

Xiaobai (Angela) Yao

Curriculum Vitae

Department of Geography
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PROFESSIONAL EMPLOYMENT HISTORY

2016 - present Professor Department of Geography, University of Georgia
2008 - 2016 Associate Professor Department of Geography, University of Georgia
2002 -2008 Assistant Professor Department of Geography, University of Georgia, USA
1990-1995 GIS Specialist Municipal Bureau of Urban Planning and management, Shanghai, China

EDUCATION

2002 Ph.D. Geography, University at Buffalo, the State University of New York
1997 M.S. GIS for urban applications, International Institute of Aerospace Survey and Earth Sciences (ITC), the Netherlands
1990 B.S. GIS for urban planning and management, Wuhan University (formerly known as Wuhan Technical Univ. of Surveying & Mapping), China

RESEARCH INTERESTS

Geospatial Analysis and Modeling; Cities; Urban Transportation Systems; Network Science; Public Health; Location-based Big Data

AWARDS AND HONORS

2013, 2015 President Venture Fund, University of Georgia
2014-2015, Online Teaching Fellow, the University of Georgia
2011-2012 Fellow, Study in a Second Discipline Program, University of Georgia
2010 *Transactions in GIS* Best Paper Award (co-authored with Woo Jang). UCGIS summer assembly, June 15-16, 2010. Hilton Head, SC.
2005 ESRI-UCGIS Young Scholar Award. University Consortium of Geographic Information Science (UCGIS).
2004 Sarah Moss Fellowship Award. University of Georgia, 2004-2005.

- 2004 Nominee (representing SUNY at Buffalo) of Outstanding Dissertation in Social Science and Education for the 2004 NAGS (Northeastern Association of Graduate Schools)'s Outstanding Dissertation Award.
- 2004 J. Warren Nystrom Award Finalist. Association of American Geographers.
- 2002 Best Paper Award (first place), GIS Specialty Group Student Paper Competition, AAG Annual Meeting, Los Angeles, CA.
- 1997 Graduation with the honor of "DISTINCTION" in ITC, the Netherlands.
- 1993 Best paper award (first place), East China Urban Planning Young Scholar Paper Competition. Shanghai, China.
1990. Ye Xuean Fellowship Award. Wuhan University (formerly WTUSM).

PUBLICATIONS

Books

- Dang, A. and **X.Yao**. Spatial Analysis Techniques and Applications in Planning. *Tsinghua University Press*. (Textbook in Chinese) (In Press)
- Jiang, B. and **X. Yao**. (eds) 2010. *Geospatial Analysis and Modelling of Urban Structure and Dynamics*. In GeoJournal Library Book Series. Dordrecht, the Netherlands: Springer. ISBN: 9048185718.

Guest-edited Journal Volumes

- Yao, X.** and B. Jiang, M. Madden, Y. Liu. 2016. New Insights Gained from Location-based Social Media Data. Special Issue *Computers, Environment, and Urban Systems*. (In press)
- Yao, X.** and B. Jiang. 2009. Geospatial Modeling of Urban Environments. Special Issue *Environment and Planning B: Planning and Design*. 36(5).

Journal Articles (graduate advisees underlined)

- Xi, D. Q. Fan, **X.A. Yao**, W. Jiang, D. Duan. 2016. A visual salience model for wayfinding in 3D virtual urban environments. *Applied Geography*. 75: 176-187.
- Sahoo K, G.L. Hawkins, **X.A.Yao**, K.Samples, S. Mani. 2016. GIS-based biomass assessment and supply logistics system for a sustainable biorefinery: A case study with cotton stalks in the Southeastern US. *Applied Energy*. 182:260-273. DOI: <http://dx.doi.org/10.1016/j.apenergy.2016.08.114>
- Wei, X. and **X.Yao**. 2015. 3D model construction in an urban environment from sparse LiDAR points and aerial photos – a statistical approach. *Geomatica*. 69(3): 271-284. DOI:10.5623/cig2015-302
- Chen, A., **X.A.Yao**, R.Sun, & L. Chen. 2014. Effect of urban green patterns on surface urban cool islands and its seasonal variations. *Urban Forestry & Urban Greening*. 13(4):646-654.
DOI:10.1016/j.ufug.2014.07.006

