

CURRICULUM VITAE

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I. EDUCATION

Ph.D., Geography, The Ohio State University, Columbus, Ohio, 1986. Dissertation topic:
A constrained attitudinal modeling of urban travel mode-choice behavior
M.A., Geography, The Ohio State University, Columbus, Ohio, 1983
B.S., Geography, National Taiwan University, Taipei, Taiwan, 1979

II. PROFESSIONAL POSITIONS

2013-present Alvin and Sally Beaman Professor of Geography, University of Tennessee, Knoxville, Tennessee
2010-present Arts and Sciences Excellence Professor of Geography, University of Tennessee, Knoxville, Tennessee
2012-present Director, Confucius Institute, University of Tennessee, Knoxville, Tennessee
2003-present Professor, Department of Geography, University of Tennessee, Knoxville, Tennessee
2013-present Guest Professor, Southeast University, Nanjing, China
2011-present Affiliated Professor, Center for Intelligent Systems and Machine Learning, College of Engineering, University of Tennessee, Knoxville, Tennessee
2011-present Affiliated Professor, Center for Sustainable Business and Tourism, Institute for a Secure and Sustainable Environment, University of Tennessee, Knoxville, Tennessee
2011-present Joint Professor, State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing (LIESMARS), Wuhan University, Wuhan, China
2005-present Research Fellow, Institute of Space and Earth Information Science, Chinese University of Hong Kong, Shatin, Hong Kong
2003-present Affiliated Professor, Center for Transportation Research, University of Tennessee, Knoxville, Tennessee
2007-2010 Head, Department of Geography, University of Tennessee, Knoxville, Tennessee
2006-2011 Guest Professor, State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing (LIESMARS), Wuhan University, Wuhan, China

- 2010 Visiting Professor, Center for Geographic Information Science, Research Center for Humanities and Social Sciences, Academia Sinica, Taipei, Taiwan (July-August, 2010)
- 2006 Visiting Professor, State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing, Wuhan University, Wuhan, China (June-July, 2006)
- 2005 Visiting Professor, Department of Geography and Resource Management, Chinese University of Hong Kong, Shatin, Hong Kong (May-June, 2005)
- 2004 Visiting Professor, State Key Laboratory of Resources and Environmental Information System (LREIS), Institute of Geographical Sciences and Natural Resources Research, Chinese Academy of Sciences, Beijing, China (August-December, 2004)
- 2001-04 Associate Head, Department of Geography, University of Tennessee, Knoxville, Tennessee
- 1998-03 Associate Professor, Department of Geography, University of Tennessee, Knoxville, Tennessee
- 1994-98 Associate Professor, Department of Geography, Florida Atlantic University, Boca Raton, Florida
- 1988-94 Assistant Professor, Department of Geography, Florida Atlantic University, Boca Raton, Florida
- 1993-98 Director, Geographic Information and Analysis Laboratory, Department of Geography, Florida Atlantic University, Boca Raton, Florida
- 1990-92 Co-Director, GIS/Remote Sensing Laboratory, Department of Geography, Florida Atlantic University, Boca Raton, Florida
- 1988-90 Faculty of Master's Program of Urban and Regional Planning, Florida Atlantic University, Boca Raton, Florida
- 1988-90 Director, Geographic Information Systems Laboratory, Master's Program of Urban and Regional Planning, Florida Atlantic University, Boca Raton, Florida
- 1986-88 GIS Manager and Associate Planner, Planning Information Technology Center, Broward County Office of Planning, Ft. Lauderdale, Florida
- 1985-86 Graduate Research Assistant, National Committee for Digital Cartographic Data Standards, Dr. Harold Moellering (Chair of the National Committee), Department of Geography, The Ohio State University, Columbus, Ohio
- 1983-85 Graduate Teaching Associate, Department of Geography, The Ohio State University, Columbus, Ohio
- 1981-83 Graduate Teaching Assistant, Department of Geography, The Ohio State University, Columbus, Ohio
- 1979-81 Second Lieutenant, Air Force, Taiwan, Republic of China (compulsory service)

III. HONORS AND AWARDS

- 2014 Convocation Research Award (Senior Career Level), College of Arts and Sciences, University of Tennessee, Knoxville
- 2014 Faculty Fellow, Center for Transportation Research, University of Tennessee, Knoxville

