F. Benjamin Zhan, Ph.D.

Professor
Department of Geography and Environmental Studies, Texas State University

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Texas State University	E–Mail:	zhan@txstate.edu
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RESEARCH INTERESTS

Geographic Information Science; Spatial Data Science; Health/Medical Geography; Health Disparities; Transportation; Hazards Reduction

EDUCATION

Institution	*Area of study*	*Degree & Year*
SUNY–Buffalo, The State University of New York National Center for Geographic Information & Analysis Buffalo, NY, USA (Major advisor: David M. Mark)	Geography/GIScience	Ph.D., 1994
International Institute for Geo-Information Science & Earth Observation (ITC), Enschede, The Netherlands	Geo-Information Systems	M.S., 1989
Wuhan Technical University of Surveying & Mapping (part of Wuhan University since 2000), Wuhan, China	Geodetic Engineering (Earthquake Science)	B.S., 1983

PROFESSIONAL EXPERIENCE

Employment History

2003–present
Texas State University (Texas State), San Marcos, TX, USA
Professor with tenure, *Department of Geography and Environmental Studies*

2003–2015
Texas State University, San Marcos, TX, USA
Director, *Texas Center for Geographic Information Science*

1999–2003
Texas State University, San Marcos, TX, USA
Associate Professor with tenure, Department of Geography

1995-1999
Texas State University, San Marcos, TX, USA
Assistant Professor, Department of Geography

1994–1995
The University of Tennessee, Knoxville, TN, USA
Post-Doctoral Research Fellow at the Management Science Program in the School of Business

1991–1994
University at Buffalo, The State University of New York (SUNY), Buffalo, NY, USA
Research Assistant at the **U. S. National Center for Geographic Information & Analysis (NCGIA)**

1989–1991
Delft University of Technology, Delft, The Netherlands
Research Associate at the Center for Computer Graphics and Mapping
Faculty of Geodetic Science and Surveying Engineering

1983–1987
Wuhan Technical University of Surveying and Mapping, Wuhan, China
Full time instructor at the Department of Geodetic Engineering

Visiting Positions or Adjunct Professorships

2018–present
(Adjunct) Clinical Professor of Population Health
University of Texas at Austin–Dell Medical School, Austin, Texas

1/2015–5/2015
Visiting Professor
Department of Health Disparities Research
The University of Texas MD Anderson Cancer Center, Houston, TX, USA

2008–2011
Guest Chair Professor in Cartography and Geographic Information Engineering
Guest chair professorship supported by the **Chang Jiang (Cheung Kong) Scholars Award Program**
Wuhan University, Wuhan, China
`(Note: "Chang Jiang" is the Yangtze River.)`

2007–2010
Visiting Professor
Shenzhen Institutes of Advanced Technology
The Chinese Academy of Sciences, China

12/2007
Visiting Professor
National Center for Geography and Geographic Information Science and Geomatics, Mexico

5/2006–6/2006
Visiting Professor
Central South University, Changsha, China

12/2005
Visiting Professor
National Center for Geography and Geographic Information Science and Geomatics, Mexico

6/2005
Visiting Professor
Central South University, Changsha, China

2/2002–4/2002
Visiting Scholar
Joint Laboratory for Geo-Information Science
The Chinese Academy of Sciences and the Chinese University of Hong Kong, Hong Kong, China

HONORS AND AWARDS

2017
Outstanding Mentor Award, The Conference of Southern Graduate Schools (CSGS), USA.
(Note: The CSGS has 200+ institutions. It gives one outstanding mentor award per year.)

2016
Outstanding Mentor Award, Graduate College, Texas State University

2016
Outstanding Professor, Graduate Forum, Department of Geography, Texas State University

2015
Favorite Professor, Alpha Chi National College Honor Society, Texas State University Chapter

2012
Faculty Award for Outstanding Achievement in International Education
International Office, Texas State University

2011
Presidential Award for Excellence in Scholarly/Creative Activities
(professor/associate professor rank)
Texas State University

2011
Golden Apple Award for Excellence in Scholarly/Creative Activities
(professor/associate professor rank)
College of Liberal Arts, Texas State University

2008
Chang Jiang (Cheung Kong) Scholars Award
China Ministry of Education (Beijing, China) and the Li Ka Shing Foundation (Hong Kong, China)

2008
University Award for Excellence in Scholarly/Creative Activities
(professor/associate professor rank)
Texas State University

2008
Golden Apple Award for Excellence in Scholarly/Creative Activities
(professor/associate professor rank)
College of Liberal Arts, Texas State University

2008
Marquis Who's Who in the World (2008-2009; Special 25th Silver Anniversary Edition)

2007
Dean's Excellence Award for Scholarly/Creative Activities
College of Liberal Arts, Texas State University

2007
Marquis Who's Who in Science and Engineering (2007-2008 Edition)

GRANTS OR CONTRACTS

[Note: Zhan is/was sole PI unless noted differently.]

31. 2024–2025 $21,319
Cancer Prevention and Research Institute of Texas (CPRIT)
Subaward to TxState from the Texas Comprehensive Access & Resources for Early Lung Cancer Prevention (TEX-CARE) lead by Dr. Roger Zoorob at Baylor College of Medicine
Zhan's Role: PI at TxState

30. 2023–2028 $121,507
Cancer Prevention and Research Institute of Texas (CPRIT)
Subaward to TxState from the Coordinating Center for Colorectal Cancer Screening Across Texas (CONNECT) lead by Dr. Navkiran "Kiran" K. Shokar
Zhan's Role: PI at TxState

29. 2021–2023 $300,000
Cancer Prevention and Research Institute of Texas (CPRIT)
Dissemination of a mailed stool testing program for colorectal cancer prevention in underserved communities in Texas
PI: Michael P. Pignone; Co-Is: F. Benjamin Zhan; Todd A. Olmstead

28. 2020–2023 $220,819
Texas Department of Transportation
Determine Evacuation Planning Design for Disaster Resilience
PI: Zhijie (Sasha) Dong; Co-PIs: Feng Wang; F. Benjamin Zhan

27. 2018–2019 $25,000
LIVESTRONG Cancer Institutes, University of Texas Dell Medical School
A Spatially Enhanced Multi-Faceted Intervention to Increase Colorectal Cancer Screening Rates in Vulnerable Populations in Travis County
PI: F. Benjamin Zhan; Co-PI: Michael P. Pignone; Co-Is: Anjum Khurshid; Nicole Kluz; Bretta Candelaria

26. 2016–2017 $20,000
Texas State University
Spatially Informed Strategies for Cancer Intervention
PI: F. Benjamin Zhan; Co-PIs: Larry Price, Yijun Lu, and Hui Zhao

25. 2012–2015 CNY700,000 ($110,000)
Natural Science Foundation of China
Space-Time Evolution of Gravity Field before and after the Wenchuan Earthquake
PI: Yiqing Zhu; US Collaborator: F. Benjamin Zhan

24. 2011–2015 $499,987
United States Environmental Protection Agency (USEPA)
Science To Achieve Results (STAR) Program
Air Pollution-Exposure-Health Effect Indicators: Mining Massive Geographically-Referenced Environmental Health Data to Identify Risk Factors for Birth Defects
PI: F. Benjamin Zhan; Co-PIs: Jean D. Brender, Jing Yang, and Peter H. Langlois

23. 2009–2010 $15,000
Texas Department of Transportation
Texas Department of Transportation (TxDOT) Research Technical Assistance Panels

22. 2008–2011 CNY300,000 ($43,800)
China Ministry of Education, the Li Ka Shing Foundation (Hong Kong), and Wuhan University
Visual Geospatial Analytics and its Applications in Human-Environmental Sciences

21. 2008–2009 $87,991
Texas Department of State Health Services
GIS-Augmented Environmental Health Research in Texas:
Maternal Residential Proximity to Superfund Sites and Low Birth Weight in Offspring

20. 2007–2008 $26,907
Texas Department of State Health Services
GIS-Based Analysis for Linking Environmental and Birth Data

19. 2007–2011 $1,080,454
National Institute of Environmental Health Sciences
Nitrates, Nitrites, and Nitrosatable Drugs and Risk of Selected Birth Defects
PI: Jean D. Brender; F. Benjamin Zhan (consultant) was one of other five
senior researchers on the team

18. 2007–2008 $30,877
Texas Department of State Health Services
GIS for Environmental Health Data Analysis in Texas

17. 2005–2007 $65,000
United States Environmental Protection Agency (USEPA)
"Dos Laredos": Integrating Monitoring, Watershed Education, and Litter Cleanup

16. 2005–2006 $15,412
United States Environmental Protection Agency (USEPA)
Learning Urban Watersheds

15. 2005–2007 $59,560
Texas Department of Transportation
Regional Public Transportation Solutions for Intercity Commuting Problems

14. 2004–2006 $656,842
Texas Commission on Environmental Quality (TCEQ)
The Texas Watch Program

13. 2004–2008 $161,395
United States Department of Agriculture (USDA)
(part of the grant – USDA/CSREES Award No: 2004-38899-02181)
Sustainable Agricultural Water Conservation in the Rio Grande Basin–
GIS and Climate Modeling Component
(sub-contract through River Systems Institute at Texas State)

12. 2003–2006 $1,000,000
United States Department of Defense (USDOD)
through the Air Force Institute for Operational Health
and the International Consortium for Health and Environmental Security
Texas-Mexico Border Health and Environmental Security Initiative
Co-PIs: Roberto Villarrel, Isidore Flores, Monte Thies, F. Benjamin Zhan, Keith Sternes

11. 2002–2003 $25,000
Houston Endowment
The Impacts of Economic and Population Growth
on Water Quality and Physical Habitat in the Guadalupe River Basin
(subcontract through the River Systems Institute at Texas State)

10. 2002–2005 $215,495
United States Centers for Disease Control and Prevention (CDC)
(subcontract through the Texas Center for Birth Defects Research and Prevention)
Residential Proximity to Environmental Hazards and Congenital Malformations in Offspring
PI: Jean D. Brender; Co-PIs: F. Benjamin Zhan, Lucina Suarez, Peter H. Langlois

9. 2001–2003 $238,000
Texas Workforce Commission
High Tech Workforce Training for Youth: Geospatial Information Technology
PI: Richard Boehm; Co-PI: F. Benjamin Zhan

8. 2000–2001 $50,000
Texas Department of Public Safety
Texas GIS-Based Sex Offender Location Notification Seed Grant
PI: F. Benjamin Zhan; Co-PI: Lawrence Estaville

7. 2000–2001 $43,365
Texas Natural Resources and Conservation Commission
GIS-Based Pollutants Emission Estimation and Allocation along the Texas-Mexico Border

6. 1998–2000 $107,830
Lower Colorado River Authority (LCRA)
Modeling Urban Growth and GIS-Based Allocation Analysis of Regional Water Demand and Supply

5. 1998–1999 $33,045
Texas Natural Resources and Conservation Commission
A Web-Based Recycling Markets Information System II

4. 1997-1998 $44,740
Texas Natural Resources and Conservation Commission
A Web-Based Recycling Markets Information System II
PI: Robert Larsen; Co-PI: F. Benjamin Zhan

3. 1997–1998 $10,588
Texas State University
A Network-Based Model for Water Availability and Water Rights Management of Texas Rivers
PI: F. Benjamin Zhan; co-PI: Richard Earl

2. 1997–1998 $6,000
Texas State University
Shortest Path Algorithms: An Empirical Evaluation Using Real Road Networks

1. 1996–1997 $3,000
Texas State University
Models of Fuzzy Spatial Relations

PUBLICATIONS

Book(s)

1. Bin Zou, F. Benjamin Zhan, and Yongnian Zeng. 2012. *Spatial-Temporal Modeling of Air Pollution Exposure and Health Risk Assessment*. Beijing, China: Environmental Science Press. (in Chinese)

Refereed Journal Articles

[Note: ‡ Indicates a student who was Zhan's advisee when the article was initially prepared;
* Denotes the corresponding author.]

109. Spencer, JC; Kluz, N; Mitchell, V; **Zhan, FB**; Shokar, NK; Pignone, MP. 2025. Modeling Tradeoffs in Reminder Intensity and Navigation for Large-Scale Mailed Stool Testing Programs. *American Journal of Preventive Medicine*. (DOI: https://doi.org/10.1016/j.amepre.2025.108187)

108. ‡Yang, M; *Narasimhan, VM; ***Zhan, FB**. 2025. Spatial insights into colorectal cancer risk factors and priority areas for screening in the United Kingdom based on data from the UK Biobank. *PLoS One* 20(7): e0328778. (DOI: 10.1371/journal.pone.0328778)

107. ‡Yang, M; *Narasimhan, VM; ***Zhan, FB**. 2025. Development of a composite score to assess colorectal cancer risk based on both genetic and environmental factors. *Annals of Cancer Epidemiology* 9: (DOI: 10.21037/ace-24-19)

106. ‡*Morshed, N; Weaver, R; **Zhan, FB**. 2024. Causal Mediation Analysis for Childhood Cancer Survival Disparity in Texas, 2005 to 2014. *Journal of Community Medicine and Health Solutions* 5: 023–030. (DOI: 10.29328/journal.jcmhs.1001044)

105. ‡*Liu, J; Das, S; **Zhan, FB**; Khan, MN. 2024. Spatial Analysis of Geographical Disparities in Pedestrian Safety. *Transport Policy* 156, 164-181. (DOI: 10.1016/j.tranpol.2024.06.018)

104. *Olmstead, TA; Spencer, JC; Kluz, N; **Zhan, FB**; Shokar, NK; Pignone, MP. 2024. Costs and projected impact of a Federally Qualified Health Center-based mailed colorectal cancer screening program in Texas. *Preventing Chronic Disease* 21: E30. (DOI: 10.5888/pcd21.230266)

103. ‡Yang, M; *Narasimhan, VM; ***Zhan, FB**. 2023. High polygenic risk score is a risk factor associated with colorectal cancer based on data from the UK Biobank. *PLoS One* 18(11): e0295155. (DOI: 10.1371/journal.pone.0295155)

102. *Gong, X; Huang, Y; Duong, J; Leng, S; **Zhan, FB**; Guo, Y; Lin, Y; Luo, Li. 2023. Industrial air pollution and low birth weight in New Mexico, USA. *Journal of Environmental Management* (DOI: 10.1016/j.jenvman.2023.119236)

101. *Zou, B; Xu, S; Liu, N; Li, S; Liu, X; Guo, Y; **Zhan, FB**. 2023. PM2.5 Exposure and Associated Premature Mortality to 2100 in China Under Climate and Socioeconomic Change Scenarios. *Earth's Future* 11(9): e2022EF003416. (DOI: https://doi.org/10.1029/2022EF003416)

100. ***Zhan, FB**; Liu, Y; Yang, M; Kluz, N; Olmstead, TA; Spencer, J; Shokar, N; Cruz, RL; Pignone, MP. 2023. Using GIS to identify priority sites for colorectal cancer screening programs in Texas health centers. *Preventing Chronic Disease* 20:220–205. (DOI: http://dx.doi.org/10.5888/pcd20.220205)

99. ‡*Yang, M; Hong, Y; **Zhan, FB**. 2023. Explore urban interactions based on floating car data – a case study of Chengdu, China. *Annals of GIS* (doi: 10.1080/19475683.2023.2166109)

98. Wu, X; Blanchardrd, D; **Zhan, FB**; *Zhang, J. 2022. Determining Association between Lung Cancer Mortality Worldwide and Risk Factors Using Fuzzy Inference Modeling and Random Forest Modeling. *International Journal of Environmental Research and Public Health*, 19(21): 14161. (doi: 10.3390/ijerph192114161. PMID: 36361041; PMCID: PMC9659002.)