- Wei, X. and **X.Yao.** 2014. A Hybrid GWR-Based Height Estimation Method for Building Detection in Urban Environments. *ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences* 2(2):23-29. DOI: 10.5194/isprsannals-II-2-23-2014
- Wei, X. and **X.Yao.** 2014. Random Walking Value for Ranking Spatial Characteristics in Road Networks. *Geographical Analysis* 46(4):411-434. DOI: 10.1111/gean.12064
- Yao, X.** and S. Zhang. Social-spatial structure of Beijing: a spatial-temporal analysis. 2014. *International Journal of Society System Science* 6(1):18-33. DOI: 10.1504/IJSS.2014.059923
- Jang, W. and **X.Yao.** 2014. Track Ethnically Divided Commuting Patterns Over Time – Method and a Case Study of Metropolitan Atlanta. *Professional Geographer*. 66(2):274-283. DOI: 10.1080/00330124.2013.784952
- Jang, W. and **X. Yao.** 2011. Interpolating Spatial Interaction Data. *Transactions in GIS*. 15(4):541-555. DOI: 10.1111/j.1467-9671.2011.01273.x
- Coleman, J.B. **X. Yao,** T. Jordan, and M. Madden. 2011. Holes in the Ocean: Filling Voids in Bathymetric Lidar Data. *Computers and Geosciences*. 37 (4):474-484. doi:10.1016/j.cageo.2010.11.008
- Shen, Z., **X.A.Yao,** M. Kawakami, P.Chen. 2011. Simulating spatial market share patterns for impacts analysis of large-scale shopping center on downtown revitalization. *Environment and Planning B: Planning and Design* 38(1):142-162. DOI: 10.1068/b35138
- Kim, H. and **X. Yao.** 2010. Pycnophylactic interpolation revisited: integration with dasymmetric method. *International Journal of Remote Sensing*. 31(21):5657-5671. DOI:10.1080/01431161.2010.496805
- Yao, X.** and Jiang, B. 2009. Geospatial Modeling of Urban Environments. Editorial. *Environment and Planning B: Planning and Design*. 36(5):769-771. doi:10.1068/b3605ged
- Yao, X.** and L. Zou. 2008. Interoperable Internet Mapping - An Open Source Approach. *Cartography and Geographic Information Science*. 35(4):279-293. DOI:10.1559/152304008786140560
- Yao, X.** 2007. Where are public transit needed? - Examining potential demand for public transit for commuting trips. *Computers, Environment, and Urban Systems*. 31(5):535-550. doi:10.1016/j.compenvurbsys.2007.08.005
(Note: The journal article has been invited for reprint in one edited book)
- Yao, X.** and J.C. Thill. 2007. Neuro-Fuzzy Modeling of Context-Contingent Proximity Relations. *Geographical Analysis: An International Journal of Theoretical Geography*. 39(2):169-194. DOI: 10.1111/j.1538-4632.2007.00700.x
- Jiang, B. and **Yao, X.** 2006. Location-Based Services and GIS in Perspective. *Computers, Environment and Urban Systems*. 30(6): 712-725. doi:10.1016/j.compenvurbsys.2006.02.003
(Note: The journal article has been invited for reprints in two edited books).
- Yao, X.** and Thill, J.C. 2006. Spatial Queries With Qualitative Locations In Spatial Information Systems. *Computers, Environment and Urban Systems*. 30(4):485-502. doi:10.1016/j.compenvurbsys.2004.08.001

- Yao, X.** and Thill, J.C. 2005. How Far Is Too Far – A Statistical Approach To Proximity Modeling. *Transactions in GIS*. Vol. 9(2): 157-178. DOI: 10.1111/j.1467-9671.2005.00211.x
- Yao, X.** and B. Jiang. 2005. Visualization of Qualitative Locations. *Cartography and Geographic Information Science*. 32(4):219-229. DOI:10.1559/152304005775194683
- Yao, X.** 1993. Analyzing the GIS Data Structures for Urban Planning, *Shanghai Urban Planning* (in Chinese).