- 2013 Alvin and Sally Beaman Professorship, University of Tennessee, Knoxville (2013 - present)
- 2013 Guest Professor, Southeast University, Nanjing, China (2013 – present)
- 2012 Outstanding Teaching Award, Department of Geography, University of Tennessee, Knoxville
- 2011 Betty Lynn Hendrickson Professorship, College of Arts and Sciences, University of Tennessee, Knoxville (2011 - 2013)
- 2011 Faculty Development Leave Award (Sabbatical Leave), University of Tennessee, Knoxville
- 2011 Joint Faculty of the State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing, Wuhan University, Wuhan, China (2011 – present)
- 2011 Affiliated Faculty of the Center for Intelligent Systems and Machine Learning (CISML), College of Engineering, University of Tennessee, Knoxville (2011 – present)
- 2011 Affiliated Faculty of the Center for Sustainable Business and Tourism, Institute for a Secure and Sustainable Environment, University of Tennessee, Knoxville (2011 – present)
- 2010 Featured in the Chancellor’s Report - Journey to the Top 25, University of Tennessee, Knoxville
- 2010 Appointed to the Academic Advisory Committee of the Research Center for Humanities and Social Sciences, Academia Sinica, Taipei, Taiwan (2010 – present)
- 2010 Arts and Sciences Excellence Professorship, College of Arts and Sciences, University of Tennessee, Knoxville (2010 - present)
- 2009 Betty Lynn Hendrickson Professorship, College of Arts and Sciences, University of Tennessee, Knoxville (2009 - 2011)
- 2009 Chancellor’s Research and Creative Achievement Award, University of Tennessee, Knoxville
- 2008 Elected to Fellow of the American Association for Advancement of Science (AAAS) (2008 – present)
- 2008 Edward L. Ullman Award for outstanding contributions to the field of transportation geography, Transportation Geography Specialty Group, The Association of American Geographers (AAG)
- 2006 Guest Professor of Wuhan University, Wuhan, China
- 2005 Research Fellow of Chinese University of Hong Kong, Hong Kong, China (2005 – present)
- 2004 Outstanding Faculty Award, Department of Geography, University of Tennessee, Knoxville
- 2004 Featured among eight faculty members in the Provost’s publication of “Taking on Tomorrow,” which highlights research and education at University of Tennessee, Knoxville
- 1998 Recognition of Contribution, Florida Department of Transportation
- 1998 Certificate of Appreciation, College of Science, Florida Atlantic University
- 1996 Medal of Outstanding Overseas Chinese, Federation of Overseas Chinese Associations, Taipei, Taiwan
- 1995 Finalist, Distinguished Teacher Award, College of Social Science, Florida Atlantic University

- 1993 Excellence in Undergraduate Teaching Award, Florida Atlantic University
 1986 Huntington Award, Outstanding Graduate Student, Department of Geography, The Ohio State University

IV. RESEARCH

A. Publications

2016. Yang, X., Fang, Z., Yang, X., Shaw, S-L., Zhao, Z., Yin, L., Zhang, T. and Lin, Y. Understanding spatiotemporal patterns of human convergence and divergence using mobile phone location data, *International Journal of Geo-Information*, 5(10), 177-194 (DOI: 10.3390/ijgi5100177)
2016. Chen, B.Y., Yuan, H., Li, Q., Wang, D., Shaw, S-L., Chen, H.P. and Lam, W.H.K. Measuring place-based accessibility under travel time uncertainty, *International Journal of Geographical Information Science*, in press (DOI: 10.1080/13658816.2016.1238919).
2016. Chen, J. and Shaw, S-L. Representing the spatial extent of places based on Flickr photos with a representativeness-weighted kernel density estimation, in Jennifer Miller, David O’Sullivan, and Nancy Wiegand (eds.), *GIScience 2016, Lecture Notes in Computer Science (LNCS) 9927*, pp. 130–144, Springer International Publishing Switzerland (DOI: 10.1007/978-3-319-45738-3_9).
2016. Xu, Y., Shaw, S-L., Fang, Z. and Yin, L. Estimating potential demand of bicycle trips from mobile phone data - an anchor-point based approach, *International Journal of Geo-Information*, 5(8), 131-153 (DOI: 10.3390/ijgi5080131).
2016. Shaw, S-L., Tsou, M-H. and Ye, X. Editorial: human dynamics in the mobile and big data era, *International Journal of Geographical Information Science*, 30(9), 1687-1693 (DOI:10.1080/13658816.2016.1164317).
2016. Zhao, Z., Shaw, S-L., Xu, Y., Lu, F., Chen, J. and Yin, L. Understanding the bias of call detail records in human mobility research, *International Journal of Geographical Information Science*, 30(9), 1738-1762 (DOI:10.1080/13658816.2015.1137298).
2016. Xu, Y., Shaw, S-L., Zhao, Z., Yin, L., Lu, F., Chen, J., Fang, Z. and Li, Q. Another tale of two cities - understanding human activity space using actively tracked cellphone location data, *Annals of the Association of American Geographers*, 106(2), 489-502 (DOI:10.1080/00045608.2015.1120147).
2016. Tu, W., Li, Q., Fang, Z., Shaw, S-L., Zhou, B. and Chang, X. Optimizing the locations of electric taxi charging stations: A spatial–temporal demand coverage approach, *Transportation Research Part C: Emerging Technologies*, 65, 172-189 (DOI:10.1016/j.trc.2015.10.004).
2016. Chen, B.Y., Yuan, H., Li, Q., Shaw, S-L., Lam, W.H.K. and Chen, X. Spatiotemporal data model for network time geographic analysis in the era of big data, *International Journal of Geographical Information Science*, 30(6), 1041-1071 (DOI:10.1080/13658816.2015.1104317).
2016. Tang, L., Yang, X., Kan, Z., Wang, X, Li, Q. and Shaw, S-L. Traffic lane numbers detection based on naïve Bayesian classification, *China Journal of Highway and Transport*, 29(3), 116-123 (in Chinese with English abstract).