97. ‡Gong, X; ***Zhan, FB**. 2022. A method for identifying critical time windows of maternal air pollution exposures associated with low birth weight in offspring using massive geographic data. *Environmental Science and Pollution Research* 29(22): 33345–33360. (doi: 10.1007/s11356-021-17762-2)

96. ‡*Morshed, N; **Zhan, FB**. 2021. Racial/ethnic, social characteristics and geographic disparities of childhood cancer late-stage diagnosis in Texas, 2005 to 2014. *Annals of GIS* 27(4): 329–340. (doi: 10.1080/19475683.2021.1981999)

95. Zhang, JT; **Zhan, FB**; Wu, X; Zhang, DJ. 2021. Partial Correlation Analysis of Association Between Subjective Well-Being and Ecological Footprint. *Sustainability* 13(3): 1033– (doi: 10.3390/su13031033)

94. ***Zhan, FB**; Morshed, N; Kluz, N; Candelaria, B; Baykal-Caglar, E; Khurshid, A; Pignone MP. 2021. Spatial Insights for Understanding Colorectal Cancer Screening in Disproportionately Affected Populations, Central Texas, 2019. *Preventing Chronic Disease* 18: E20–. (doi: https://doi.org/10.5888/pcd18.200362)

93. ‡Peng W; Wang, Q; **Zhan, FB**; Cao, Y. 2020. Spatiotemporal Ocean Tidal Loading in InSAR measurements Determined by Kinematic PPP Solutions of a Regional GPS Network. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing* 13, 3772-3779. (doi: 10.1109/JSTARS.2020.3002777)

92. Zou, B; Li, SX; Zheng, Z; **Zhan, FB**; Yang, ZL; Wan, N. 2020. Healthier routes planning: A new method and online implementation for minimizing air pollution exposure risk. *Computers Environment and Urban Systems* 80 (doi: 10.1016/j.compenvurbsys.2019.101456)

91. ‡*Morshed, N; Haskard-Zolnierek, K; **Zhan, FB**. 2020. Geographic variations of racial/ethnic disparities in late-stage diagnosis of childhood cancer in Texas. *Southern Medical Journal* 113(5), 224-231. (doi: 10.14423/SMJ.0000000000001097)

90. Fulton, L; Dong, Z; **Zhan, FB**; Kruse, CS; and Granados, PS. 2019. Geospatial-Temporal and Demand Models for Opioid Admissions, Implications for Policy. *Journal of Clinical Medicine* 8(7), 993–. (doi: 10.3390/jcm8070993)

89. Wang, Y; Hong, S; Wang, Y; Gong, X; He, C; Lu, Z; **Zhan, FB**. 2019. What is the difference in global research on Central Asia before and after the collapse of the USSR: a bibliometric analysis. *Scientometrics* (doi: 10.1007/s11192-019-03069-0)

88. ‡Gong, X; Lin, Y; ***Zhan, FB**. 2018. Industrial Air Pollution and Low Birth Weight: A Case-Control Study in Texas, USA. *Environmental Science and Pollution Research* 25(8): 1-15. (doi: 10.1007/s11356-018-2941-y)

87. ‡Gong, X; Lin, Y; Bell, ML; ***Zhan, FB**. 2018. Associations between maternal residential proximity to air emissions from industrial facilities and low birth weight in Texas, USA. *Environment International* 120: 181-198. (doi: 10.1016/j.envint.2018.07.045)

86. Lin, Y; Wan, N; ***Zhan, FB**. 2017. Colorectal cancer disparities among racial/ethnic minorities in Texas, 1995-2003. *Annals of GIS* 23(2): 93-101. (doi: 10.1080/19475683.2017.1311942)

85. Zhao, C; Jensen, J; **Zhan, FB**. 2017. A comparison of urban growth and their influencing factors of two border cities: Laredo in the US and Nuevo Laredo in Mexico. *Applied Geography* 79: 223-234. (doi: 10.1016/j.apgeog.2016.12.017)

84. ‡*Gong, X; **Zhan, FB**; Lin, Y. 2016. Maternal Residential Proximity to Nuclear Facilities and Low Birth Weight in Offspring in Texas. *Radiation and Environmental Biophysics* 56(1): 111-120. (doi: 10.1007/s00411-016-0673-2)

83. ‡Gong, X; ***Zhan, FB**; Brender, JD; Langlois, PH; Lin, Y. 2016. Validity of the Emission Weighted Proximity Model in estimating air pollution exposure intensities in large geographic areas. *Science of the Total Environment* 563-564: 478-85. (doi: 10.1016/j.scitotenv.2016.04.088)

82. Wu, X; **Zhan, FB**; Zhang, K; *Deng, Q. 2016. Application of a two-step cluster analysis and the Apriori algorithm to classify the deformation states of two typical colluvial landslides in the Three Gorges, China. *Environmental Earth Sciences* 75(2): 1-16. (doi: 10.1007/s12665-015-5022-2)

81. *Yang, Y; Li, L; **Zhan, FB**; Zhuang, Y. 2016. Probabilistic Analysis of Earthquake-Led Water Contamination: A Case of Sichuan, China. *Pure and Applied Geophysics*: 173(6): 1859–1879. (doi: 10.1007/s00024-015-1216-5)

80. Wu, X; Chen, X; **Zhan, FB**; *Hong, S. 2015. Global Research Trends in Landslides During 1991–2014: A Bibliometric Analysis. *Landslides* (2015): 1-12. (doi: 10.1007/s10346-015-0624-z)

79. ‡Lin, Y; Schootman, M; ***Zhan, FB**. 2015. Racial/Ethnic, Area Socioeconomic, and Geographic Disparities of Cervical Cancer Survival in Texas. *Applied Geography* 56: 21-28 (doi: 10.1016/j.apgeog.2014.10.004)

78. ‡*Yorke, C; **Zhan, FB**; Lu, Y; Hagelman, R. 2015. Incorporating Evacuation Potential into Place Vulnerability Analysis. *Geomatics, Natural Hazards and Risk* 6(3): 195-211. (doi: 10.1080/19475705.2013.832406)

77. *Brender, JD; Shinde, MU; **Zhan, FB**; ‡Gong, X; Langlois, PH. 2014. Maternal Residential Proximity to Chlorinated Solvent Emissions and Birth Defects in Offspring: A Case-Control Study. *Environmental Health* 13: 96 (doi: 10.1186/1476-069X-13-96)

76. Guo, YJ; Feng, N: Christopher, SA; Kang, P; **Zhan, FB**; *Hong, S. 2014. Satellite remote sensing of fine particulate matter ($PM_{2.5}$) air quality over Beijing using MODIS. *International Journal of Remote Sensing* (35)17): 6522-6544. (doi: 10.1080/01431161.2014.958245)

75. **Zhan, FB**; ‡*Lin, Y. 2014. Racial/Ethnic, Socioeconomic, and Geographic Disparities of Cervical Cancer Advanced-Stage Diagnosis in Texas. *Women's Health Issues* 24(5): 519-527. (doi: 10.1016/j.whi.2014.06.009)

74. Kang, P; Feng, N; Wang, Z; Guo, Y; Wang, Z; Chen, Y; Zhan, J; **Zhan, FB**; Hong, S. 2014. Statistical properties of aerosols and meteorological factors in Southwest China. *Journal of Geophysical Research: Atmospheres* 119(16): 9914-9930. (doi: 10.1002/2014JD022083)

73. Niu, B; Loáiciga, HA; Wang, Z; **Zhan, FB**; *Hong, S. 2014. Twenty years of global groundwater research: A Science Citation Index Expanded-based bibliometric survey (1993-2012). *Journal of Hydrology* 519: 966-975. (doi: 10.1016/j.jhydrol.2014.07.064)

72. Zhang, W; Wang, H; Han, F; Gao, J; Nguyen, T; Chen, Y; Huang, B; **Zhan, FB**; Zhou, L; *Hong, S. 2014. Modeling Urban Growth by the Use of a Multiobjective Optimization Approach: Environmental and Economic Issues for the Yangtze Watershed, China. *Environmental Science and Pollution Research* 21: 13027-13042. (doi: 10.1007/s11356-014-3007-4)

71. ‡*Lin, Y; **Zhan, FB**. 2014. Geographic Variations of Racial Disparities of Cervical Cancer Mortality in Texas. *Southern Medical Journal* 107(5): 281-288. (doi: 10.1097/SMJ.0000000000000100)

70. ***Zhan, FB**; ‡Gong, X; Liu, XJ. 2014. Mark on the Globe: A Quest for Scientific Bases of Geographic Information and its International Influence. *International Journal of Geographic Information Science* 28(6): 1233-1245. (doi: 10.1080/13658816.2013.847186)

69. *Brender, JD; Weyer, PJ; Romitti, PA: Mohanty, B; Shinde, MU; Vuong, AM; Sharkey, JR; Dwivedi, D; Horel, SA; Kantamneni, J; Huber, JC; Zheng, Q; Werler, M; Kelley, KE; Griesenbeck, JS; **Zhan, FB**; Langlois, PH; Suarez, L; Canfield, MA; the National Birth Defects Prevention Study. 2013. Prenatal Nitrate Intake from Drinking Water and Selected Birth Defects in Offspring. *Environmental Health Perspective* 121(9): 1083-1089. (doi: 10.1289/ehp.1206249)

68. *Zhou, XG; Chen, J; **Zhan, FB**; Li, ZL; Madden, M; Zhao, RL; Liu, WZ. 2013. A Euler Number-based Topological Computation Model for Land Parcel Database Updating. *International Journal of Geographic Information Science* 27(10): 1983-2005. (doi: 10.1080/13658816.2013.780607)

67. ‡*Lu, Z; **Zhan, FB**; Er, D. 2013. Probability Estimation of Future Earthquakes in China Based on an Improved PSHA Model. *Geomatics and Information Science of Wuhan University* 38(3): 349-352. (in Chinese with an English abstract) (doi: 1671-8860(2013)03-0349-04)

66. ‡Wan, N; **Zhan, FB**; *Zou, B; Wilson, JG. 2013. Spatial Access to Healthcare Services and Disparities in Colorectal Cancer Stage at Diagnosis in Texas. *The Professional Geographer* 65(3): 527-541. (doi: 10.1080/00330124.2012.700502)

65. ‡*Yu, X-M; **Zhan, FB**; Liao, M-S; Hu, J-X. 2012. Object-Oriented Feature Selection Algorithms based on Improved SEaTH Algorithms. *Geomatics and Information Science of Wuhan University* 37(8): 921-924. (in Chinese with an English abstract) (doi: 1671-8860(2012)08-0921-04

64. Zhu, Y; ***Zhan, FB***. 2012. Medium-Term Earthquake Forecast Using Gravity Monitoring Data: Evidence from the Yutian and Wenchuan Earthquakes in China. *International Journal of Geophysics* (doi: 10.1155/2012/307517)

63. *Zhu, Y; Liang, W; **Zhan, FB**; Liu, F; Xu, Y; Guo, S; Liu, L. 2012. Gravity Field Dynamics in Mainland China: 1998–2008. *Chinese Journal of Geophysics–Chinese Edition* 55(3): 804-813. (in Chinese with an English abstract) (doi: 10.6038/j.issn.0001-5733.2012.03.010)

62. Liu, X; **Zhan, FB**; Song, H; Niu, B; *Liu, Y. 2012. A Bibliometric Study of Earthquake Research: 1900–2010. *Scientometrics* 92(3): 747-765. (doi: 10.1007/s11192-011-0599-z)

61. ‡*Tian, N; Goovaerts, P; **Zhan, FB**; Chow, E; Wilson, JG. 2012. Identifying Risk Factors for Disparities in Breast Cancer Mortality Amongst African American and Hispanic Women. *Women's Health Issues* 22(3): e267-e276. (doi: 10.1016/j.whi.2011.11.007)

60. *Lu, Y; ‡Yorke, C; **Zhan, FB**. 2012. Considering Risk Locations when Defining Perturbation Zones for Geomasking. *Cartographica: The International Journal for Geographic Information and Geovisualization* 47(3): 168-178. (doi: 10.3138/carto.47.3.1112)

59. ‡Liu, X; ***Zhan, FB***. 2012. Productivity of Doctoral Graduate Placement among PhD-Granting Geography Programs in the United States: 1960–2010. *The Professional Geographer* 64(4): 475-490. (doi: 10.1080/00330124.2011.603658)

58. ‡Wan, N; ***Zhan, FB***; Lu, Y; Tiefenbacher, JP. 2012. Access to Health Care and Disparities in Colorectal Cancer Survival in Texas. *Health & Place* 18: 321-329. (doi: 10.1016/j.healthplace.2011.10.007)

57. ‡Yao, X; **Zhan, FB**; *Lu, Y; Yang, M–H. 2012. Effects of Real Time Traffic Information Systems on Traffic Performance under Different Network Structures. *Journal of Central South University of Technology* 19: 586-592. (doi: 10.1007/s11771-012-1043-0)

56. ‡*Wan, N; **Zhan, FB**; Cai, ZL. 2011. A Spatially Weighted Degree Model for Network Vulnerability Analysis. *Geo-Spatial Information Science* 14(4): 274-281. (doi: 10.1007/s11806-011-0575-z)

55. *Zou, B; **Zhan, FB**; Zeng, Y. 2011. Maternal Exposure to Sulfur Dioxide and the Risk of Low Birth Weight Babies. *Journal of Hygiene Research* 40(5): 638-642 (in Chinese with an English abstract) (doi: 1000-8020(2011) 05-0638-05)

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21. **Zhan, FB**; Brender, JD; Langlois, PH; Yang, J. 2015. Air Pollution-Exposure-Health Effect Indicators: Mining Massive Geographically Referenced Environmental Health Data to Identify Risk Factors for Birth Defects. Final report (2011-2015; 325 pages), US Environmental Protection Agency.