Book Chapters (graduate advisees underlined)

- Brown, C. and **X. Yao.** 2015. Development of a Nationwide Road Change Database for the U.S. in the Post-Recession Years (2008–2012). Chapter 10. In Francis Harvey and Yee Leung (eds) *Advances in Spatial Data Handling and Analysis*. 2015. Springer. pp.163-181.
- Shen, Z., **X.Yao,** M. Kawakami, P. Chen, M. Koujin. 2012. Integration of MAS and GIS using Netlogo. In Z.Shen (eds) *Geospatial Techniques in Urban Planning*, *Advances in Geographic Information Science*. Berlin: Springer-Verlag. pp.369-388.
- Yao, X.** 2010. Modeling and analyzing cities as spatio-temporal places. In B.Jiang and X.Yao (eds) *Geospatial Analysis and Modelling of Urban Structure and Dynamics*. Dordrecht, the Netherlands: Springer. pp.311-328.
- Jiang, B, and **X.Yao.** 2010. Geospatial Analysis and Modeling of Urban Structure and Dynamics: An Overview. In B.Jiang and X.Yao (eds) *Geospatial Analysis and Modelling of Urban Structure and Dynamics*. Dordrecht, the Netherlands: Springer. pp.3-11.
- Yao, X.** Qualitative Spatial Reasoning and GIS. 2009. In M. Madden (ed) *Manual of Geographic Information Systems*. 1st edition. ASPRS publisher. pp.71-86.
- Yao X.** 2009. Georeferencing, Geocoding. In Kitchin R, Thrift N (eds) *International Encyclopedia of Human Geography*, Volume 1, Oxford: Elsevier. pp. 458-465.
- Yao, X.** and Zhou, Y. 2009. Public Transit Need Index – Analyzing Spatial Distribution of the Potential Demand for Public Transit in a City. *Geo-spatial Information and Decision Support for Urban Planning*. Wuhan University Publishing. ISBN: 9787307066694. (in Chinese).
- Thill, J.C. Kretzschmar, W.A., Casas, I. and **Yao, X.** 2007. Detecting geographic and socio-economic associations in English dialect features with self-organising maps. In Agarwal, P. and Skupin, A. (Eds) *Self-Organising Maps: Applications in Geographic Information Science*, West Sussex, UK: Wiley. pp87-106.
- Thill, J.C. and **Yao, X.** 1999. Urban Land Management in Transitional Countries: A Decision Support Prototype for Shanghai. In J.C. Thill (ed) *Spatial Multicriteria Decision Making and Analysis: A Geographic Information Sciences Approach*, Brookfield, VT: Ashgate. pp. 175-197.

Research White Paper and Reports

- Yao, X.** 2006. Position Paper Selected for participation in Digital Gazetteer Research and Practice: A 2 1/2 – day workshop for the presentation, discussion, and summarization of current issues and opportunities. Dec. 7-9, 2006. Santa Barbara, CA.
- Yao, X.** 2003. Research Issues in Spatio-temporal Data Mining, a white paper prepared for the University Consortium for Geographic Information Science (UCGIS) workshop on Geospatial Visualization and Knowledge Discovery, Lansdowne, Virginia, Nov. 18-20, 2003.
- Yao, X.** 2003. Modeling Spatio-Temporal Interaction Data and Identifying Unusual Patterns. A proposal of research challenges submitted to the University Consortium for Geographic Information Science (UCGIS) workshop on Homeland Security, Dawsonville, GA. Nov. 6-7, 2003.