2016. Tang, L., Kan, Z., Huang, F., Li, Q., Shaw, S-L. and Dong, K. Travel time detection at intersections from taxi trace data, *Geomatics and Information Science of Wuhan University*, 41(1), 136-142 (in Chinese with English abstract, DOI:10.13203/j.whugis20130822).
2016. Shaw, S-L. Taipei MRT (Taiwan), in Selima Sultana and Joe Weber (eds.), *Minicars, Maglevs, and Mopeds: Modern Modes of Transportation around the World*. Santa Barbara, CA: ABC-CLIO, 301-302.
2015. Fang, Z., Li, Q. and Shaw, S-L. What about people in pedestrian navigation? *Geo-spatial Information Science*, 18(4), 135-150 (DOI:10.1080/10095020.2015.1126071).
2015. Yin, L., Wang, Q., Shaw, S-L., Fang, Z., Hu, J., Tao, Y. and Wang, W. Re-identification risk versus data utility for aggregated mobility research using mobile phone location data, *PLOS ONE*, 10(10): e0140589 (DOI:10.1371/journal.pone.0140589).
2015. Chen, J., Lu, F., Zhai, H. and Shaw, S-L. Making place recommendations: An individual accessibility measure to urban opportunities in space and time, *Acta Geographica Sinica*, 70(6), 931-940 (in Chinese).
2015. Xu, Y., Shaw, S-L., Zhao, Z., Yin, L., Fang, Z. and Li, Q. Understanding aggregate human mobility patterns using passive mobile phone location data – a home-based approach, *Transportation*, 42(4), 625-646.
2015. Shaw, S-L. Geographic information systems for transportation, in D. Richardson (ed.), *The International Encyclopedia of Geography: People, the Earth, Environment, and Technology*. Hoboken, NJ: Wiley.
2015. Chan, T-C., Pai, P-L., Shaw, S-L. and Fan, I-C. Spatiotemporal evolution of market towns in the Jiangnan area during the Ming-Qing dynasties of China, *Historical Methods: A Journal of Quantitative and Interdisciplinary History*, 48(2), 90-102.
2015. Miller, H. and Shaw, S-L. Geographic information systems for transportation in the 21st century, *Geography Compass*, 9(4), 180-189.
2015. Yin, L. and Shaw, S-L. Exploring space-time paths in physical and social closeness spaces: a space-time GIS approach, *International Journal of Geographical Information Science*, 22(4), 409-430.
2015. Fang, Z., Shaw, S-L., Tu, W. and Li, Q. Spatiotemporal critical opportunity and link identification for joint participation scheduling, in M-P. Kwan, D. Richardson, D. Wang and C. Zhou (eds.), *Space-Time Integration in Geography and GIScience*. New York, NY: Springer, 109-126.
2015. Zhao, Z., Shaw, S-L. and Wang, D. A space-time raster GIS data model for spatiotemporal analysis of vegetation responses to a freeze event, *Transactions in GIS*, 19(1), 151-168.
2014. Lindley, L.C. and Shaw, S-L. Who are the children enrolled in hospice care? *Journal for Specialists in Pediatric Nursing*, 19(4), 308-315.
2014. Shaw, S-L. Geographic information systems in transportation, in M. Garrett (ed.), *Encyclopedia of Transportation: Social Science and Policy*. Thousand Oaks, CA: SAGE Publications, 618-621 (<http://dx.doi.org/10.4135/9781483346526>).
2014. Pei, T., Sobolevsky, S., Ratti, C., Shaw, S-L., Li, T. and Zhou, C. A new insight into land use classification based on aggregated mobile phone data, *International Journal of Geographical Information Science*, 28(9), 1988-2007.