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10. **Zhan, FB**. 2001. A User Manual of WaterPlan-a GIS software package used for GIS-Based Allocation Analysis of Regional Water Supply and Demand. Prepared for the Lower Colorado River Authority (LCRA). Department of Geography, Southwest Texas State University.

9. **Zhan, FB**. 2000. GIS-Based Allocation Analysis of Regional Water Supply and Demand. Technical report prepared for the Lower Colorado River Authority (LCRA). Department of Geography, Southwest Texas State University.

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3. **Zhan, FB**. A Review and a Framework for Knowledge-Based Interpretation of Scanned Map Images. Technical Report, Center for Computer Graphics and Mapping, Delft University of Technology, The Netherlands.

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65. †Morshed, N; Zhan, FB. 2018. Childhood cancer disparities in Texas. *The Annual Meeting of the Association of American Geographers (AAG)*. New Orleans, LA, USA.

64. Zhan, FB; Gong, X; Brender, JD; Langlois, P. 2018. Data-Driven Environmental Health Research. *The Annual Meeting of the Association of American Geographers (AAG)*. New Orleans, LA, USA.

63. †Wei, G; Zhan, FB. 2017. Variability and Uncertainty Associated with Personal Environmental Exposure Assessment in Geographic Space and Time. *The Annual Meeting of the Association of American Geographers (AAG)*. Boston, MA, USA.

62. †Morshed, N; Zhan, FB. 2017. Late stage diagnosis factors of childhood cancer in Texas. *The Annual Meeting of the Association of American Geographers (AAG)*. Boston, MA, USA.

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58. †Gong, X; Zhan, FB. 2013. Health Risk Assessment of TRI Toxic Air Pollutants in Texas from 1996 to 2008, in the *Program of the Annual Meeting of the Association of American Geographers (AAG)*. Los Angeles, CA, USA.

57. †Lin, Y; Zhan, FB. 2013. Geographic variations of racial disparities of cervical cancer mortality in Texas, in the *Program of the Annual Meeting of the Association of American Geographers (AAG)*. Los Angeles, CA, USA.

56. Zhan, FB; Brender, JD. 2012. GIS and Health: Maternal Residential Proximity to Superfund Sites and Low Birth Rate in Offspring, in the *Program of the Annual Meeting of the Association of American Geographers (AAG)*. New York, NY, USA.

55. †Gong, X; Pei, T; Zhan, FB. 2012. Clustering Methods of Trajectory Data: A Review (poster), in the *Program of the Annual Meeting of the Association of American Geographers (AAG)*. New York, NY, USA.

54. †Lin, Y; Zhan, FB. 2012. Geographic Disparities in Cervical Cancer Mortality in the United States, in the *Program of the Annual Meeting of the Association of American Geographers (AAG)*. New York, NY, USA.

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52. †Lin, Y; Chow, TKE; **Zhan, FB**. 2011. An Exploratory study of Vietnamese Americans in Texas using web demographic data, in the *Program of the Annual Meeting of the Association of American Geographers (AAG)*. Seattle, WA, USA.

51. †Wan, N; **Zhan, FB**. 2011. Disparities of Colorectal Cancer Stage at Diagnosis in Texas, 1996-2003, in the *Program of the Annual Meeting of the Association of American Geographers (AAG)*. Seattle, WA, USA.

50. **Zhan, FB**; Zhu, Y; Zhou, JC. 2011. Global Surveillance of High Risk Regions of Large Earthquakes Using Satellite Gravity Data, in the *Program of the Annual Meeting of the Association of American Geographers (AAG)*. Seattle, WA, USA.

49. **Zhan, FB**; Zhu, Y. 2010. Gravity Measurements and Their Variations before Large Earthquakes in China: 1998-2005. In printable abstracts of *The 82nd annual meeting of the Eastern Section of the Seismological Society of America* (page 50). Boston, MA. October 17-19.

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47. †Lin, Y; **Zhan, FB**; Zhu, JJ. 2010. Assessment of Mercury Pollution in Soil, in the *Program of the Annual Meeting of the Association of American Geographers (AAG)*. Washington, DC, USA.

46. **Zhan, FB**; Zhu Y. 2010. Earthquakes can be Forecasted, in the *Program of the Annual Meeting of the Association of American Geographers (AAG)*. Washington, DC, USA.

45. Brender, JD; Langlois, PH; **Zhan, FB**; Suarez, L; Canfield, MA. 2009. Environmental Hazards and Birth Defects in Texas (USA). Birth Defects Research (Part A) 85:244. (**refereed**)

44. †Liu, X; **Zhan, FB**. 2009. Road Selection Based on Voronoi Diagrams and 'Strokes' in Map Generalization, in the *Program of the Annual Meeting of the Association of American Geographers (AAG)*. Las Vegas, NV.

43. Silvan, J; Wang, L; **Zhan, FB**; Crews, KA. 2009. Multi-temporal sub-pixel change detection and analysis of invasive saltcedar: A case study along the Rio Grande, 1993-2005, in the *Program of the Annual Meeting of the Association of American Geographers (AAG)*. Las Vegas, NV.

42. **Zhan, FB**; Tapia, FO; Santillana. M. 2009. Estimating Small Area Population Growth Using Geographic Knowledge Guided Cellular Automata, in the *Program of the Annual Meeting of the Association of American Geographers (AAG)*. Las Vegas, NV.

41. **Zhan, FB**; Zhu Y. 2009. Medium-Term Earthquake Prediction Using Gravity Monitoring Data (poster), in the *Program of the American Geophysical Union (AGU), Fall Meeting 2009*, abstract No. S21A-1703. San Francisco, CA, USA.

40. **Zhan, FB**; Zhu Y; Hu, B; Li, Z; Yang, L; Li, T. 2009. Geovisual Analytics for Earthquake Risk Assessment & Earthquake Related Decision Support: A Research Agenda, in *Proceedings of the International Symposium on Earthquake Seismology and Earthquake Predictability (ISESEP)*. Beijing, China.

39. Zhu Y; **Zhan, FB**; Liang W; Xu, Y. 2009. Medium-Term Prediction of the Wenchuan Earthquake Using Mobile Gravity Survey Data, in *Proceedings of the International Symposium on Earthquake Seismology and Earthquake Predictability (ISESEP)*. Beijing, China.

38. Brender, JD; Suarez, L; Langlois, PH; Steck, M; **Zhan, FB**; Moody, K. 2008. Are Maternal Occupation and Residential Proximity to Industrial Sources of Pollution Related? *American Journal of Epidemiology* 167(11): S102-S102. (**refereed**)

37. †Collins, W; **Zhan, FB**; Chen, X. 2008. Evacuation Microsimulation of Diurnal Population Distributions, in the *Program of the Annual Meeting of the Association of American Geographers (AAG)*. Boston, MA. April 17

36. †Tian, N; Wilson, JG; **Zhan, FB**. 2008. Regional Cluster Analysis of Female Brest Cancer at the County Level of the United States, in the *Program of the Annual Meeting of the Association of American Geographers (AAG)*. Boston, MA.

35. †Wan, N; **Zhan, FB**. 2008. Complexity of spatial networks, in the *Program of the Annual Meeting of the Association of American Geographers (AAG)*. Boston, MA.

34. **Zhan, FB**. 2008. Spatial Cluster Analysis and Cancer Mortality Hot Spots in Texas. *Annals of the Academy of Medicine, Singapore* 37(5): S32 (Supplement). (Proceedings of the Singapore Disease Management Conference 2008) (**refereed**)

33. **Zhan, FB**. 2008. Spatial Cluster Analysis and Cancer Mortality Hot Spots in Texas, in *Proceedings of the Singapore Disease Management Conference 2008*. Singapore.

32. †Yao, ZJ; **Zhan, FB**. 2007. Visual Exploration and Spatial Analysis for Detecting Clusters of Line Segments (poster), in the *Program of the Annual Meeting of the Association of American Geographers (AAG)*. San Francisco, CA.

31. **Zhan, FB**; Chen, X. 2007. Intercity and Urban-Rural Commute Flows in Central Texas, in the *Program of the Annual Meeting of the Association of American Geographers (AAG)*. San Francisco, CA.

30. Brender, JD; **Zhan, B**; Suarez, L; Langlois, PH. 2006. Residential Proximity to Waste Sites and Industrial Facilities and Chromosomal Anomalies in Offspring. *American Journal of Epidemiology*, 163 (11): S156-S156. (**refereed**)

29. †Chen, X; **Zhan, FB**. 2006. Commute Patterns in Central Texas, in the *Program of the Annual Meeting of the Association of American Geographers (AAG)*. Chicago, IL.

28. †Wu, G; **Zhan, FB**. 2006. Climate Change and Water Resources Vulnerability in Texas, in the *Program of the Annual Meeting of the Association of American Geographers (AAG)*. Chicago, IL.

27. †Wu, G; **Zhan, FB**. 2006. GIS, Geospatial Analysis, and Modeling for Sustainable Water Resource Management. Fifth Annual Rio Grande Initiatives Conference. Ruidoso.

26. **Zhan, FB**; Brender, JD; Suarez, L; Langlois, PH. 2006. GIS-Augmented Environmental Health Research, in *Proceedings of the 4th International Academic Conference on Environmental and Occupational Medicine*. Kunming, China, October 16-19, p. 38. (**refereed**)

25. **Zhan, FB**; Brender, JD; Suarez, L; Langlois, PH. 2006. GIS-Augmented Environmental Epidemiology Research (poster), in *Program of the 14th International Conference on Geoinformatics (Geoinformatics 2006)*. Wuhan, China.

24. **Zhan, FB**; Chen, X; Meaker, J. 2006. Agent-Based Modeling and Analysis of Hurricane Evacuation Procedures for the Florida Keys, in the *Program of the Annual Meeting of the Association of American Geographers (AAG)*. Chicago, IL.

23. **Zhan, FB**. 2005. The Use of Geographic Information Systems for Sustainable Water Resource Management. In *Proceedings of the International Seminar of the Precious Water Environment*, Shimane University, Matsue, Japan, January 26, pp. 83-92. (**refereed**)

22. **Zhan, FB**; 2005. GIS for Sustainable Water Resource Management in the Rio Grande Basin–Development of Geodatabases and Acquisition of Land Use Land Cover Data. Fourth Annual Rio Grande Initiatives Conference. Alpine, TX.

21. **Zhan, FB**; Brender, JD; Suarez, L; Langlois, PH; 2005. GIS-Augmented Environmental Epidemiology Research: Residential Proximity to Hazardous Waste Sites and Congenital Malformations in Offspring, in the *Program of the Annual Meeting of the Association of American Geographers (AAG)*. Denver, CO.

20. †Chen, X; **Zhan, FB**. 2004. Agent-Based Modeling and Simulation of Urban Evacuation: Relative Effectiveness of Simultaneous and Staged Evacuation Strategies. The 83rd Annual Meeting of Transportation Research Board. Washington, DC.

19. †Wu, G; **Zhan, FB**. 2004. Hydrologic Modeling Using Remote Sensing and GIS - A Case Study in the San Marcos Basin?, in the *Program of the Annual Meeting of the Association of American Geographers (AAG)*. Philadelphia, PA.

18. **Zhan, FB**. 2004. Automatic Calibration of Mathematical Models for Spatial Allocation of Population Growth in Regional Water Resource Planning. The 4th International Conference on Watershed Management and Urban Water Supply. Shenzhen, China.

17. **Zhan, FB**. 2004. What are *the Weakest Links* in Intermodal Transportation?, in the *Program of the Annual Meeting of the Association of American Geographers (AAG)*. Philadelphia, PA.

16. **Zhan, FB**; Brender, J; Han, Y; De Lima, I; Suarez, L; Langlois, P. 2004. GIS-Based Spatial Search for Environmental Health Research: Environmental Hazards and Birth Defects in Texas. CDC 2004 Environmental Health Tracking Conference. Philadelphia, PA.

15. **Zhan, FB**; Wu, G. 2004. Spatially Distributed Hydrologic Modeling Using Information Derived from Remote Sensing Images and Other Geospatial Data. International Conference on Water Security for Future Generations. Changchun, Jilin, China.

14. †Chen, X; **Zhan, FB**. 2003. Mapping the Vulnerability of Potential Toxic Substance Release from Industrial Facilities under Emergency Situations: A Case Study of Galveston, in the *Program of the Annual Meeting of the Association of American Geographers (AAG)*. New Orleans, LA.

13. †Wu, G; **Zhan, FB**. 2003. Spatial Data Mining with Improved GIS Tools, in the *Program of the Annual Meeting of the Association of American Geographers (AAG)*. New Orleans, LA.

12. **Zhan, FB**; Chen, X. 2003. Micro-Simulation of Urban Evacuation Strategies, in the *Program of the Annual Meeting of the Association of American Geographers (AAG)*. New Orleans, LA.

11. †Wilson, JG; **Zhan, FB**; Brender, JD; Bryan, D. 2002. Geographic concentrations of prostate cancer incidence in Texas and their relationship to socioeconomic conditions, in the *Program of the Annual Meeting of the Association of American Geographers (AAG)*. Los Angeles, CA.

10. **Zhan, FB**. 2001. Geographic Distributions of Cancer Mortality in Texas, in the *Program of the Annual Meeting of the Association of American Geographers (AAG)*. New York, NY.

9. **Zhan, FB**. 2001. How Much is Region Q Covering Region R 'a Little Bit,' 'Somewhat,' or 'Nearly Completely?' In: Matteo Cristani and Brandon Bennett (Eds.), Proceedings of SVUG01: The Joint COSIT-FOIS Workshop on Spatial Vagueness, Uncertainty and Granularity, Ogunquit, ME, October 15-16, 2001. (**refereed**)

8. **Zhan, FB**. 2000. Quantification of Linguistic Modifiers in Descriptions of the Topological Relation "Region A Covers Region B." GIScience 2000: The First International Conference on Geographic Information Science. Savannah, GA, October 28-31. (**refereed**)

7. **Zhan, FB**. 1997. A New Method for Spatial Point Pattern Analysis, in the *Program of the Annual Meeting of the Association of American Geographers (AAG)*. Fort Worth, TX.

6. **Zhan, FB**. 1997. Approximation of Topological Relations between Fuzzy Regions Satisfying a Linguistically Described Query. In: Stephen C. Hirtle and Andrew U. Frank (eds.) Lecture Notes in Computer Science 1329. Spatial Information Theory: A Theoretical Basis for GIS. International Conference COSIT'97. Laurel Highlands, Pennsylvania, USA, October15-18, 1997. Springer, Berlin, 509-510. (**refereed**)

5. **Zhan, FB**. 1997. GIS-Transportation and the Private Sector: Building Common Grounds between Universities and Private Sectors, in the *Program of the Annual Meeting of the Association of American Geographers (AAG)*. Fort Worth, TX.