Proceeding Publications

- Yao, X.** 2009. Investigating spatial autocorrelation of commuting flows. *Network on European Communications and Transport Activities Research in the USA*. Arlington, USA. June 18-20, 2009.
- Shen, Z., **X.Yao**, M. Kawakami, M.Kojin. 2009. Simulating the impact of large-scale center location on downtown revitalization. *Proceedings of the 11th International Conference on Computers in Urban Planning and Urban Management*. Hongkong. June 16-18, 2009. Ed by A.G.O. Yeh and F. Zhang. Hong Kong : University of Hong Kong, 2009. ISBN 978-962-7589-0
- Yao, X.** 2006. Examining potential demand for public transit for commuting trips: an integrative analysis combining GIS, statistics, and data mining. *Proceedings of the first ICA workshop on geospatial analysis and modeling*. Jiang, B and D.Sui (eds). Munich, Austria. July 8, 2006. 73-84.
- Yao, X.** and Jiang, B. 2005. Visualization of Qualitative Locations. *Proceedings of Auto-Carto 2005: A research Symposium*. Las Vegas, NV. March 18-23, 2005. 14 pages.
- Yao, X.** 1999. Qualitative Georeferencing For Web-Based GIS. *Geoinformatics and Socioinformatics*. Li,B. et al. (eds) *Proceedings of Geoinformatics 99*, Ann Arbor, MI, June 19-21,1999. pp.549-563.

Book Review

- Yao, X.** (2013). A book review on Statistics for Spatio-temporal Data by Noel Cressie and Christopher K. Wikle. *Journal of the American Statistical Association*. 108(501): 357
- Yao, X.** (2010) A book review on Understanding Dynamics of Geographic Domain, by K.S. Hornsby and M. Yuan (eds), 2010. *Photogrammetric Engineering and Remote Sensing*. 76(4):525-526.

Creative contributions other than formal publications

- Invited video interview by the National Geographic Learning, to be included in the World History Project (for middle school students) as a featured scholar.
- Invited talks at various universities and research institutions such as Tsinghua University, Peking University, Beijing Normal University, Institute of Geographic Sciences and Natural Resources Research

under the Chinese Academy of Science, and Beijing Municipal Institute of City Planning and Design, Georgia Southern University.

CONFERENCE PRESENTATIONS

- Yao, X.** and A. Grundstein. A Visual analytics approach to examining the moving patterns of asthma incidences from social media. *The 27th International Cartographic Conference*. Rio de Janeiro, Brazil. Aug. 23-28, 2015.
- Wei, X. and **X.Yao**. 2014. A Hybrid GWR-Based Height Estimation Method for Building Detection in Urban Environments. *Joint International Conference on Geospatial Theory, Processing, Modelling and Applications*. Oct.6-8, 2014. Toronto, Canada.
- Brown, C. and **X.Yao**. 2014. Development of a Nationwide Road Change Database for the U.S. in the Post-Recession Years (2008-2012). *Joint International Conference on Geospatial Theory, Processing, Modelling and Applications*. Oct.6-8,2014.Toronto, Canada.
- Yao, X.** and X. Wei and **2013**. A random walking algorithm to quantify the spatial importance of road network. *International Cartographic Conference and its pre-conference workshop on Street Networks and Transport*. Aug 23-30, Dresden, Germany.
- Yao, X.** **2013**. Investigating the relationship between commuting pattern and urban form in Beijing. *The Annual meeting of Association of American Geographers*. Apr. 2013. Los Angeles, CA
- Yao, X.** **2012**. A multi-objective assessment of road ranking in a regional network. The 20th GeoInformatics, June 14-17, 2012, Hong Kong.
- Yao, X.** and S. Zhang. 2011. How is the city growing - Exploring the impact of Beijing's urban growth on traffic. *International Conference on Spatial Planning and Sustainable Development*, July 29-31, 2011. Kanazawa, Japan.
- Yao, X.** 2011. Where is the city going – a case study of Beijing. *The Annual meeting of Association of American Geographers*. Apr. 2011. Seattle, WA.
- Yao, X.** 2010. Investigating spatial autocorrelation of flow data. *The Annual meeting of Association of American Geographers*. Apr. 14-18. 2010. Washington, D.C.
- Yao, X.** 2009. Investigating spatial autocorrelation of commuting flows. *Network on European Communications and Transport Activities Research (NECTAR) in the USA*. Arlington, USA. June 18-20, 2009.
- Yao, X.** 2008. Object-based Image Analysis Aided by Vector Ancillary Data. *The 21st Congress of International Society of Photogrammetry and Remote Sensing (ISPRS)*. Beijing, July 3-11, 2008.
- Yao, X.** 2008. Spatial transformation in the post-reform China – a case study of Beijing. *The CPGIS 2008 Young Scholar Summer Workshop*. Shanghai, June 18-20, 2008.
- Yao, X.** 2007. Which bus to take? *The second International Cartographic Association Workshop on Geographic Analysis and Modeling*. Athens, GA, USA. July 12-13. 2007.