2014. Shaw, S-L., Fang, Z., Lu, S. and Tao, R. Impacts of the high speed rail on railroad network accessibility in China, *Journal of Transport Geography*, 40, 112-122.
2014. Zhang, X., Li, Q., Fang, Z., Lu, S. and Shaw, S-L. An assessment method for landmark recognition time in real scenes, *Journal of Environmental Psychology*, 40, 206-217.
2014. Xiao, J., Li, W., Liu, G., Shaw, S-L. and Zhang, Y. Hierarchical tone mapping based on image colour appearance model, *IET Computer Vision*, 8(4), 358-364.
2014. Shaw, S-L. and Fang, Z. Rethinking human behavior research from the perspective of space-time GIS, *Geomatics and Information Science of Wuhan University*, 39(6), 667-670 (DOI: 10.13203/j.whugis20140127, in Chinese with English abstract).
2014. Chang, X., Yue, Y., Li, Q., Chen, B., Shaw, S-L. and Tu, W. Extracting the geographic backbone of location-based social network, *Geomatics and Information Science of Wuhan University*, 39(6), 706-710 (DOI: 10.13203/j.whugis20140105, in Chinese with English abstract).
2014. Tu, W., Fang, Z., Li, Q., Shaw, S-L. and Chen, B. A bi-level Voronoi diagram-based metaheuristic for a large-scale multi-deport vehicle routing problem, *Transportation Research Part E: Logistics and Transportation Review*, 61, 84-97.
2014. Li, Q., Chen, L., Li, M., Shaw, S-L., and Nuchter, A. A sensor-fusion drivable-region and lane detection system for autonomous vehicle navigation in challenging road scenarios, *IEEE Transactions on Vehicular Technology*, 63(2), 540-555.
2013. Shaw, S-L. Book review: Daily spatial mobilities: physical and virtual, *Journal of Transport Geography*, 31, 309-310.
2013. Chen, B.Y., Yuan, H., Li, Q., Lam, W.H.K., Shaw, S-L. and Yan, K. Map-matching algorithm for large-scale low-frequency floating car data, *International Journal of Geographical Information Science*, 28(1), 22-38.
2013. Chen, B.Y., Li, Q., Wang, D., Shaw, S-L., Lam, W.H.K., Yuan, H. and Fang, Z. Reliable space-time prisms under travel time uncertainty, *Annals of the Association of American Geographers*, 103(6), 1502-1521.
2013. Fang, Z., Li, Q., Li, Q., Han, L. and Shaw, S-L. A space-time efficiency model for optimizing intra-intersection vehicle-pedestrian evacuation movements, *Transportation Research Part C: Emerging Technologies*, 31, 112-130.
2013. Li, Q., Chang, X., Shaw, S-L., Yan, K., Yue, Y. and Chen, B. Characteristics of micro-blog inter-city social interactions in China, *Shenzhen Daxue Xuebao (Ligong Ban)/Journal of Shenzhen University Science and Engineering*, 30(5), 441-449 (in Chinese).
2013. Fang, Z., Tu, W., Li, Q., Shaw, S-L, Chen, S. and Chen, B. A Voronoi neighborhood-based search heuristic for distance/capacity constrained very large vehicle routing problems, *International Journal of Geographical Information Science*, 27(4), 741-764.
2013. Pei, T., Gong, X., Shaw, S-L., Ma, T. and Zhou, C. Clustering of temporal event processes, *International Journal of Geographical Information Science*, 27(3), 484-510.
2012. Shaw, S-L. Guest Editorial Introduction: Time geography – its past, present and future, *Journal of Transport Geography*, 23, 1-4.
2012. Fang, Z., Shaw, S-L., Tu, W., Li, Q. and Li, Y. Spatiotemporal analysis of critical transportation links based on time geographic concepts: a case study of critical bridges in Wuhan, China, *Journal of Transport Geography*, 23, 44-59.