4. **Zhan, FB**. 1996. A Spatial Decision Support System For Wood Fuel Procurement, in the *Program of the Annual Meeting of the Association of American Geographers (AAG)*. Charlotte, NC.

3. **Zhan, FB**; Noon, CE. 1995. Shortest Paths Algorithms: A Further Evaluation Using Real World Road Networks. In: F. Andrew Schoolmaster (ed.) *Papers and Proceedings of Applied Geography Conferences*, Volume 18, p. 231. (**refereed**).

2. **Zhan, FB**. 1995. A Family of Spatio-Temporal Competitive Location Models in Mobile Trading, in the *Program of the Annual Meeting of the Association of American Geographers (AAG)*. Chicago, IL.

1. **Zhan, FB**. 1995. Shortest Path Algorithms: An Evaluation Using Real Road Networks, in *Program of the 18th Applied Geography Conference*. Crystal City, Arlington, VA.

LECTURES OR CONFERENCE PRESENTATIONS

Invited Seminars/Lectures/Presentations

87. Zhan, FB. 2023. Spatial Data Science and Health: Analysis to Support Colorectal Cancer Screening. CDC Colorectal Cancer Control Program (CRCCP) - Stakeholder and Community Advisory Council (SCAC) Quarterly Meeting, UT Health–Houston, November 29, 2023.

86. Zhan, FB; Pignone, MP. 2023. Using Mapping (GIS) to Identify Priority Sites for Colorectal Cancer Screening Programs in Texas Health Centers. *The 2023 Health Information Technology & Clinical Conference.* Georgetown, TX, April 26.

85. Zhan, FB; Morshed, N; Kluz, N; Candelaria, B; Baykal-Caglar, E; Khurshid, A; Pignone, MP. 2019. A spatially enhanced multi-faceted intervention to increase colorectal cancer screening rates in vulnerable populations in Travis County. LCI Basic–Translational Research Retreat. University of Texas at Austin Dell Medical School – LIVESTRONG Cancer Institutes (LCI). Austin, TX, Nov. 19.

84. Zhan, FB. 2019. Spatial Insights for Health Improvement: Case Studies in Texas. Keynote Presentation at the GIS Day in 2019, Texas Department of State Health Services. Austin, TX, November 13.

83. Zhan, FB; Morshed, N; Kluz, N; Candelaria, B; Baykal-Caglar, E; Khurshid, A; Pignone, MP. 2019. How Spatial Insights May Enhance Intervention for Colorectal Cancer Screening. Clinical Research Retreat: Strategies to Advance Cancer Care Through Clinical Research. University of Texas at Austin Dell Medical School – LIVESTRONG Cancer Institutes (LCI). Austin, TX, October 28.

82. Zhan, FB. 2019. Panel member, Academic Success for International Students Shop Talks. Texas State University Graduate College. San Marcos, TX. August 30.

81. Zhan, FB. 2018. A Spatially Enhanced Multi-Faceted Intervention to Increase Colorectal Cancer Screening Rates in Vulnerable Populations in Travis County. Presentation made to the Research Committee of CommUnityCare Health Centers, Austin, TX. July 10.

80. Zhan, FB. 2018. Spatial Data Science and Applications: Progress and Challenges. Wuhan University, Wuhan, China. May 22.

79. Zhan, FB. 2017. Geospatial Data Science and Knowledge Discovery in Environmental Health Research. The 5th Annual 2017 International Conference on Geo-Spatial Knowledge and Intelligence [GSKI2017], Chiang Mai, Thailand. December 9. (**Keynote Presentation**)

78. Zhan, FB. 2017. Presentation as a panel member. PROGRAM FOR EXCELLENCE IN TEACHING AND SCHOLARSHIP (PETS) – Graduate Education and Undergraduate Research. Texas State University. San Marcos, TX. October 27.

77. Zhan, FB. 2017. Presentation as a panel member. Mentoring Graduate Students. Graduate College, Texas State University, San Marcos, TX. March 8.

76. Zhan, FB. 2016. Spatially Informed Strategies for Targeted Health Promotion, University of Texas Health Science Center at San Antonio, August 11.

75. Zhan, FB. 2016. Spatially Informed Strategies for Targeted Health Promotion, Central South University, China, May 16.

74. Zhan, FB. 2015. Data-Driven Spatial Strategies for Targeted Health Promotion. Center for Geoinformation Engineering, Division of Land Management, Shenzhen, May 21.

73. Zhan, FB. 2015. Spatial Insights for Health Disparity Reduction: Where to Intervene. Division of Cancer Prevention and Population Science Grand Rounds. The University of Texas MD Anderson Cancer Center, Houston, TX, USA. March 11.

72. Zhan, FB. 2014. Brief on GIS applications for health data analysis through a teleconference, National Academy of Sciences Committee on the ANALYSIS OF CANCER RISKS IN POPULATIONS NEAR NUCLEAR FACILITIES: PHASE 2 PILOT PLANNING, San Marcos, TX. February 18.

71. Zhan, FB. 2013. GIS and its Applications in Health Services, Urban Evacuation, and Disaster Management. Shanxi Provincial Bureau of Earthquake Administration, Xi'An, China. June 9

70. Zhan, FB. 2013. Earthquake Forecast based on Gravity Change. Second Crust Monitoring and Application Center, China Earthquake Administration, Xi'An, China. June 7

69. Zhan, FB. 2012. Texas State Research Initiatives in GIS and Health. Department of Geography, Texas State University, TX. March 21

68. Zhan, FB. 2010. Gravity Monitoring and Earthquake Forecast: New Evidence from China. Department of Civil Engineering, Purdue University, West Lafayette, IN. April 12

67. Zhan, FB. 2010. Are Earthquakes Really Unpredictable? Department of Geography, Texas State University-San Marcos. February 5

66. Zhan, FB. 2009. GIS-Augmented Environmental Health Research. Department of Land Surveying & Geo-Informatics, The Hong Kong Polytechnic University, Hong Kong, China. November 2

65. Zhan, FB. 2009. Big Country, Advanced Science and Technology, and Forever Lasting Work. Wuhan University, Wuhan, China. October 26

64. Zhan, FB. 2009. GIS-Augmented Environmental Health Research. Department of Biology, Texas Lutheran University, Seguin, Texas. October 8

63. Zhan, FB. 2009. Maternal Residential Proximity to Superfund Sites & Low Birth Weight in Offspring. Texas Department of State Health Services, Austin, Texas. September 22

62. Zhan, FB. 2009. Geographic Information Science and Technology for Hazards and Environmental Health Research. Shandong University of Science and Technology, Qingdao, China. July 3

61. Zhan, FB. 2009. Recent Advancement of Earth and Space Information Technologies and Their Potential Applications in Earthquake Risk Analysis and Decision-Support. Sichuan Earthquake Administration, Chengdu, China. June 8

60. Zhan, FB. 2009. How to Become a Beginning Scholar. Central South University, Changsha, China. June 17

59. Zhan, FB. 2009. Transportation Analysis and Research. Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences, Shenzhen, China. June 3

58. Zhan, FB. 2008. Digital City, Extreme Events, and Geospatial Information Technologies for Emergency Planning and Crisis Management. Workshop on Digital City to Digital Life: Digital City Monitoring and Emergency Management. Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences, Shenzhen, China. October 25 (**keynote presentation**)

57. Zhan, FB. 2008. Geospatial Analysis and Computation: Some Example Applications. Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences, Shenzhen, China. June 30

56. Zhan, FB. 2008. Human-Environmental Science and Geographic Information Science: Some Theoretical and Methodological Issues. National Key Laboratory for Information Engineering in Surveying, Mapping and Remote Sensing, Wuhan University, China. June 18

55. Zhan, FB. 2008. GIS and Disaster Management. Shanxi Provincial Bureau of Earthquake Administration, Xi'An, China. May 5

54. Zhan, FB. 2008. Human-Environmental Science and Geographic Information Science: Some Theoretical and Methodological Issues. Second Crust Monitoring and Application Center, China Earthquake Administration, Xi'An, China. May 4

53. Zhan, FB. 2008. Regional Climate Change and its Impacts on Water Resources in Texas. Central South University, Changsha, China. April 15

52. Zhan, FB. 2007. Agent-Based Modeling of Network Dynamics for Evacuation Planning. Institute for Geoinformatics, University of Münster, Münster, Germany. December 18

51. Zhan, FB. 2007. Transportation Analysis: Regional Integrated Biomass Assessment (RIBA). Video Conference Lecture for the Mexican National Institute of Statistics and Geographic Information (INEGI) at the Center for Geography and Geographic Information Science (CentroGeo), CONACYT (Mexican National Science Foundation). December 7

50. Zhan, FB. 2007. GIS and Spatial Analysis for Environmental Health Research. Video Conference Lecture for the Mexican National Institute of Statistics and Geographic Information (INEGI) at the Center for Geography and Geographic Information Science (CentroGeo), CONACYT (Mexican National Science Foundation). December 7

49. Zhan, FB. 2007. GIS and Environmental Health Research: Visual Exploration of Geospatially-Referenced Health Data with Hundreds of Dimensions. Center for Geography and Geographic Information Science (CentroGeo), CONACYT (Mexican National Science Foundation). December 5

48. Zhan, FB. 2007. Visual Exploration of Environmental Health Data. Geospatial Technologies and Public Health: Mapping Disease, Promoting Health. College Station, Texas, USA. November 17 (**plenary speech**)

47. Zhan, FB. 2007. Research Challenges in High Performance Computing for Transportation. National Annual Conference on High Performance Computing, HPC China 2007, Shenzhen, China. October 27 (**plenary speech**)

46. Zhan, FB. 2007. Microsimulation of Urban Evacuation. Wuhan University, Wuhan, China. June 15

45. Zhan, FB. 2007. Geographic Information Systems and Transportation Analysis. Heilongjiang Institute of Technology, Haerbin, China. June 9

44. Zhan, FB. 2007. Geographic Information Systems and Transportation Analysis. Northeast Normal University, Changchun, China. June 4

43. Zhan, FB. 2007. Geographic Information Systems and Transportation Analysis. Northeastern University, Shenyang, China. June 1

42. Zhan, FB. 2007. Microsimulation as a Means to Understand the Complexity of Urban Evacuation. Tsinghua University, Beijing, China. May 29

41. Zhan, FB. 2007. Microsimulation of Urban Evacuation. Central South University, Changsha, China. May 25

40. Zhan, FB. 2007. Agent-Based Modeling and Simulation of Network Dynamics for Evacuation Planning. Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences, Shenzhen, China. May 24

39. Zhan, FB. 2007. GIS and Spatial Analysis for Epidemiological Research. Health Science Center, University of North Texas, Fort Worth, TX. February 26

38. Zhan, FB. 2006. GIS-Augmented Environmental Health Research. Central South University, Changsha, China. October 23

37. Zhan, FB. 2006. GIS-Augmented Environmental Health Research. The 4th International Academic Conference on Environmental and Occupational Medicine. Kunming, China. October 18. (**plenary speech**)

36. Zhan, FB. 2006. GIS and Environmental Epidemiology: Maternal Residential Proximity to Industrial Facilities and Congenital Malformations in Offspring. East-West Center, Hawaii. June 30

35. Zhan, FB. 2006. The Potential of GIScience in Helping Answer Big Scientific Questions. The State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing (LIESMARS), Wuhan University, China. May 27

34. Zhan, FB. 2006. The Role of GIScience in Helping Answer Big Scientific Questions in Human Environmental Sciences. Conference of Scientific Week, Central South University, Changsha, China. May 12

33. Zhan, FB. 2006. GIS and its Applications in Transportation and Environmental Health Research. Department of Computer Science, Texas State University–San Marcos. April 28

32. Zhan, FB. 2006. GIS-Augmented Environmental Health Research. Department of Earth and Environmental Science, University of Texas at San Antonio. February 7

31. Zhan, FB. 2005. Global Environmental Change, Human Health, and GIScience. Center for Geography and Geographic Information Science (CentroGeo), CONACYT (Mexican National Science Foundation). December 8

30. Zhan, FB. 2005. GIS-Based Disease Mapping and Modeling. U.S. Air Force Institute of Operational Health, Brooks City-Base, San Antonio, TX. August 5

29. Zhan, FB. 2005. Global Environmental Change, Human Health, GIScience – What Are the Connections? Central South University, Changsha, China. June 27

28. Zhan, FB. 2005. GIS-Augmented Human Environmental Research: Case Studies in Birth Defects Research and Hurricane Evacuation. State Key Laboratory of Resources and Environmental Information System (LREIS), Chinese Academy of Sciences. June 9

27. Zhan, FB. 2004. A GIS-Enabled Analysis of Pricing Strategies for the Procurement of Renewable Energy Materials. Central South University, Changsha, Hunan, China. December 10

26. Zhan, FB. 2004. Health and the Environment: GIS-Augmented Environmental Epidemiology for Birth Defects Research. University of Illinois at Carbondale, IL. October 26

25. Zhan, FB. 2004. GIScience in the United States: Applications and Research Frontiers. Heilongjiang Institute of Seismology Research. Haerbin, Heilongjiang, China. July 29

24. Zhan, FB. 2003. GIScience and Environmental Health Research at Texas State University. The School of Rural Public Health, South Texas Center, Texas A&M University System Health Science Center, McAllen, TX. August 14

23. Zhan, FB. 2003. Spatial Data Mining for Environmental Health. CentroGeo, CONACYT, Mexico City, Mexico. July 31

22. Zhan, FB. 2003. Environment and Human Health: The Case of Cancer Mortality and Birth Defects in Texas. Houston Advanced Research Center (HARC), Houston, TX. January 9

21. Zhan, FB. 2002. GIS and Intelligent Transportation Systems. The State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing (LIESMARS), Wuhan University, China. May 17

20. Zhan, FB. 2002. GIS Applications in Land Management in the USA. Shenzhen Municipal Planning and Land Information Center, Shenzhen, China. April 12

19. Zhan, FB. 2002. Geographic Dimensions of Biomass and Bioenergy. Department of Geography, The Chinese University of Hong Kong, China. March 21

18. Zhan, FB. 2002. GIS and Health Research. Joint Laboratory for Geoinformation Science, The Chinese University of Hong Kong, Hong Kong, China. March 19

17. Zhan, FB. 2002. Biomass to Energy Supply Chain Management. Joint Laboratory for Geoinformation Science, The Chinese University of Hong Kong, Hong Kong, China. March 13