- Yao, X.** 2007. Network analysis of multiple route systems. Annual meeting of Association of American Geographers. San Francisco. Apr. 17-21. 2007.
- Yao, X.** 2006. Examining Potential Demand of Public Transit for Commuting Trips – an integrative approach. the first International Cartographic Association Workshop on Geographic Analysis and Modeling, joined with the 12th International Symposium on Spatial Data Handling. Vienna, Austria. Jul. 8-14, 2006.
- Yao, X.** 2006. Referencing Common-sense Spatial Information in GIS. Annual Meeting of Association of American Geographers, Chicago, IL. Mar.7-11, 2006.
- Yao, X.** 2006. Qualitative Spatial Information and GIS. GIS in Teaching & Research Symposium. Feb.23-24, 2006. Athens, GA.
- Yao, X.** 2005. Computation of Conditioned Network Distance. Southeastern Division of the Association of American Geographers (SEDAAG) annual meeting. West Palm Beach, FL. Nov. 20-22. 2005.
- Yao, X.** and Jiang, B. 2005. Visualization of Qualitative Locations. Auto-Carto 2005. A research symposium organized by Cartography and Geographical Information Sciences (CaGIS). Las Vegas, NV. March 18-23, 2005.
- Yao, X.** 2004. From Naïve Geography to Naïve GIS - Handling Queries of Qualitative Spatial Relations in GIS, J. Warren Nystrom Dissertation Competition, Annual Meeting of Association of American Geographers, Philadelphia, PA.
- Yao, X.** and Thill, J.C. 2002. Qualitative Georeferencing for Geospatial Information Systems, Annual Meeting of Association of American Geographers, Los Angeles, CA
- Yao, X.** 2001. Incorporating Domain Knowledge into Neural Network for Trip Distribution Forecasting, Annual Meeting of Association of American Geographers, New York, NY
- Yao, X.** 1999. Qualitative Georeferencing for Web-Based GIS, *Geoinformatics'99*, Ann Arbor, MI
- Yao, X.** 1997. A Decision Support System for Land Use Planning and Management, North American meeting of RSAI, Buffalo, NY

SELECTED PARTICPATION IN RESEARCH WORKSHOPS

- Spatial Transformation in the Post-Reform China – a case study of Beijing. Young Scholar Summer Workshop of the Association of Chinese Professionals in Geographic Information Sciences (CPGIS). June 18-21. 2008. Shanghai, China.
- Digital Gazetteer Research and Practice: A 2 1/2 –day workshop for the presentation, discussion, and summarization of current issues and opportunities. Dec. 7-9, 2006. Santa Barbara, CA.
- Accessibility in Space and Time, Center for Spatially Integrated Social Science (CSISS) summer workshop. July 7-11, 2003. Columbus, OH.
- Homeland Security Workshop – current issues and future research directions. Funded by University Consortium of Geographic Information Science (UCGIS). Nov. 5-6, 2003. Amicalola, GA.