2012. Fang, Z., Li, Q., Zhang, X. and Shaw, S-L. A GIS data model for landmark-based pedestrian navigation, *International Journal of Geographical Information Science*, 26(5), 817-838.
2012. Shaw, S-L. Progress and prospects of geographic information systems for transportation, in Q. Li, S-L. Shaw, Z. Fang and B. Yang (eds.), *Technology and Research Frontiers of Geographic Information Systems for Transportation*. Beijing, China: Science Press, 310-319 (in Chinese).
2012. Li, Q., Shaw, S-L., Fang, Z. and Yang, B. (eds.) *Technology and Research Frontiers of Geographic Information Systems for Transportation*. Beijing, China: Science Press (in Chinese, 319 pages).
2012. Yin, L., Shaw, S-L., Wang, D., Carr, E., Berry, M., Gross, L. and Comiskey, J. A framework of integrating GIS and parallel computing for spatial control problems – a case study of wildfire control, *International Journal of Geographical Information Science*, 26(4), 621-641.
2011. Shaw, S-L. Guest Editorial - Geographic information systems for transportation: an introduction, *Journal of Transport Geography*, 19(3), 377-378.
2011. Chen, J., Shaw, S-L., Yu, H., Lu, F., Chai, Y. and Jia, Q. Exploratory data analysis of activity diary data: a space-time GIS approach, *Journal of Transport Geography*, 19(3), 394-404.
2011. Yin, L., Shaw, S-L. and Yu, H. Potential effects of ICT on face-to-face meeting opportunities: A GIS-based time-geographic exploratory approach, *Journal of Transport Geography*, 19(3), 422-433.
2011. Wong, D. and Shaw, S-L. Measuring segregation: an activity space approach, *Journal of Geographical Systems*, 13(2), 127-145.
2011. Tang, L. Chang, X., Li, Q. and Shaw, S-L. Public travel route optimization based on ant colony optimization algorithm and taxi GPS data, *China Journal of Highway and Transport*, 24(2), 89-95 (in Chinese with English abstract).
2011. Yu, H. and Shaw, S-L. GIS designs for studying human activities in a space-time context, in T. Nyerges, H. Couclelis, and R. McMaster (eds.), *Handbook of GIS and Society*. Thousand Oaks, CA: SAGE Publications, 251-268.
2010. Shaw, S-L. Geographic information systems for transportation: from a static past to a dynamic future, *Annals of GIS*, 16(3), 129-140.
2010. Fang, Z., Shaw, S-L. and Li, Q. A sensitive indicator of regional space-time accessibility, *Annals of GIS*, 16(3), 155-164.
2010. Fang, Z., Li, Q. and Shaw, S-L. Representation of location-specific space-time accessibility based on time geography framework, *Geomatics and Information Science of Wuhan University*, 35(9), 1091-1095 (in Chinese with English abstract).
2010. Chai, Y., Kwan, M-P. and Shaw, S-L. Guest Editorial - Time geography and urban planning: an introduction, *Urban Planning International*, 6, 1-2 (in Chinese).
2010. Shaw, S-L. and Yu, H. (translated by Chen, J.) A GIS-based time-geographic approach of studying individual activities and interactions in a hybrid physical-virtual space, *Urban Planning International*, 6, 27-35 (in Chinese, a translated copy of Shaw and Yu, 2009, article published in *Journal of Transport Geography*).
2010. Shaw, S-L. GIS implementation, in B. Warf (ed.), *Encyclopedia of Geography*, Vol. 3. Thousand Oaks, CA: SAGE, 1293-1294.