16. Zhan, FB. 2002. GIS: An Overview of Application Areas and Research Frontier. Guangdong Institute of Land Surveying and Planning, China. February 28

15. Zhan, FB. 2002. An Overview of GIS Application Areas in the United States. Tianjin Information Center of Critical Geospatial Infrastructure, Tianjin, China. February 4

14. Zhan, FB. 2000. GIS-Based Sex Offender Neighborhood Notification. Presentation to the Staff of the Crime Records Services of the Texas Department of Public Safety (TDPS), Austin, TX. November 1

13. Zhan, FB. 2000. GIS-Based Estimation and Allocation of Criteria Pollutants Emissions. Texas Natural Resource Conservation Commission (TNRCC). Austin, TX, August 25

12. Zhan, FB. 1999. GIS and Crime Analysis. Presentation to the Staff of the Criminal Law Enforcement Division of the Texas Department of Public Safety (TDPS), Austin, TX. October 5

11. Zhan, FB. 1999. GIS and its Potential Applications in Highway Patrol Planning. Presentation to the Staff of the Traffic Law Enforcement Division of the Texas Department of Public Safety (TDPS), Austin, TX. September 24

10. Zhan, FB. 1999. GIS Solutions for the Identification of the Location of Texas Sex Offenders. Presentation to the Staff of the Crime Record Division of the Texas Department of Public Safety (TDPS), Austin, TX. September 2

9. Zhan, FB. 1999. Texas Data Center for Crime Mapping and Analysis. Presentation to the Director of the Texas Department of Public Safety, Austin, TX. April 9

8. Zhan, FB. 1998. Texas Data Center for Crime Mapping and Analysis. Presentation to Representative Henry Cuellar, Laredo, TX. October 19

7. Zhan, FB. 1998. Multiple-Institution Teaching Center (MITC) Site Location Analysis. Texas State President Cabinet. San Marcos, TX. April 16

6. Zhan, FB. 1997. A Web-Based Texas Recycling Markets Information System (RMIS). Presentation to Houston-Galveston Area Council of Government, TX. May 8

5. Zhan, FB. 1997. A Web-Based Texas Recycling Markets Information System (RMIS). Presentation to Permian Basin Council of Government, Midland, TX. April 25

4. Zhan, FB. 1997. A Web-Based Texas Recycling Markets Information System (RMIS). Presentation to North Texas Council of Government, Dallas, TX. April 11

3. Zhan, FB. 1996. A New Method For Cluster Detection in Spatial Point Patterns. Department of Mathematics, Texas State University, San Marcos, TX. March 27

2. Zhan, FB. 1995. A Spatial Decision Support System for Wood Fuel Procurement. Department of Geography, Southwest Texas State University, San Marcos, TX. April 27

1. Zhan, FB. 1994. Spatio-Temporal Location Theory of Mobile Trading. Management Science Program, The University of Tennessee, Knoxville, TN. September 16

Conference Presentations

`[Note: Zhan was the presenter unless a different name is marked by †.]`

113. Zhan, FB. Liu, Y; Spencer, J; Kluz, N; Mitchell, G; Shokar, N; Pignone, MP. 2025 Priority Sites for Colorectal Cancer Screening at Health Centers in Texas (2024) (poster presentation). *AGX Applied Geography Conference 2025: Geographic Confluences*. St Louis, MO, October 22–25, 2025.

112. Zhan, FB and Yang, M. 2024. Genetic Risk Factor Associated with Early-Onset Colorectal Cancer and its Geographic Variations Based on Data from The UK Biobank. *The 31st International Conference on Geoinformatics*. Toronto, Canada, August 14.

111. Zhan, FB; Yang, M; Liu, Y; Kluz, N; Olmstead, TA; Pignone, MP. 2022. Geospatial Data Science and Cancer Prevention: Improving CRC Screening Programs Through Targeted Intervention (poster). *LCI Cancer Prevention and Control Symposium: Substance Use Disorders in Cancer*. Austin, TX, USA. April 28.

110. Gong, X; Zhan, FB. 2021. Industrial Air Pollution and Low Birth Weight: A Case-Control Study Using Big Geographic Data. *The 28th International Conference on Geoinformatics – CPGIS Annual Conference*. November 2, 2021. (virtual)

109. Yang, M; Zhan, FB; Lin, Y. 2021. Spatial Accessibility of Primary Care Facilities in Texas (poster). *The Annual Meeting of the American Association of Geographers (AAG)* (virtual).

108. Zhan, FB; Gong, X. 2019. Geospatial Data Science and Health Research (poster presentation). *The Annual Meeting of the American Association of Geographers (AAG)*. Washington, DC, USA, April 5.

107. Zhan, FB. 2018. Cervical Cancer Disparities in Texas, 1995-2011. Race, Ethnicity, and Place Conference, IX^{th} Conference. Austin, TX, USA, October 25.

106. Lu, Y; Zhan, FB. 2018. Understanding health and healthcare through geographic lens. *GIS & Health Conference*, Texas State University, Department of Geography, Texas State University Round Rock Campus, Austin, TX, USA, May 17.

105. †Morshed, N; Zhan, FB. 2018. Childhood cancer disparities in Texas. *The Annual Meeting of the American Association of Geographers (AAG)*. New Orleans, LA, USA, April 13.

104. †Wei, G; Zhan, FB. 2018. Spatiotemporal Variability of Personal Exposure to Traffic Emissions while the Dynamics of Human Activities is Considered. *The Annual Meeting of the American Association of Geographers (AAG)*. New Orleans, LA, USA, April 12.

103. Zhan, FB; Gong, X; Brender, JD; Langlois, P. 2018. Data-Driven Environmental Health Research. *The Annual Meeting of the American Association of Geographers (AAG)*. New Orleans, LA, USA, April 10.

102. Zhan, FB. 2017. Spatially Informed Strategies for Cancer Intervention. *The 25th International Conference on Geoinformatics*. Buffalo, NY, USA, August 3.

101. †Wei, G; Zhan, FB. 2017. Variability and Uncertainty Associated with Personal Environmental Exposure Assessment in Geographic Space and Time. *The Annual Meeting of the American Association of Geographers (AAG)*. Boston, MA, USA, April 7.

100. †Morshed, N; Zhan, FB. 2017. Late stage diagnosis factors of childhood cancer in Texas. *The Annual Meeting of the American Association of Geographers (AAG)*. Boston, MA, USA, April 8.

99. Zhan, FB; Lu, Y. 2017. Geospatial Data Science and Health Geography. *Health Scholar Showcase*. Texas State University, San Marcos, TX. February 10.

98. Castro-Arellano, I; Rohde, R; Zhan, FB. 2017. Texas State research addresses diverse impacts of the environment on health. *Health Scholar Showcase*. Texas State University, San Marcos, TX. February 10.

97. Zhan, FB. 2015. Toward Integrated Biomass Assessment in China. *2015 International Conference on Energy and Environmental Systems Engineering*. Beijing, China, May 18.

96. †Gong, X; Zhan, FB; Brender, HD, Langlois, PH; Lin, Y. 2015. The Emission Weighted Proximity Model Performance for Estimating Long Term Air Pollution Exposure Risks In Large Geographic Areas. *The Annual Meeting of the American Association of Geographers (AAG)*. Chicago, IL, USA, April 24.

95. †Lin, Y; Zhan, FB. 2014. GIS and Health: Cervical Cancer Disparities in Texas. *The Annual Meeting of the American Association of Geographers (AAG)*. Tampa, FL, USA, April 11.

94. †Gong, X; Chow, TE; Zhan, FB. 2014. The Importance of "Space" in Strategies of Team Sports: An Agent-based Modeling Approach. *The Annual Meeting of the American Association of Geographers (AAG)*. Tampa, FL, USA, April 9.

93. Zhan, FB; Cai, ZL; Zhu, Y; Zhou, JC. 2014. A Geospatial Analytical System for Medium-Term Earthquake Probability Estimation. *The Annual Meeting of the American Association of Geographers (AAG)*. Tampa, FL, USA, April 9.

92. Zhan, FB; Yang, J; Brender, JD; Langlois, PH; Gong, Xi; Zhang, C. 2013. Computational Environmental Epidemiology for Identifying Risk Factors of Birth Defects from Toxic Air Pollutants. *The Community Indicators Consortium Impact Summit 2013*. Chicago, IL, October 17.

91. Zhan, FB; Yang, J; Brender, JD; Langlois, PH; Gong, Xi; Zhang, C. 2013. Computational Environmental Epidemiology: Searching for Possible Associations between Maternal Exposure to Toxic Air Pollutants and Malformation in Offspring, *GeoComputation 2013*. Wuhan, China, May 23

90. †Lin, Y; Zhan, FB. 2013. Geographic variations of racial disparities of cervical cancer mortality in Texas, *The Annual Meeting of the American Association of Geographers (AAG)*. Los Angeles, CA, USA, April 13

89. †Gong, X; Zhan, FB. 2013. Health Risk Assessment of TRI Toxic Air Pollutants in Texas from 1996 to 2008, *The Annual Meeting of the American Association of Geographers (AAG)*. Los Angeles, CA, USA, April 12

88. Zhan, FB (session chair). 2013. Honoring the Scholarship of Professor David M. Mark, *The Annual Meeting of the American Association of Geographers (AAG)*. Los Angeles, CA, USA, April 11

87. Zhan, FB; Yang, J; Gong, X; Brender, JD; Langlois, PH. 2013. Visual Exploration of Geospatial Data to Identify Risk Factors of Birth Defects: Fetching a Trace of Bad Air in the Sky, *The Annual Meeting of the American Association of Geographers (AAG)*. Los Angeles, CA, USA, April 10

86. Zhan, FB; Cai, ZL; Lu, ZY; Zhu, YQ. 2012. A GIS Augmented Medium–Term Earthquake Forecast System. *The 20th International Conference on Geoinformatics (Geoinformatics 2012)*. Hong Kong, China. June 16 (recorded presentation played by Xingjian Liu at the conference)

85. Zhan, FB; Cai, ZL; Zhu, Y; Zhou, JC. 2012. A Geospatial Analytical System for Mapping Global Medium-Term Earthquake Probabilities. In *Proceedings of the 2012 International Conference on Systems and Informatics (ICSAI 2012)*, Yantai, China, May 20

84. Zhan, FB; Brender, JD. 2012. GIS and Health: Maternal Residential Proximity to Superfund Sites and Low Birth Rate in Offspring. *Annual Meeting of the American Association of Geographers (AAG)*. New York, NY. February 27

83. †Gong, X; Pei, T; Zhan, FB. 2012. Clustering Methods of Trajectory Data: A Review (poster). *Annual Meeting of the American Association of Geographers (AAG)*. New York, NY. February 26

82. †Lin, Y; Zhan, FB. 2012. Geographic Disparities in Cervical Cancer Mortality in the United States. *Annual Meeting of the American Association of Geographers (AAG)*. New York, NY. February 25

81. Zhan, FB; Brender, JD; Zou, B. 2011. GIS Augmented Human-Environmental Science Research: Maternal Residential Proximity to Superfund Sites and Low Birth Rate in Offspring. *Annual Meeting of the American Association of Geographers (AAG), Southwest Division (SWAAG)*, Austin, TX. Nov. 11

80. †Lin, Y; Chow, TKE; Zhan, FB. 2011. An Exploratory study of Vietnamese Americans in Texas using web demographic data. *Annual Meeting of the American Association of Geographers (AAG)*. Seattle, WA. April 16

79. Zhan, FB; Zhu, Y; Zhou, JC. 2011. Global Surveillance of High Risk Regions of Large Earthquakes Using Satellite Gravity Data. *Annual Meeting of the American Association of Geographers (AAG)*. Seattle, WA. April 14

78. †Yang, Y; Zhan, FB; Li, L. 2011. GIS-Based Analysis of Seismic Hazard in Washington State of the United States. *Annual Meeting of the American Association of Geographers (AAG)*. Seattle, WA. April 13

77. †Wan, N; Zhan, FB. 2011. Disparities of Colorectal Cancer Stage at Diagnosis in Texas, 1996-2003. *Annual Meeting of the American Association of Geographers (AAG)*. Seattle, WA. April 13

76. Zhan, FB; Zhu, Y. 2010. Gravity Measurements and Their Variations before Large Earthquakes in China: 1998-2005. *The 82nd annual meeting of the Eastern Section of the Seismological Society of America*. Boston, MA. October 18.

75. Zhan, FB; Zhu, Y. 2010. Timing a Large Earthquake within a 3-Year Window: The Case of the 2008 Wenchuan (M8.0) Earthquake. *The 18th International Conference on Geoinformatics (Geoinformatics 2010)*. Beijing, China. June 20

74. Yu, X. Zhan, FB; †Hu, J; Zou, Q. 2010. Radiometric Normalization for Multitemporal and Multispectral High Resolution Satellite Images Using Ordinal Conversion. *The 18th International Conference on Geoinformatics (Geoinformatics 2010)*. Bejing, China. June 19

73. †Tian, N; Goovaerts, P; Zhan, FB. 2010. Influence of late stage presentation of female breast cancer on racial disparities in mortality. *Annual Meeting of the American Association of Geographers (AAG)*. Washington, DC. April 16

72. †Wan, N; Zhan, FB. 2010. Socioeconomic disparities in prostate cancer mortality and the impact of geographic scale. *Annual Meeting of the American Association of Geographers (AAG)*. Washington, DC. April 16

71. †Lin, Y; Zhan, FB; Zhu, JJ. 2010. Assessment of Mercury Pollution in Soil in a City in Southern China. *Annual Meeting of the American Association of Geographers (AAG)*. Washington, DC. April 15 (poster)

70. Zhan, FB; Zhu, Y. 2010. Earthquakes can be Forecasted. *Annual Meeting of the American Association of Geographers (AAG)*. Washington, DC. April 14

69. †Chen X; Zhan, FB; Zhou, Q. (workshop co-chairs) 2009. *International Workshop on High Performance Geocomputation and Geoinformatics*. Shenzhen, China. December 19

68. Zhan, FB; Zhu, Y. 2009. Medium-Term Prediction of the Wenchuan Earthquake Using Mobile Gravity Survey Data. *The 2009 American Geophysical Union (AGU) Fall Meeting*. San Francisco, CA. December 15 (poster)

67. Zhu Y; Zhan, FB; Liang, W; Xu, Y. 2009. Medium-Term Prediction of the Wenchuan Earthquake Using Mobile Gravity Survey Data. *International Symposium on Earthquake Seismology and Earthquake Predictability (ISESEP)*. Beijing, China. July 7 (poster)

66. Zhan, FB; Zhu, Y; Hu, B; Li, Z; Yang, L; Li, T. 2009. Geovisual Analytics for Earthquake Risk Assessment & Earthquake Related Decision Support: A Research Agenda. *International Symposium on Earthquake Seismology and Earthquake Predictability (ISESEP)*. Beijing, China. July 6

