, D.C.
8. **Connor Y.H. Wu**, Benjamin Zaitchik, Samarth Swarup, and Julia M. Gohlke (2018). *Preterm birth and heat waves: Influence of the spatial resolution of the exposure estimate in determining the association*. Paper presented at Teratology Society 58th Annual Meeting.
7. **Connor Y.H. Wu**, Benjamin Zaitchik, Samarth Swarup, and Julia M. Gohlke (2018). *Influence of the spatial resolution of the exposure estimate in determining the association between heat waves and adverse health outcomes*. Paper presented at the 2018 Association of American Geographers (AAG) Annual Meeting
8. **Connor Y.H. Wu**, Julia M. Gohlke, Benjamin Zaitchik, Samarth Swarup, and Sung Kim (2017). *Influence of spatial resolution for exposure estimation in determining the association between heatwaves and adverse health outcomes*. Paper presented at the American Public Health Association (APHA) 2017 annual meeting
9. **Connor Y.H. Wu** (2017). *The association between heat waves and preterm birth using address-level versus ZIP code-level data*. Paper presented at the 2017 Association of American Geographers (AAG) Annual Meeting
4. **Connor Y.H. Wu** (2016). *Effect of Temperature and Precipitation Change on Historical Plague Outbreaks in Europe*. Paper presented at the Urban and Regional Information Systems Association (URISA)'s 2016 GIS and Health Symposium- Mapping the Way to Healthy Communities
3. **Connor Y.H. Wu**, and Becky. P.Y. Loo (2013). *Effects of helmet law enforcement on helmet use: A case study in Maoming, China*. Paper presented at the Transportation Surveys: Proceedings of the 18th International Conference of Hong Kong Society for Transportation Studies, Hong Kong
2. Becky. P.Y. Loo, and **Connor Y.H. Wu** (2013). *Effects of vehicular countdown signals on intersection safety: A case study in Maoming City, China*. Paper presented at the 2013 Association of American Geographers (AAG) Annual Meeting
1. Becky. P.Y. Loo, and **Connor Y.H. Wu** (2012). *Effects of the probationary driving licenses scheme on motorcycle safety in Hong Kong*. Paper presented at the 2012 Association of American Geographers (AAG) Annual meetings

TEACHING EXPERIENCE

Courses taught at Oklahoma State University (2023 – current)

Undergraduate (3 credits)

- MSIS 2301 Computer Programming for Business 2 times

Courses taught at Troy University (2018 - 2023)

Undergraduate (3 credits)

- GEO 2210 World Regional Geography (&online course) 14 times
- GEO 2299 Basic GIS 2 times
- GEO 3300 Principles of Physical Geography 4 times
- GEO 3301 Principles of Cultural Geography 2 times
- GEO 3306 Geography of Asia 2021 1 time
- GEO 3307 Geography of Europe 1 time
- GEO 4411 Population and Society 3 times
- GIS 3310 Introduction to Remote Sensing 2 times
- GIS 3320 GIS in the Social Science (&online course) 2 times
- GIS 3390 Fundamentals of Geographical Information & Analysis 8 times
- GIS 3391 Applications of Geospatial Information Science 3 times
- GIS 4401 Spatial Database Design & Management 6 times
- GIS 4405 Spatial Modeling & Programming 6 times
- SS 3375 Introduction to Social Scientific Inquiry 2 times
- SS 3377 Spatial Applications in Social Science 1 time

Graduate

- GEO 5511 Demography 3 times
- GIS 5530 Crime Mapping 1 time
- BIO 6650 Spatial Analysis Using GIS 1 time

VOLUNTEER WORK

Stillwater Medical Center, Stillwater OK

June 2025- Present

- Emergency Room Volunteer

Autism Support of Alabama, Birmingham AL

June 2020- Present

- Conducting spatial analysis and producing high-quality maps in ArcGIS
- Drafting and submitting proposals for funding

Montgomery Area Food Bank, Montgomery AL

June 2020- June 2023

- Took the lead in the development of online maps and data visualization

Old Dominion University, Norfolk VA

Research Collaborator (Department of Political Science and Geography)

Mar 2015- July 2019

- Evaluated the quality of life in Virginia by analyzing data from 2010 to 2014
- Investigated the relationship between crime and climate change in Hampton Roads
- Investigated the correlation between plague outbreaks and climate change in California
- Mentored students in the GIS course (GEOG402_502) at ODU

Research volunteer (Center for Coastal Physical Oceanography)

Jul 2015- Dec 2015

- Investigated the relationship between global sea level rising and El Nino Southern Oscillation using geospatial analysis and cyclostationary empirical orthogonal function (EOF) analysis in Matlab

Foodbank of Southeastern Virginia and the Eastern Shore, Norfolk VA

GIS Analyst

Jul 2015- Jul 2018

- Conducted spatial analysis and produced high-quality maps in ArcGIS
- Developed empirical models to evaluate the policies of partner agencies
- Performed statistical analysis in MS excel and SPSS
- Assisted in data visualization in MS Office

Mothers Against Drunk Driving, Virginia Beach VA

Volunteer

Mar 21st, 2015

- Assisted in the event of Walk Like MADD

PROFESSIONAL ACTIVITIES

Editorial Board

- Editorial Review Board member, the *Madridge Journal of Behavioral and Social Sciences* (MJBSS) (2019-Present)

Journal Reviewer

- *Atmosphere* (2020)
- *Archives of Environmental and Occupational Health* (2019)
- *Traffic Injury Prevention* (2019)
- *Scientific Reports* (2019-2021)
- *Sustainability* (2020-2021)
- *Environmental Health Perspectives* (2019-2020)
- *Environmental Health* (2023)
- *Injury Epidemiology* (2021)
- *International Journal of Environmental Research and Public Health* (2021-Present)
- *Journal of Medical Internet Research* (2023-Present)
- *JMIR Public Health and Surveillance* (2023-Present)
- *Journal of Transport Policy* (2019-2020)
- *Journal of Orthopedics and Trauma Research* (2019)

- *Journal of Environmental Earth Sciences (2018-2021)*
- *Journal of International Association of Traffic and Safety Sciences (IATSS) Research (2018)*
- *Journal of Travel Behaviour and Society (2014 - 2022)*
- *Journal of Transport Geography (2014 - 2018)*
- *Open Transportation Journal (2016)*

Conference Reviewer

- *ICIS (2024-25)*
- *AMCIS (2024)*
- *MWAIS (2025)*

Memberships

- *Association of American Geographers (AAG)*
- *American Public Health Association (APHA)*
- *Teratology Society (TS)*

TECHNICAL SKILLS

- KNIME
- GIS: ArcGIS Pro/Desktop, AutoCAD, ArcGIS Server, ArcSDE, ArcIMS, Surfer, GRASS, ERDAS IMAGINE
- Statistical Analysis: SPSS, MATLAB, R, SAS
- Database Management Systems: Oracle, SQL, and MS Access
- Programming: ASP (VBScript), PHP, JavaScript, HTML5, CSS, C, C++, C#, Python, and KML
- Professional: Microsoft Office Suites, Adobe Premiere, Photoshop, Illustrator
- Operating System: Windows and Unix
- Distance teaching environment: Blackboard, Moodle

LANGUAGES

- 100% fluent in English, Mandarin, and Cantonese

INTERESTS

- Skills-based volunteering for the socially vulnerable, such as improving road safety among the elderly and eliminating hunger
- Hiking in national parks and other ecotourism activities