2010. Shaw, S-L. Implications of location-based service on human activities, *Communications of the China Computer Federation*, 6(6), 32-37 (in Chinese).
2010. Tang, L., Li, Q., Chang, X., Shaw, S-L. and Zhao, Z. Modeling of taxi drivers' experience for routing applications, *Science in China Series E: Technological Sciences*, 53, 44-51.
2009. Shaw, S-L., Lu, F., Chen, J., and Zhou, C. China's airline consolidation and its effects on domestic airline networks and competition, *Journal of Transport Geography*, 17(4), 293-305.
2009. Shaw, S-L. and Yu, H. A GIS-based time-geographic approach of studying individual activities and interactions in a hybrid physical-virtual space, *Journal of Transport Geography*, 17(2), 141-149.
2009. Shaw, S-L. Transportation and land use, in R. Kitchin and N. Thrift (eds.), *International Encyclopedia of Human Geography*. Volume 11. Oxford, UK: Elsevier, 470-475.
2009. Shaw, S-L and Rodrigue, J-P. Method 3 - Geographic information systems for transportation (GIS-T), in J-P Rodrigue, C. Comtois and B. Slack, *The Geography of Transport Systems*, second edition. New York: Routledge, 32-37.
2008. Shaw, S-L., Yu, H. and Bombom, L. A space-time GIS approach to exploring large individual-based spatiotemporal datasets, *Transactions in GIS*, 12(4), 425-441.
2008. Yu, H. and Shaw, S-L. Exploring potential human interactions in physical and virtual spaces: A spatiotemporal GIS approach, *International Journal of Geographical Information Science*, 22(4), 409-430.
2008. Yu, H. and Shaw, S-L. A space-time GIS for exploring stations in large tracking datasets of moving objects, in T. Cova et al. (eds.) *Proceedings of the 5th International Conference on Geographic Information Science (Extended Abstracts)*, Park City, Utah, September 23-26, 2008, pp. 220-225.
2007. Dye, A.S. and Shaw, S-L. A GIS-based spatial decision support system for tourists of the Great Smoky Mountains National Park, *Journal of Retailing and Consumer Services*, 14(4), 269-278.
2007. Yu, H. and Shaw, S-L. Revisiting Hägerstrand's time-geographic framework for individual activities in the age of instant access, in H.J. Miller (ed.), *Societies and Cities in the Age of Instant Access*. Dordrecht, The Netherlands: Springer Science, 103-118.
2006. Han, W., Wang, J. and Shaw, S-L. Visual exploratory data analysis of traffic volume, *Lecture Notes in Computer Science*, 4293, 695-703.
2006. Shaw, S-L. Method 2 - Geographic information systems for transportation (GIS-T), in J-P Rodrigue, C. Comtois and B. Slack, *The Geography of Transport Systems*. New York: Routledge, pp. 32-37.
2006. Shaw, S-L. What about "time" in transportation geography? *Journal of Transport Geography*, 14(3), 237-240.
2006. Wang, D., Buchanan, N., Berry, M., Carr, E., Comiskey, J., Gross, L. and Shaw, S-L. A GIS-enabled distributed simulation framework for high-performance ecosystem modeling, *Proceedings of ESRI International User Conference*, available on CD-ROM and at http://gis.esri.com/library/userconf/proc06/papers/papers/pap_1272.pdf.
2005. Yu, H. and Shaw, S-L. Revisiting Hägerstrand's time-geographic framework for individual activities in the age of instant access, *Proceedings of Research Symposium on Societies and Cities in the Age of Instant Access*, Salt Lake City, UT, November 10-12, 2005.

2005. Lu, F., Shaw, S-L., Chen, J. and Zhou, C. Spatial patterns of domestic passenger transport and competitive situations of Chinese civil airlines, *Geo-Information Science*, 7(4), 43-49 (in Chinese with English abstract).
2005. Jin, F., Sun, W. and Shaw, S-L. China's airlines reorganization and its effects on network structure, *Progress in Geography*, 24(2), 59-68 (in Chinese with English abstract).
2004. Yu, H. and Shaw, S-L. Representing and visualizing travel diary data: a spatiotemporal GIS approach, *Proceedings of ESRI International User Conference*, available on CD-ROM and at <http://gis.esri.com/library/userconf/proc04/docs/pap1258.pdf>.
2004. Xin, X., Shaw, S-L. and Lin, H. An operational spatio-temporal data model for temporal GIS, *Geography and Geo-information Science*, 20(2), 18-21 (in Chinese with English abstract).
2003. Shaw, S-L. Book review: Uncertainty in geographical information, *Annals of the Association of American Geographers*, 93(4), 948-949.
2003. Shaw, S-L. and Xin, X. Integrated land use and transportation interaction: a temporal GIS exploratory data analysis approach, *Journal of Transport Geography*, 11(2), 103-115.
2003. Xin, X., Shaw, S-L. and Lin H. Developing a spatio-temporal data model for an exploratory study on the land use transportation interaction: A temporal GIS attempt, *Proceedings of Asia GIS 2003 International Conference*, available at http://www.hku.hk/cupem/asiagis/fall03/Full_Paper/Xin_Xiaohong.pdf.
2002. Shaw, S-L. Book review: Geographic information systems in transportation research, *Journal of Regional Science*, 42(2), 418-421.
2002. Zhao, F., Shaw, S-L., and Li, S-C. Investigation of transportation and land use interactions with spatiotemporal GIS, *Florida Transportation Modeling*, 21, 8-11.
2002. Shaw, S-L. and Xin, X. A temporal GIS for analyzing transportation and land use interactions, *Proceedings of ESRI International User Conference*, available on CD-ROM and at <http://gis.esri.com/library/userconf/proc02/pap0179/p0179.htm>.
2001. Miller, H. and Shaw, S-L. *Geographic Information Systems for Transportation: Principles and Applications*. New York: Oxford University Press, 458 pages.
2000. Shaw, S-L. and Wang, D. Handling disaggregate spatiotemporal travel data in GIS, *GeoInformatica*, 4(2), 161-178.
2000. Shaw, S-L. Moving toward spatiotemporal GIS for transportation applications, *Proceedings of ESRI International User Conference*, available on CD-ROM and at <http://gis.esri.com/library/userconf/proc00/professional/papers/PAP205/p205.htm>.
1999. Shaw, S-L. Handling disaggregate travel data with GIS, *Proceedings of International Workshop on GIS for Transportation and Intelligent Transportation Systems*, 18 pages (no page numbers).
1997. Shaw, S-L. GIS challenges in urban transportation planning applications, *Proceedings of GIS AM/FM Asia '97 & GeoInformatics '97 Conference*, 485-494.
1996. Ralston, B. and Shaw, S-L. Introduction to GIS for logistics, *Proceedings of Council of Logistics Management Conference*, 363-372.
1996. Shaw, S-L and Lall Dass, P. Geographic variations in travel characteristics, *Proceedings of 1996 ESRI User Conference*, available on CD-ROM and at <http://gis.esri.com/library/userconf/proc96/TO300/PAP295/P295.HTM>.
1996. Shaw, S-L. GIS for transportation applications and its related research issues, in Gong, P. (Ed.) *Urban GIS: Methods and Applications*. Berkeley, CA: CPGIS, 83-92 (in Chinese).