65. †Liu, X; Zhan, FB. 2009. Road Selection Based on Voronoi Diagrams and 'Strokes' in Map Generalization. *Annual Meeting of the American Association of Geographers (AAG)*. Las Vegas, NV. March 24

64. †Silvan, J; Wang, L; Zhan, FB; Crews, KA. 2009. Multi-temporal sub-pixel change detection and analysis of invasive saltcedar: A case study along the Rio Grande, 1993–2005. *Annual Meeting of the American Association of Geographers (AAG)*. Las Vegas, NV. March 23

63. Zhan, FB; Tapia, FO; Santillana. M. 2009. Estimating Small Area Population Growth Using Geographic Knowledge Guided Cellular Automata. *Annual Meeting of the American Association of Geographers (AAG)*. Las Vegas, NV. March 22

62. †Zou, B; Zhan, FB; Yorke, Charles. 2009. Evaluation of Kriging and EWPM for Exposure Risk Assessment of Air Pollution Using Results from AERMOD as Benchmark. *Texas Geography Student Research Symposium (TxGSRS)*. San Marcos, TX. March 6

61. Zhan, FB. 2009. Healthcare in the U.S.: A Critical Juncture Panel Session. Panel of *the Texas Geography Student Research Symposium (TxGSRS)*. San Marcos, TX. March 6 (member of a panel)

60. Zhan, FB. 2008. Perspectives on the Evolution of Applied Geography. Keynote Panel of *the 31st annual meeting of the Applied Geography Conferences*. Wilmington, DE. October 15 (**member of a keynote panel**)

59. Zhan, FB; Chen, C. 2008. Intercity Commute Patterns in Central Texas. *GeoInformatics 2008*. Guangzhou, China. June 29

58. Zhan, FB. 2008. Spatial Cluster Analysis and Cancer Mortality Hot Spots in Texas. *The Singapore Disease Management Conference 2008*. Singapore. May 9

57. †Collins, W; Zhan, FB; Chen, X. 2008. Evacuation Microsimulation of Diurnal Population Distributions. *Annual Meeting of the American Association of Geographers (AAG)*. Boston, MA. April 17

56. †Wan, N; Zhan, FB. 2008. Complexity of spatial networks. *Annual Meeting of the American Association of Geographers (AAG)*. Boston, MA. April 17 (poster)

55. †Tian, N; Wilson, JG; Zhan, FB. 2008. Regional Cluster Analysis of Female Brest Cancer at the County Level of the United States. *Annual Meeting of the American Association of Geographers (AAG)*. Boston, MA. April 15

54. Zhan, FB. 2007. Panelist, Panel Session about GIS, Geoscience and Interoperability. *OGC-China Symposium at Wuhan*. Wuhan, China. October 26

53. Zhan, FB. 2007. Session Chair, Introduction to OGC (Open Geospatial Consortium). *OGC-China Symposium at Wuhan*. Wuhan, China. October 25

52. Zhan, FB; Chen, X; Voigt, T. 2007. A Framework for Developing Left-Turn Operations Guidelines at Signalized Intersections. *The 4th IEEE Conference on Service Systems and Service Management (ICSSSM07)*. Chengdu, China. June 11

51. †Wu, GY; Zhan, FB. 2007. Climate Change and Water Resources in Texas. *2007 Annual ConferenceŮJoint Rio Grande Basin Initiatives*, South Padre Island, TX. May 17

50. †Yao, ZJ; Zhan, FB. 2007. Visual Exploration and Spatial Analysis for Detecting Clusters of Line Segments (poster). *Annual Meeting of the American Association of Geographers (AAG)*. San Francisco, CA. April 19

49. Zhan, FB; Chen, X. 2007. Intercity and Urban-Rural Commute Flows in Central Texas. *Annual Meeting of the American Association of Geographers (AAG)*. San Francisco, CA. April 19

48. Zhan, FB; Chen, X. 2006. Agent-Based Modeling and Evacuation Planning. *2006 Texas A&M University Symposium on "Geospatial Technologies and Homeland Security."* College Station, TX. November 15

47. Zhan, FB; Brender, JD; Suarez, L; Langlois, PH. 2006. GIS-Augmented Environmental Epidemiology Research. *The 14th International Conference on Geoinformatics (Geoinformatics 2006)*. Wuhan, China. October 28-29

46. †Hanford EJ; Zhan FB; Lu Y; Giordano A. 2006. Chagas Disease and the Implications of Historical Biogeographical Research in Texas. Invited presentation to *the Six States Meeting*, August 10-11, 2006, sponsored by U.S. Department of Agriculture, U.S. Department of Homeland Security, Animal & Plant Health Inspection Service. Texarkana, TX. August 10

45. Zhan, FB; Wu, G. 2006. Distributed Modeling and Analysis for Regional Water Resource Vulnerability Assessment. *Hydrological Sciences for Managing Water Resources in the Asian Developing World*. Guangzhou, China. June 9

44. †Wu, G; Zhan, FB. 2006. GIS, Geospatial Analysis, and Modeling for Sustainable Water Resource Management. *Fifth Annual Rio Grande Initiatives Conference*. Ruidoso, TX. March 29

43. †Chen, X; Zhan, FB. 2006. Commute patterns in Central Texas. *Annual Meeting of the American Association of Geographers (AAG)*. Chicago, IL. March 11

42. †Wu, G; Zhan, FB. 2006. Climate Change and Water Resources Vulnerability in Texas. *Annual Meeting of the American Association of Geographers (AAG)*. Chicago, IL. March 11

41. Zhan, FB; Chen, X; Meaker, J. 2006. Agent-Based Modeling and Analysis of Hurricane Evacuation Procedures for the Florida Keys. *Annual Meeting of the American Association of Geographers (AAG)*. Chicago, IL. March 10

40. Zhan, FB; Lu, Y; Giordano, A; Hanford, EJ. 2005. Geographic Information System (GIS) as a Tool for Disease Surveillance and Environmental Health Research. *The Second IEEE Conference on Service Systems and Service Management (ICSSSM05)*. Chongqing, China. June 13-15

39. Zhan, FB; 2005. GIS for Sustainable Water Resource Management in the Rio Grande Basin–Development of Geodatabases and Acquisition of Land Use Land Cover Data. *Fourth Annual Rio Grande Initiatives Conference*. Alpine, TX. April 12

38. Zhan, FB; Brender, JD; Suarez, L; Langlois, PH; 2005. GIS-Augmented Environmental Epidemiology Research: Residential Proximity to Hazardous Waste Sites and Congenital Malformations in Offspring. *Annual Meeting of the American Association of Geographers (AAG)*. Denver, CO. April 8

37. Zhan, FB. 2005. The Use of Geographic Information Systems for Sustainable Water Resource Management. *International Seminar on Sustainability of the Precious Water Environment-Partnership between Texas and Shimane.* Matsue, Japan. January 26

36. Zhan, FB. 2004. Automatic Calibration of Mathematical Models for Spatial Allocation of Population Growth in Regional Water Resource Planning. *The 4th International Conference on Watershed Management and Urban Water Supply*. Shenzhen, China. December 14

35. Zhan, FB; Wu, G. 2004. Spatially Distributed Hydrologic Modeling Using Information Derived from Remote Sensing Images and Other Geospatial Data. *International Conference on Water Security for Future Generations*. Changchun, Jilin, China. July 27

34. Zhan, FB; Brender, J; Han, Y; De Lima, I; Suarez, L; Langlois, P. 2004. GIS-Based Spatial Search for Environmental Health Research: Environmental Hazards and Birth Defects in Texas. *CDC 2004 Environmental Health Tracking Conference*. Philadelphia, PA. March 24-26

33. Zhan, FB. 2004. STAR/STELLA Transatlantic Transport Research Initiative II. *Annual Meeting of the American Association of Geographers (AAG)*. Philadelphia, PA. March 19 [discussant]

32. Zhan, FB. 2004. What are 'the Weakest Links' in Intermodal Transportation? *Annual Meeting of the American Association of Geographers (AAG)*. Philadelphia, PA. March 19

31. †Wu, G; Zhan, FB. 2004. Hydrologic Modeling Using Remote Sensing and GIS - A Case Study in the San Marcos Basin? *Annual Meeting of the American Association of Geographers (AAG)*. Philadelphia, PA. March 15

30. Zhan, FB; Morrill, RL. 2004. Fleming Lecture in Transportation Geography. *Annual Meeting of the American Association of Geographers (AAG)*. Philadelphia, PA. March 15 [session organizer]

29. †Chen, X; Zhan, FB. 2004. Agent-Based Modeling and Simulation of Urban Evacuation: Relative Effectiveness of Simultaneous and Staged Evacuation Strategies. *The 83rd Annual Meeting of Transportation Research Board*. Washington, DC. January 11-15

28. Zhan, FB; Chen, X. 2003. Micro-Simulation of Urban Evacuation Strategies. *Annual Meeting of the American Association of Geographers (AAG)*. New Orleans, LA. March 5

27. †Wu, G; Zhan, FB. 2003. Spatial Data Mining with Improved GIS Tools. *Annual Meeting of the American Association of Geographers (AAG)*. New Orleans, LA. March 5

26. Zhan, FB; Morrill, RL. 2003. Fleming Lecture in Transportation Geography. *Annual Meeting of the American Association of Geographers (AAG)*. New Orleans, LA. March 5 (session organizer)

25. †Chen, X; Zhan, FB. 2003. Mapping the Vulnerability of Potential Toxic Substance Release from Industrial Facilities under Emergency Situations: A Case Study of Galveston, Texas. *Annual Meeting of the American Association of Geographers (AAG)*. New Orleans, LA. March 5

24. Zhan, FB. 2003. GIS-Based Allocation Analysis of Regional Water Demand. *Geoinfomatics 2002: Geoinfomatics for Global Change Studies and Sustainable Development*. Nanjing, China. June 1-3

23. †Wilson, JG; Zhan, FB; Brender, JD; Bryan, D. 2002. Geographic concentrations of prostate cancer incidence in Texas and their relationship to socioeconomic conditions. *Annual Meeting of the American Association of Geographers (AAG)*. Los Angeles, CA. March 19-23

22. Zhan, FB. 2001. Locating a Multiple-Institution Teaching Center In North Austin, Texas. *Papers and Proceedings of Applied Geography Conference*. Fort-Worth, TX. November 14-15

21. Zhan, FB. 2001. How Much is Region Q Covering Region R 'a Little Bit,' 'Somewhat,' or 'Nearly Completely?' *SVUG, The Workshop on Spatial Vagueness, Uncertainty, and Granularity*. Ogunquit, ME. October 15-19

20. Zhan, FB. 2001. Geographic Distributions of Cancer Mortality in Texas. *Annual Meeting of the American Association of Geographers (AAG)*. New York, NY. February 25–March 3

19. Zhan, FB. 2000. Quantification of Linguistic Modifiers in Descriptions of the Topological Relation "Region A Covers Region B." *GIScience 2000: The First International Conference on Geographic Information Science*. Savannah, GA. October 28-31

18. Zhan, FB. 2000. Geographers in the Real World: Some Example Employment Profiles of Geography Graduates from Southwest Texas State University, *International IT Conference on Geo-Spatial Education*. Hong Kong, China. July

17. Zhan, FB. 1998. An Online Recycling Markets Information System (RMIS). *ESRI User Conference*. San Diego, CA.

16. Zhan, FB. 1998. The Ribbon and the "Beige Region:" GIS Development for Epidemiology Analysis. *Annual Conference of US-Mexico Borderland Studies*. Nogales, AZ.

15. Zhan, FB. 1997. A New Method for Spatial Point Pattern Analysis. *Annual Meeting of the American Association of Geographers (AAG)*. Fort Worth, TX.

14. Zhan, FB. 1997. GIS-Transportation and the Private Sector: Building Common Grounds between Universities and Private Sectors. *Annual Meeting of the American Association of Geographers (AAG)*. Fort Worth, TX.

13. Zhan, FB. 1997. Topological Relations Between Fuzzy Regions. *The 1997 ACM Symposium on Applied Computing*, San Jose, CA.
12. Zhan, FB. 1997. Approximate Analysis of Topological Relations Between Geographic Regions with Indeterminate Boundaries. *The Second Workshop of the International Institute for General Systems Studies*. San Marcos, TX.
11. Zhan, FB. 1996. GIS Programs at Southwest Texas State University. *Texas GIS Forum'96*. Austin, TX.
10. Zhan, FB. 1996. Approximate Analysis of Geographic Objects with Indeterminate Boundaries. *International Institute of General Systems Studies Workshop II*. San Marcos, TX.
9. Zhan, FB. 1996. A Set of Shortest Path Algorithms That Run Fastest on Real Road Networks. *GIS/LIS'96*. Denver, CO.
8. Zhan, FB. 1996. A Spatial Decision Support System For Wood Fuel Procurement. *Annual Meeting of the American Association of Geographers (AAG)*. Charlotte, NC.
7. Zhan, FB. 1995. A Family of Spatio-Temporal Competitive Location Models in Mobile Trading. *Annual Meeting of the American Association of Geographers (AAG)*. Chicago, IL.
6. Zhan, FB. 1995. Shortest Path Algorithms: An Evaluation Using Real Road Networks. *The 18th Applied Geography Conference*. Crystal City, Arlington, VA.
5. Zhan, FB. 1994. A Model of Spatio-Temporal Competition in Two-Trader Mobile Trading. *Annual Meeting of the American Association of Geographers (AAG)*. San Francisco, CA.
4. Zhan, FB. 1993. Spatio-Temporally Constrained Disaggregate Accessibility Modeling in GIS. *First McMaster/UB Graduate Conference*. Buffalo, NY.
3. Zhan, FB. 1992. Generalization of Spatial Databases. *The First Conference of Chinese Professionals in GIS*. Buffalo, NY.
2. Zhan, FB. 1992. Object-Oriented Spatial Knowledge Representation and Processing: Formalization of Core Classes and Their Relationships. *Fifth International Symposium on Spatial Data Handling*. Charleston, SC.
1. Zhan, FB. 1991. Structuring the Knowledge of Cartographic Symbolization: An Object-Oriented Approach. *Auto Carto 10*. Baltimore, MD.