Visualization and Knowledge Discovery Workshop – current issues and future research directions. UCGIS.
Nov. 17-20, 2003. Lansdowne, VA.

RESEARCH GRANTS

External Sources

- Co-PI. Keeping the Promise: Planning the Future of the Blue Ridge Parkway – Developing a Transportation Implementation Plan. Marguerite Madden (PI). National Parks Conservation Association. 2015–2016. \$83,155
- PI. Geosimulation of Urban Growth and Traffic Patterns Based on Social Media Data. with B. Jiang, S. Holloway, X.Wei. Ministry of Education of China Key Laboratory (at Tsinghua University) Open Research Grant. 2014-2016. CNY¥400,000
- Co-PI. Evaluation and Hierarchical Optimization of Urban Transit System. with Z.Huang (PI). National Science Foundation of China. 2013-2016. CNY¥ 750,000
- PI, Modeling the impact of Urban Transportation on Beijing’s Air Quality. Chinese Academy of Science Research Center of Eco-Environmental Sciences. 2012-2014. CNY¥150,000
- PI, with C. Pannell. Investigating Urban Spatial Transformation in Post-Reform Beijing, China. National Geographical Society (NGS). 2006-2007. \$12,000.
- Travel grant. National Geospatial-Intelligence Agency (NGA). For participation in Digital Gazetteer Research and Practice : A 2 1/2 –day workshop for the presentation, discussion, and summarization of current issues and opportunities. Dec. 7-9, 2006. Santa Barbara, CA. University of California at Santa Barbara (UCSB). \$1,500
- GFDA (Geography Faculty Development Alliance) travel grant. NSF. For participation in the Summer Workshop for Early Career Geography Faculty. June 18-25. Boulder, CO. 2005. \$500
- UCGIS research workshop grant. Co-organizer (with Amit Sheth, Lynn Usery, and Budak Arpinar). Homeland Security Workshop grant. University Consortium for Geographic Information Sciences. 2003. \$15,000
- UCGIS (University Consortium of Geographic Information Science) Travel grant. For participation in the UCGIS workshop on Geospatial Visualization and Knowledge Discovery, Lansdowne, Virginia, Nov. 18-20, 2003. \$1000
- CSISS (Center for Spatially Integrated Social Science) travel scholarship. NSF funded. Summer workshop *Accessibility in Space and Time*. Columbus, OH. July 7-11, 2003. \$500
- NCGIA (National Center for Geographic Information and Analysis) Travel Grant. NSF funded. GIScience Conference. Savannah, GA, NCGIA. 2000. \$700
- NCGIA travel grant. Geoinformation 99. Ann Arbor, MI, NCGIA. 1999. \$500