1996. Shaw, S-L. GIS database creation and spatial analysis of trip log survey data, in Lin, H. et al. (Eds.) *Urban GIS: Research and Practice*. Shanghai, China: Shanghai Science and Technology, 138-144 (in Chinese).
1995. Shaw, S-L., Harris, D., Li, S-C., and Ewing, R. Urban trip generation and trip distribution modeling with GIS, *Proceedings of Geoinformatics '95*, Vol. 1, 57-62.
1994. Shaw, S-L. and Ivy, R. Airline mergers and their effect on network structure, *Journal of Transport Geography*, 2(4), 234-246.
1994. Lee, J., Chen, L. and Shaw, S-L. A method for the exploratory analysis of airline networks, *Professional Geographer*, 46(4), 468-477.
1994. Shaw, S-L. and Hinton, M. A building-block design approach to GIS and modeling, *Proceedings of the 1994 Annual Conference of CPGIS*, 151-154.
1993. Shaw, S-L. Hub structures of major U.S. passenger airlines, *Journal of Transport Geography*, 1(1), 47-58.
1993. Shaw, S-L. Geography: a place for GIS, *Applied Geography*, 13(2), 107-110.
1993. Shaw, S-L. GIS for urban travel demand analysis: requirements and alternatives, *Computers, Environment and Urban Systems*, 17(1), 15-29.
1993. Boros, A., Lee, J. and Shaw, S-L. Analysis of network structure for U.S. domestic airline networks, *Papers and Proceedings of Applied Geography*, 136-143.
1993. Shaw, S-L. Transportation GIS for regional development planning, *Proceedings of the Third International Workshop on Geographic Information System*, Vol. 1, 404-412.
1992. Lopata, M., Parent, E. and Shaw, S-L. Searching for sunken treasure in Turkey's Sea of Marmara, *Geo Info Systems*, 2(8), 57-61.
1991. Shaw, S-L. and Williams, J. Role of transportation in Taiwan's regional development, *Transportation Quarterly*, XLV(2), 271-296.
1991. Shaw, S-L. Urban transit accessibility analysis using a GIS: a case study of Florida's Tri-Rail system, *Southeastern Geographer*, XXXI(1), 15-30.
1991. Shaw, S-L. A GIS approach for the analysis of hub-and-spoke structures of airline networks, *GIS/LIS'91 Proceedings*, Vol. 1, 199-208.
1990. Shaw, S-L. Study of the accessibility level in a multimodal transport network, *Modeling and Simulation*, 21(1), 7-11.
1989. Shaw, S-L. The tri-county commuter rail system in Southeast Florida: a ridership survey and its planning implications, *The Florida Geographer*, 23, 46-64.
1989. Shaw, S-L. Design considerations for a GIS-based transportation network analysis system, *GIS/LIS'89 Proceedings*, Vol. 1, 20-29.
1989. Shaw, S-L. GIS as decision support tools in transportation analysis, *Proceedings of the Ninth Annual ESRI User Conference*, 10 pages (no page numbers).
1988. Shaw, S-L. Modeling of network problems: a discussion of the Arc/Info Network subsystem, *Proceedings of the Eighth Annual ESRI User Conference*, 9 pages (no page numbers).