TEACHING

Courses Taught at Texas State University

GEO2426	Fundamentals of Geographic Information Systems (GIS)
GEO3426	Advanced Geographic Information Systems
GEO2427	Management and Implementation of GIS
GEO3310	Urban Geography
GEO3351	Health Geography
GEO4336	Transportation Systems
GEO4338	Land Use Planning
GEO4426	Advanced GIS I

GEO4427 Advanced GIS II

GEO5301 Multivariate Quantitative Methods

GEO5336 Transportation Systems

GEO5418 Geographic Information Systems

GEO7301 Advanced Quantitative Methods

GEO7417 Geographic Information Systems

GEO7418 Technical Foundations and Methods of GIScience

GEO7372 Seminar in Geographic Information Science

Courses Taught at Wuhan University, China

Research Seminar in Geographic Information Science

Courses Taught at CentroGeo, Mexico

Introduction to Spatial Analysis and Modeling

GIS and Transportation Analysis

RESEARCHERS SPONSORED/HOSTED

Visiting Professors/Scholars

Xueling Wu (2014-2016) [China University of Geosciences, China]

Yiqing Zhu (2014) [China Earthquake Administration]

Weifeng Liang (2014) [China Earthquake Administration]

Jinting Zhang(2013-2016) [Wuhan University, China]

Song Hong (2013-2014) [Wuhan University, China]

Limin Jiao (2012) [Wuhan University, China]

Zhongliang Cai (2012) [Wuhan University, China]

Rui Zheng (2011-2012) [China Earthquake Administration, China]

Zhiyue Lu (2011-2012) [Wuhan University, China]

Jingru Tian (2011-2012) [Wuhan University, China]

Min Weng (2011-2012) [Wuhan University, China]

Hai Huang (2010-2011) [Chong Qing Jiaotong University, China]

Yanfang Liu (2009) [Wuhan University, China]

Han Cao (2009-2010) [Shanxi Normal University, China]

Limin Jiao (2009) [Wuhan University, China]

Zhongliang Cai (2008-2009) [Wuhan University, China]

Yaolin Liu (2008) [Wuhan University, China]

Jianjun Zhu (2008) [Central South University, China]

Benzao Tao (2007) [Wuhan University, China]

Deren Li (2007) [Wuhan University, China]

Post-Doctoral Research Associates

Yan Lin (2013–2014)

Bin Zou (2011–2013)

Xuwei Chen (2005–2007)

Omar Tapia (2006)

SUPERVISION OF GRADUATE STUDENTS

Graduated doctoral students (as major advisor or co-advisor if noted)

24. 12/2024 **Jinli Liu**
Analysis of Association Between Demographic, Socioeconomic, and Built Environment Factors and Pedestrian Safety Using Traditional and AI Approaches
(co-advisor with Dr. Subasish Das, Ingram School of Engineering, Texas State University) *Assistant Professor, Zhejiang Normal University, China*

23. 07/2024 **Xiu Wu**
An Assessment of Different Methods for Examining the Association Between Various Risk Factors and Lung Cancer Mortality Rates
Post-Doctoral Research Fellow, Tulane University

22. 05/2024 **Chijioke I Anyanwu**
Spatial Association Between Maternal and Early Life Exposure to Air Pollution and Acute Respiratory Infection Among Children in Nigeria
GIS Specialist, Exxon Corporation

21. 12/2023 **Mei Yang**
Colorectal cancer risk factors and geographical variations of these factors in the United Kingdom
Assistant Professor, Mississippi State University

20. 05/2019 **Md Niaz Morshed**
Childhood Cancer Disparities in Texas
Research Specialist, Texas Health and Human Service Commission

19. 08/2018 **Guixing Wei**
Assessment of Personal Exposure to Air Pollution Based on Trajectory Data
Senior Research Scientist, Spatial Structures in the Social Sciences (S4), Brown University

18. 01/2016 **Xi Gong**
Exploring Associations Between Environmental Risk Factors and Low Birth Weight Using Geographic Big Data
Associate Professor, Department of Biobehavioral Health and the Institute of Computing and Data Sciences, Pennsylvania State University

17. 12/2014 **Yan Lin**
Cervical Cancer Disparities in Texas
Associate Professor, Department of Geography, Pennsylvania State University

16. 10/2013 **David A. Nicosia**
Simulating Uncertainty in Volunteered Geographic Information
GIS Analyst, Remme Corporation, San Marcos, TX

15. 08/2013 **Zhiyue Lu** (degree conferred by Wuhan University, China)
Estimation of Earthquake Probability in Mainland China
(co-advisor with Prof. Dongchen Er of Wuhan University, China)

14. 12/2012 **Xiaomin Yu** (degree conferred by Wuhan University, China)
Land Cover Classification Methods for Ecosystem Carbon Budget Evaluation
(Wuhan University, China)

13. 06/2012 **Yan Yang** (degree conferred by Wuhan University, China)
A Comparative Study and Improvement of Methods for Seismic Risk Analysis
(co-advisor with Prof. Lin Li of Wuhan University, China)

12. 12/2011 **Xueheng Yao** (degree conferred by Central South University, China)
Micro–Simulation of Transportation Systems
(co-advisor with Prof. Minghua Yang of Central South University, China)

11. 07/2011 **Neng Wan**
Disparities of Colorectal Cancer Survival in Texas
Professor, Department of Geography, University of Utah

10. 04/2011 **Zhijun Yao**
Cluster Analysis of Health Data Involving General Disease Cluster Shapes and Multiple Variables
Senior Java Developer, CyberData Technologies Inc., Washington, DC, USA

9. 07/2010 **Nancy Tian**
Racial, Socioeconomic, and Geographic Disparities of Female Breast Cancer in Texas
Health Statistician with GIS expertise, U.S. Food and Drug Administration (FDA), Washington, DC, USA

8. 12/2009 **Charles Yorke**
A Three-Component Model of Hazards of Place

7. 11/2009 **Bin Zou** (degree conferred by Central South University, China)
Models of Air Pollution Exposure Assessment and Their Applications in Epidemiological Analysis
(co-advisor with Prof. Yongnian Zeng of Central South University, China)
Outstanding Dissertation Award, Hunan Province, China
Professor, Associate Dean, School of Geoscience and Info-Physics, Central South University, China

6. 05/2009 **Jose L. Silvan-Cardenas**
Sub-Pixel Remote Sensing for Mapping and Modeling Invasive Tamarix:
A Case Study in West Texas, 1993-2005.
J. Warren Nystrom Dissertation Award (AAG best dissertation award)–2011
Associate Professor, National Center for Geography and Geographic Information Science and Geomatics (CentroGeo), Mexico City, Mexico

5. 01/2009 **Dingju Zhu** (degree conferred by the Chinese Academy of Sciences, China)
High Performance Computing and Spatial Databases
(co-advisor with Professor Jianping Fan, CAS)
Associate Professor, Shenzhen Institutes of Advanced Technology
The Chinese Academy of Sciences (CAS)

4. 05/2008 **Guangyu Wu**
   Regional Climate Change and Its Impacts on Water Resources in Texas
   Senior Software Engineer, Allstate Insurance Company, Chicago, IL

3. 12/2007 **Ionara De Lima Wilson**
   A Spatial Epidemiological Analysis of Oral Clefts and Volatile Organic Solvents in Texas
   GIS Specialist II, Texas Forest Service, College Station, Texas

2. 05/2006 **Xuwei Chen**
   Microsimulation of Evacuation Strategies
   J. Warren Nystrom Dissertation Award (AAG best dissertation award)–2007
   Associate Professor, Department of Geography, Northern Illinois University

1. 12/2000 **Xinnong Zhou**
   Geographic Concentrations of Lung Cancer Mortality in Texas and Their Relationships to Socioeconomic and Environmental Conditions
   Senior Software Development Engineer, Microsoft Corporation, Seattle, WA

Graduated doctoral students (as a committee member)

Chayanika Singh (2022)

Ayodeji E. Iyanda (2021)

He Jin (2018)

Ioannis Kamarinas (2018)

Reni Bibriven Lila (2018)

Erin D. Dascher (2017)

Tamara Biegas (2017)

Nathaniel Dede–Bamfo (2016)

Naizuo Zhao (2014)

Adam Mathews (2014)

Khila Dahal (2013)

Haoran Chen (2013), Department of Chemistry & Biochemistry, Texas State

Tianfang Fang (2012)

Elaine J. Hanford (2010)

Greg Rybarcyzk (University of Wisconsin-Milwaukee) (2010)

Xuelian Meng (2009)

Christi Townsend (2008–2010)

Junmei Tang (2007)

Forrest Wilkerson (2004)

Current doctoral students (as major advisor)

Yanyan Liu (2020–)

Arup Acharjee (2022–)

Emmanuel Aklie (2024–)

Jeanette Hosch (2024–)

Current doctoral students (as a committee member)

Graduated master's students (as major advisor)

2021 **Matthew H. Beavers**
Archaeological Predictive Modeling for Black Mesa District, Apache–Sitgreaves National Forest, AZ

2021 **Ting Hsun Yang**
A Case Study of Environment Justice Ű- Air Quality In The Greater Houston Area

2020 **L. Megan Gunnells**
A Study of Urban Redevelopment of the Broadway Area in San Antonio, Texas from 2009-2019

2020 **Xiu Wu**
Exploring Association Between Subjective Well-Being and Ecological Footprint: Panel Data Analysis

2015 **David L. Melancon**
How the Price of Oil Affects Where Oil Producers Drill

2014 **Yuanda Liu**
Regional Income and Income Inequality Distribution: A Case Study of The Interstate 10 Area

2010 **Xingjian Liu**
Method and Application of Spatial Probit Model to the Business Return to New Orleans after Hurricane Katrina

2009 **William "Bill" Korthals**
An Analysis of Residential View Properties and their Effects on the Price of a House

2009 **Yan Lin**
Geostatistic and GIS methods for Assessing Heavy Metal Contamination in Soils

2007 **Patricia Longas**
The Spatial Distribution of Fast-Food Restaurants in Harris County, Texas

2004 **Muhammad T. Rahman**
Perception of Arsenic Hazard and Factors Affecting People's Participation of its Mitigation in Three Villages of Bangladesh

2004 **Joseph Rincon**
Developing the Texas Commission on Environmental Quality Spatial Data Management Infrastructure: A Focus on Needs Assessment

2003 **Kschitij Chaturvedi**
Geographic Patterns of Obesity in Texas

2002 **Jeff G. Wilson**
Geographic Concentrations of Prostate Cancer Incidence in Texas and Their Relationship to Socioeconomic Conditions

2000 **Arwen Vaughan**
GIS-Based Allocation Analysis of Regional Water Supply and Demand

1999 **Dean Rother**
Dangerous Intersections in San Marcos, Texas: A GIS-Based Analysis

1998 **Ian Martin**
Location Analysis of the Multi-Institutional Teaching Center in North Austin

1997 **Nicolas E. Gronquist**
Factors Affecting Commute Times in the Austin Metropolitan Area

Graduated master's students (as a committee member)

Md Monzurul Islam (Ingram School of Engineering, Texas State University) (2025)

Deji Akinloye (2025)

Rohit Chakraborty (2025) (Ingram School of Engineering, Texas State University)

Abigail Edgar (2024)

T M Junaid Bashar (2023)

Ben Wang (2021)

Rachel Stanley (2018)

Ryan A. Fisher (2014), Department of Criminal Justice

Cortney L. Wenzel (2012)

P. Chance Kinnison (2012)

Zoran Stojakovic (2011)

Aja R. Davidson (2010)

Mike Zugelder (2008)

Diana Woronuk (2007)

James Graham (2006)

Jessica N. Mefford (2004)

Jon Kathy Alexander (2001)

Justin Edmondson (2001)

Steve Floyd (2000)

Stephanie Jensen (1999)

J. Alberto Colino (1998)

Tom Griffith (1998)

Current master's students (as major advisor)

Current master's students (as a committee member)

Fahad Bin Islam (2025–)

Victor Junior Kofi J Quarshie (2026–)

External examiner of Ph.D. dissertations or master's theses

Wei Peng, Hong Kong Polytechnic University, China (2017)

Cheung Yik Kong, Hong Kong Polytechnic University, China (2012)

Hong Zhang, Hong Kong Polytechnic University, China (2011)

Teng Wang, Wuhan University, China (2010)

Shang Li, Wuhan University, China (2010) (Chair, dissertation examination committee)

Tiantian Feng, Wuhan University, China (2010) (Chair, dissertation examination committee)

Wendi Peng, The University of New South Wales, Australia (2008)

Ting Yang, The University of New South Wales, Australia (2007)

Liming Jiang, Wuhan University, China (2006)

Yan Wang, Wuhan University, China (2006)

Xiang Li, the Chinese University of Hong Kong (2004)

SERVICE ACTIVITIES

Editorial Boards

Asian Geographer (2011-present) (International Editorial Advisory Board)

Environmental Health Insights (2008-present)

Journal of Transport Geography (2005-present)

URISA Journal (The Urban and Regional Information Systems Association) (2002-2013)

External Review of Faculty Performance and Tenure/Promotion Cases

University of Michigan–Flint (2024)

Northern Arizona University (2021)

King Fahd University of Petroleum and Minerals, Saudi Arabia (2019)

University of Memphis (2016)

University of Wisconsin–Milwaukee (2016)

University of Colorado at Denver (2015)

McCoy College of Business, Texas State University (2012)

University of North Texas (2009)

Florida Atlantic University (2008)

Hong Kong Baptist University (2008)

Texas A&M Health Science Center (2007)

University of Pittsburgh - College of Medicine (2007)

University of Alabama (2006)

Hofstra University (2004)

Hong Kong Baptist University (2003)

University of Massachusetts-Boston (1998)

Memberships of Professional Organizations

Member:

American Association of Geographers (AAG)

Chair (2002-04), Transportation Geography Specialty Group
Member, Geographic Information Science and Systems Specialty Group
Member, Transportation Geography Specialty Group
Member, Spatial Analysis and Modeling Specialty Group
Member, Health & Medical Geography Specialty Group

American Association of Geographers (AAG), Southwest Division (SWAAG)

Association of Chinese Professionals in Geographic Information Systems (CPGIS)

Formerly:

Association of Computing Machinery (ACM)

Institute for Operations Research and the Management Sciences (INFORMS)

American Geophysical Union (AGU)

Seismological Society of America (SSA)

University Consortium for Geographic Information Science (UCGIS)

Chair (2003-2005), UCGIS Sponsored Programs Committee
Lead delegate (2001-2006), Texas State University-San Marcos
Member (2001-2003), UCGIS Research Committee

Service as a Reviewer for Programs and Funding Agencies/Organizations

`[Key: name of Institution/Agency; year of review (number of reviews).]`

Chang Jiang Scholars Program, China Ministry of Education (Beijing, China) and the Li Ka Shing Foundation (Hong Kong, China)
2008, 2009, 2012, 2013, 2014, 2016, 2017, 2019

Texas Department of Transportation - Technical Assistance Panel
2004-2013

The Chinese University of Hong Kong
2006, 2008

Member of External Academic Review Committee, Center for Geography and Geographic Information Science (CentroGeo), Mexican National Science and Technology Commission), Mexico
2007-09

The U. S. National Institutes of Health – National Cancer Institute
2007, 2009

The U. S. National Institutes of Health – National Institute of Minority Health Disparities
2020

Review Panels of the U. S. National Science Foundation
2003, 2008

Service as a Reviewer for Journals, Publishers, Agencies, or Conferences

[Key: name of journal/conference/publisher; year of review (number of reviews).]