Internal Sources

- President Venture Fund. President's Office. Organizing the International Conference on Location-Based Social Media Data. \$2480. 2015.
- Online Teaching Fellow. University of Georgia. For the development of Geog4370/6370E. \$5000 2014-2015.
- President Venture Fund. President's Office. Random-walk Walking algorithm and the applications in Urban Modeling. \$1588. 2013.
- Study-in-a-Second-Discipline Fellow. University of Georgia. *GIS Technologies for Health Research*. \$23,000. 2011-2012.
- Sarah Moss Fellowship. University of Georgia. *Spatial Planning and Sustainable Development in Asia*. \$4000. 2011.
- Internationalization Teaching Grant. *Interactive Learning of the Real China*. Office of International Education. UGA. \$3500. 2011.
- President Venture Fund. President's Office. *Object-Based Image Analysis Aided by Vector Ancillary Data*. \$2,000. 2008.
- Mini-conference fund for organizing conference. Private donation through the Department of Geography. *Second ICA workshop on Spatial Analysis and Modeling*. July 12-13, 2007. Athens, GA. \$5,000.
- Foreign Travel Assistance fund. Office of Vice President for Research. *ICA workshop in Vienna, Austria*. \$1,360. 2006.
- President Venture Fund. President's Office. *Examining Potential Demand of Public Transit for Commuting Trips*. \$1,644. 2006.
- Sarah Moss Fellowship Award. University of Georgia. *Agent-Based Modeling*. \$5000. 2004-2005.
- Principal Investigator. Faculty Research Grant. University of Georgia Research Foundation. *Spatial Data Mining for Proximity Modeling*. \$5,500. 2003.
- Principal Investigator. University at Buffalo, the State University of New York. Mark Diamond Research Grant. *Qualitative Georeferencing for Geospatial Information Systems*. \$1,200, 2001-2002.

DISCIPLINARY SERVICE

Editorial Board

- Computers, Environment, and Urban Systems
- International Journal of Sustainable Society
- International Review for Spatial Planning and Sustainable Development

Peer Review Service

- Served on the U.S. National Science Foundation GSS Senior Advisory Panel
- Reviewed grant proposals for funding agencies in the US, China, and Israel.
- Peer-reviewed numerous manuscripts for many national and international journals

Organizing National and International Conferences and Workshops

- Chair of the organizing committee, the International Symposium on Location-based Social Media Data and Tracking Data. July 1-2, 2017. Washington DC
- Chair of the organizing committee, the International Conference on Location-based Social Media Data. Athens, GA. Mar. 13-14, 2015.
- Workshop organization and Instruction. A Hands-on Workshop on Data Acquisition and Visual Analytics for Social Media Data. Pre-conference Workshop of ICLSM. March 12, 2015.
- Organizer of International Workshop on Spatial Analysis and Modeling 2007. Athens, GA, July 12-13. 2007.
- Co-organizer of University Consortium of Geographical Information Science (UCGIS) Homeland Security Workshop. Dawsonville, GA. Nov. 6-7. 2003.

Committee Service at National and International Academic Events

- Steering Committee Chair, the Second International Conference on Social Media Data, Shanghai, China. Aug 26-28, 2016.
- Steering Committee member of SEDAAG annual meeting 2005 and 2006
- Program committee member on a wide range of national and international conferences, including the following
 - Using Big Data to Understand Spatial Connectivity. Workshop at the 2014 IEEE International Conference on Big Data (IEEE BigData 2014). Oct. 27-30, 2014. Washington DC, USA
 - The 21th International Conference on Geoinformatics 2013, June 20-22, 2013, Kaifeng, China.
 - The 20th International Conference on Geoinformatics 2012, June 15-17, 2012. Hong Kong.
 - The 11th International Conference on Geocomputation, July 20-22, 2011. London, UK.
 - The GeoVis Hamburg Workshop - Linking Geovisualization with Spatial Analysis and Modeling. March 10-11, 2011. Hamburg, Germany.
 - The AutoCarto 2010 Research Symposium. Nov. 15-19, 2010. Orlando, U.S.A.
 - The ICA workshop on Geospatial Analysis and Modeling, joined with the 12th International Symposium on Spatial Data Handling. July, 8-14, 2006, Vienna, Austria.
- Organized sessions at AAG
- Reviewer and judge for student paper competition session

Service in National and International associations

- International Cartographic Association (ICA) Commission of Geospatial Analysis and Modeling, Chair (2015 - 2019); Vice Chair (2011- 2015)

- UCGIS delegate (2013- present), alternate delegate (2003 – present)
- The International Association of Chinese Professionals in Geographic Information Science, board member (2010- 2012)
- AAG Standards for Geographic Data Committee, committee member (2003 – 2006)
- SEDAAG state representative for Georgia (2005-2007)