AJPM Focus
2024

American Journal of Epidemiology
2007, 2016

American Journal of Public Health
2010

Annals of the American Association of Geographers
2011, 2018

Annals of GIS
2010, 2011, 2012, 2017, 2018, 2019, 2021

Annual National Conference on High Performance Computing–2007 (HPC China 2007)
2007(11)

Applied Geography
2010, 2012, 2021, 2023

Artificial Intelligence in Medicine
2019

Asian Geographer
2012

American Association of Geographers (AAG) – Health/Medical Geography Specialty Group
2015

Biomass & Bioenergy
2015

BMC Public Health
2004, 2018

Cancer
2018

Cartographica
1996, 1997

Cartography and Geographic Information Sciences
1997, 1998, 2009, 2012, 2013, 2021, 2022, 2023

Computers, Environment and Urban Systems
2002, 2005, 2010, 2013, 2017

Computers and Graphics
2009

Conference on Spatial Information Theory (COSIT)
1999, 2001(3), 2003(4)

Environment and Planning A
2000, 2001, 2003

Environment International
2019

Environmental Health Insights
2012, 2015 (3), 2016

European Journal of Geography
2011

Frontiers of Earth Science
2012

Frontiers in Oncology
2022

Geocarto International
1999, 2007

Geographical Analysis
1995, 1997, 1999, 2002, 2004(2), 2005, 2006

Geographic Information Sciences
2002

Geoinformatica
1998

(Geo)Spatial Technologies for Urban Health
2018, 2019

International Conference on GeoInformatics
2011(10), 2012(9), 2013(3), 2014(3), 2015 (6), 2024 (6)

Geographical and Environmental Modelling
1998, 2001

Geo–Spatial Information Science
2011

Health & Place
2011, 2012, 2013

IEEE Transactions on Fuzzy Systems
2002, 2003

IEEE Transactions on Intelligent Transportation Systems
2003, 2004

International Conference on Advanced Data Mining and Applications
2005(14)

The International Conference on Geographical Information Systems Theory, Applications and Management (GISTAM)
2021 (2)

International Journal of Applied Earth Observation and Geoinformation
2010

International Journal of Environmental Research and Public Health
2016

International Journal of Geographical Information Science
1994, 1997, 2000, 2003, 2004, 2006, 2007, 2010, 2013, 2017, 2019, 2021, 2022

International Journal of Health Geographics
2005(2)

International Journal of Intelligent Systems Technologies and Applications
2005

International Journal of Remote Sensing
2009

Journal of Geographic Information and Decision Analysis
1997

Journal of Applied Geography
2017

Journal of Environmental and Public Health
2017(2)

Journal of Geography
2012

Journal of Transport Geography
2001, 2003, 2005, 2006(2), 2007(3), 2008(3), 2009, 2010(2), 2011(3), 2012(4), 2017, 2018 (2), 2023

MIT Press
2012

National Birth Defects Prevention Study (NBDPS) – Data Sharing Committee
2013

National Science Foundation
2000, 2001(2), 2003, 2004(2), 2005(2), 2009(2), 2010, 2011, 2025

Natural Hazards
2015

Nature Sustainability
2019, 2020

The Netherlands Organisation for Scientific Research (NWO)
2015

Networks
1998

Occupational and Environmental Medicine
2020

Papers in Regional Science
1998, 2004

Papers of Applied Geography Conferences
2003, 2004, 2005, 2011

Photogrammetric Engineering and Remote Sensing
1998, 2005

Preventing Chronic Disease
2024

Professional Geographer
2001, 2002, 2004, 2005, 2006, 2007, 2010, 2012, 2013, 2020

Research in Geographic Education
1999, 2000

Review of book chapters: Physica-Verlag book titled "Applying Soft Computing in Defining Spatial Relations"
2001(2)

Review of book chapter: Global Institute for Energy and Environmental Systems (CIEES) book titled "Encyclopedia of Life Support Systems"
2001

Review of book chapter: Pergamon/Elsevier book titled "Recent Advances in Activity-Based Approaches"
2004

Review of book chapter: Springer book titled "Geospatial Information Technologies for Homeland Security"
2007

Scientific Reports
2024

Social Science Quarterly
1996(2)

Socio-Economic Planning Sciences
2017, 2018

Transactions in GIS
2002

Transportation Research Part D: Transport and Environment
2019

UCGIS (University Consortium for Geographic Information Science) student paper competition
2001 (36 abstracts)

URISA Journal
2002(2), 2003, 2005, 2006, 2010

Publisher–Blackwell
2005

Publisher–Elsevier
2003

Publisher–Guilford Press
2015

Publisher–John Wiley and Sons
2003

Publisher–McGraw-Hill
2007

Women's Health Issues
2015 (2)

Service on Conference Committees

2024
Member, Conference Committee, *The 31st International Conference on Geoinformatics*, Toronto, Canada, August 14-16.

2021
Member, Conference Committee, *The International Conference on Geographical Information Systems Theory, Applications and Management (GISTAM)*, Online Streaming, April 23–25.

2016–2017
Member, International Steering Committee, *The 25rd International Conference on Geoinformatics (Geoinformatics 2017)*, August 2–4, 2017, Buffalo, NY.

2015
Member, Program Committee, *The 23rd International Conference on Geoinformatics (Geoinformatics 2015)*, June 19–21, 2015, Wuhan, China.

2014
Member, Program Committee, *The 22nd International Conference on Geoinformatics (Geoinformatics 2014)*, June 25–27, 2014, Kaohsiung, Taiwan.

2013
Member, Program Committee, *The 2013 International Conference on Geo-Informatics in Green Ecology & Environment (GGEE2013)*, November 8–10, 2013, Wuhan, China.

2013
Member, Program Committee, *The 21st International Conference on Geoinformatics (Geoinformatics 2013)*, June 20–22, 2013, Kaifeng, China.

2012
Member, Program Committee, *The 20th International Conference on Geoinformatics (Geoinformatics 2012)*, June 15–17, 2012, Hong Kong, China.

2011
Member, Program Committee, *The 19th International Conference on Geoinformatics (Geoinformatics 2011)*, June 24–26, 2011, Shanghai, China.

2010
Member, Honorary Program Committee, *International Workshop on GIS for Transportation*
Wuhan University, November 20-22, 2009, Wuhan, China.

2009
Member, Program Committee, *International Symposium on Spatial Data Analysis*
Wuhan University, October, 2009, Wuhan, China.

2007
Member, Program Committee
Annual National Conference on High Performance Computing–2007 (HPC China 2007)
October 26-28, Shenzhen, China.

2007
Co-Chair, Organizing Committee, *OGC-China Symposium at Wuhan University*
Wuhan University, October 25-26, Wuhan, China.

2005
Member, Program Committee, *The First International Conference*
on Advanced Data Mining and Applications (ADMA2005)
Wuhan University, July 22-24, Wuhan, China.

2003
Member, Scientific Committee, *Conference on Spatial Information Theory (COSIT)*
September 24-28, Ittingen, Switzerland.

2003
Member, Program Committee, Specialist Meeting, *Critical Transportation Infrastructure (CTI) 2003*
National Consortium on Remote Sensing in Transportation.

2002
Member, Technical Committee, *Geoinformatics 2002*, Association of Chinese Professionals in GIScience (CPGIS), Nanjing, China.

2001
Member, Scientific Committee, *Conference on Spatial Information Theory (COSIT)*
September 19-23, Morro Bay, CA, USA.

1999
Member, Scientific Committee, *Conference on Spatial Information Theory (COSIT)*
August 25-29, Stade, Germany.

1997
Member, Conference Committee, *International Institute for General Systems Studies (IIGSS) Workshop II*.
Southwest Texas State University, January 9-11, San Marcos, TX, USA.

1996
Local Arrangement, *Formal Models of Common Sense Geographic Worlds*.
National Center for Geographic Information and Analysis (NCGIA)
Research Initiative 21 Specialist Meeting (Local Arrangements)
October 30 to November 3, San Marcos, TX, USA.

1992
Member, Organizing Committee, *First Annual Conference of the Association of Chinese Professionals in Geographic Information Systems (Abroad) (CPGIS)*
August 15-16, Buffalo, NY, USA.

Service on Committees at Texas State University or the College of Liberal Arts

2011–present
Member and chair (2020), Formosa Professorship Nominating Committee, Texas State

2021
Member, Geography Representative on Liberal Arts College Curriculum Committee

2021
Member, Texas State Graduate College Research Support Fellowship Committee

2020
Member, Texas State University Graduate College Mentor Award Evaluation Committee

2020–2021
Member, The Graduate College Scholarship - Liberal Arts Evaluation Committee

2020–21
Member, Texas State University Graduate College Graduate Advisor PPS Subcomittee

2020–21
Member, Texas State University Graduate College Article–Based Thesis/Dissertation Subcomittee

2018–2019
Member, College of Liberal Arts Review Group for Tenure and Promotion.

2018–2019
Member, Graduate College Research Support Fellowship Committee, Texas State

2018–2019
Member, Research Fellowship Committee, Texas State

2017
Member, College of Liberal Arts Review Committee, Research Enhancement Program, Texas State

2012
Member, Presidential Award Committee, Texas State

2010–2015
Member, Steering Committee, Research Design and Analysis Group, Texas State

2009–2010
Member, University Principal Investigator Council, Texas State

2007
Member, Computer Science Chair Search Committee, Texas State

2006–2007
Member, Search Committee, Mitte Chair in Water and GIScience, Texas State

2006
Member, Computer Science Chair Search Committee, Texas State

2003–2004
Member, University Research Planning Committee, Texas State

2002–2004
Member, Sponsored Programs Advisory Council (SPAC), Texas State

1997–1998
Project director, Multi-Institutional Teaching Center (MITC) Site Analysis Project
for the Office of the Vice President for Academic Affairs
Texas State University
(Note: Devoted about 180-200 hours of service to the project during 1997-1998)

Service on Departmental Committees at Texas State University

2025–2026
Member, Evaluation Committee

2024–2025
Member, Alumni Relations Committee

2022–2026
Member, Instructor Evaluation Committee

2023–2024
Member, Alumni Reunion and Student Celebration Committee

2022–2023
Member, Scholarship Committee

2017–2023
Member, Evaluation Committee

2017–2022
Chair, Graduate Committee

2017–2022
Graduate Program Coordinator

2019–2020
Chair, Physical Geographer Search Committee, Texas State Department of Geography

2017–2018
Chair, Recruiting and Communication Committee

2016–2017
Member, Graduate Committee

2016–2017
Member, Undergraduate Committee

2015–2016
Member, Instructor Review Committee

2015–2016
Chair, Cartography Search Committee

2013–2014
Member, Evaluation Committee, Texas State Department of Geography

2013–2014
Member, GIScience Faculty Position Search Committee

2012–2013
Member, Colloquium Committee, Texas State Department of Geography

2011–2013
Member, TA/Adjunct Mentoring & Review Committee, Texas State Department of Geography

2009-2012
Member, Annual Faculty Scoring/Review Committee, Texas State Department of Geography

2010–2012
Member, Faculty Evaluation Committee, Texas State Department of Geography

2006–2011
Member, Graduate Committee, Texas State Department of Geography

2009
Member, Ad Hoc Committee about a Joint Masters Program in Geoinformatics,
Texas State Department of Geography

2009
Member, Faculty Annual Evaluation Scoring Committee, Texas State Department of Geography

2008–2009
Member, GIScience Assistant Professor Search Committee, Texas State Department of Geography

2008–2009
Member, GIScience (remote sensing) Faculty Position (open rank) Search Committee
Texas State Department of Geography

2002–2009
Director, Texas Center for Geographic Information Science, Texas State Department of Geography

2002–2008
Member, Leadership Committee, Texas State Department of Geography

2007
Member, Remote Sensing Assistant Professor Search Committee
Texas State Department of Geography

2007
Member, Annual Faculty Scoring/Review Committee, Texas State Department of Geography

2005–2006
Member, Library Committee, Texas State Department of Geography

2004–2006
Member, Budget Committee, Texas State Department of Geography

2004–2005
Member, Equipment Committee, Texas State Department of Geography

2004–2005
Chair, GIScience Assistant Professor Search Committee
Texas State Department of Geography

2003–2004
Member, Geography Chair Search Committee, Texas State Department of Geography

2003–2004
Member, Colloquium Committee, Texas State Department of Geography

2003–2004
Chair, GIScience (remote sensing) Assistant Professor Search Committee
Texas State Department of Geography

2002–2003
Chair, GIScience (remote sensing) Assistant Professor Search Committee
Texas State Department of Geography

2002–2003
Chair, GIScience (remote sensing) Assistant Professor Search Committee
Texas State Department of Geography

2002
Chair, GIScience (cartography) Assistant Professor Search Committee
Texas State Department of Geography

2001–2004
Member, Evaluation Committee, Texas State Department of Geography

2001
Chair, GIScience Faculty Search Committee, Texas State Department of Geography

2001
Member, Water Resources Faculty Search Committee, Texas State Department of Geography

2000–2001
Chair, Travel Committee, Texas State Department of Geography

1999–2000
Member, Travel Committee, Texas State Department of Geography

1997–1998
Member, Scholarship and Awards Committee, Texas State Department of Geography

1997
Member, Faculty Search Committee, Texas State Department of Geography

1996–1998
Supervisor, GIS concentration, Texas State Department of Geography

1996–1903
Member, ChairŠs Technical Advisory Committee, Texas State Department of Geography

1996
Member, Faculty Search Committee, Texas State Department of Geography

1995–1997
Member, Travel Committee, Texas State Department of Geography

1995–1996
Member, Scholarship and Awards Committee, Texas State Department of Geography

1995–1996
Member, Technological Committee, Texas State Department of Geography

Community Service

2021–2023
Member, Citizens Utility Advisory Board (CUAB), City of San Marcos, Texas.

2021–2023
Member, Home Owners Association Board, Villas at Commander's Point, Austin, Texas.

2001–2002
Austin Great Wall Chinese School. Board member and treasurer

1997
Geography in the digital world. Presentation at Wonderland School, San Marcos, Texas

INDEX

RESEARCH INTERESTS 1

EDUCATION 1

PROFESSIONAL EXPERIENCE 1
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PUBLICATIONS 6
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