B. Grants/Contracts

2016. "Transportation Research Support – New York State DOT," Shih-Lung Shaw (PI), funded by UT-Battelle-Oak Ridge National Laboratory (ORNL) (4000148294), \$9,816.

2016. “Transportation Research Support – U.S. DOT, Phase II,” Shih-Lung Shaw (PI), funded by UT-Battelle-Oak Ridge National Laboratory (ORNL) (4000143393), \$33,254.
2015. “Ecosystem Functional Testing Platform for Community Land Model – Phase III,” Shih-Lung Shaw (PI), funded by UT-Battelle-Oak Ridge National Laboratory (ORNL) (4000135453), \$41,844.
2015. “Transportation Research Support – U.S. DOT,” Shih-Lung Shaw (PI), funded by UT-Battelle-Oak Ridge National Laboratory (ORNL) (4000135357), \$42,706.
2014. “Ecosystem Functional Testing Platform for Community Land Model – Phase II,” Shih-Lung Shaw (PI), funded by UT-Battelle-Oak Ridge National Laboratory (ORNL) (4000132674), \$11,704.
- 2014-15. “Institute for Sustainable Mobility,” David Greene and Asad Khattak (Co-Directors) and a team of fellows (Shih-Lung Shaw is a fellow on the project team), funded by the Organized Research Units Program, Office of Research and Engagement, University of Tennessee, Knoxville, \$59,850.
- 2013-14. “Upgrade the Geographic Information System (GIS),” Shih-Lung Shaw (PI), Airton Kohls and Hyun Kim, funded by the U.S. Department of Transportation, Federal Highway Administration (DTFH61-13-Q-00050), \$360,950.
- 2013-14. “Ecosystem Functional Testing Platform for Community Land Model,” Shih-Lung Shaw (PI), funded by UT-Battelle-Oak Ridge National Laboratory (ORNL) (4000126771), \$18,560.
- 2013-16. “An Examination of Hospice Use among Children,” Lisa Lindley (PI), Shih-Lung Shaw (Co-Mentor), et al., funded by National Institutes of Health (NIH) – National Institute of Nursing Research (NINR) (NIH/NINR 1 K01NR014490-01), \$278,733.
- 2013-17. “Using Mobile Phone Data to Analyze Interactions between Group Activities and Urban Spatial Structures for Optimization of Facility Locations,” Shih-Lung Shaw (PI) in collaboration with Wuhan University, Chinese Academy of Sciences, and China Mobile, funded by the Key Grants Program of the National Natural Science Foundation of China (41231171/D0107), RMB 3,000,000 (approx. US\$480,000).
- 2012-14. “Key Technological Development of Automated Guidance Systems for Driverless Vehicles in Complex Urban Environments,” Shih-Lung Shaw (PI) in collaboration with Wuhan University, funded by the National Natural Science Foundation of China (91120002/F030602), RMB 1,200,000 (approx. US\$192,000).
- 2011-14. “Collaborative Research on Space-Time Analysis and Modeling,” Shih-Lung Shaw (PI), funded by the Chinese Ministry of Science and Technology and Wuhan University, RMB 3,000,000 (approx. US\$480,000).
2011. “Integration of Space-Time GIS with Climate Informatics for Climate Change Research,” Shih-Lung Shaw (PI), funded by the Joint Directed Research and Development (JDRD) Program, University of Tennessee and Oak Ridge National Laboratory (UT-ORNL) Science Alliance, \$39,965.
- 2010-12. “A Space-Time Routing Algorithm for Emergency Evacuation of Moving Objects,” Zhixiang Fang (PI) and Shih-Lung Shaw, funded by the National Natural Science Foundation of China (40971233/D010703), RMB 350,000 (approx. US\$56,000).
- 2009-11. “Tennessee One Road: Integration of Road Attributes on A Common Geometry,” Shih-Lung Shaw (PI) and Jerry Everett, funded by the Tennessee Department of Transportation, \$90,000.

2009. "Road Network Traffic Pattern and Accessibility Analysis Based on Taxi Tracking Data," Yang Yue (PI), Shih-Lung Shaw, and Qingquan Li, funded by the Microsoft Research Institute (Asia), \$15,000.
- 2008-13. "CIMBS Full Proposal: The University of Tennessee – Advancing Connections between Biology and Mathematics," Louis Gross (PI) and a research project team (Shih-Lung Shaw is a research collaborator on the project team), funded by the U.S. National Science Foundation's EF-Bio Centers Program (EF-0832858), \$15,907,538 (<http://www.nimbios.org/about/mission.html>).
- 2006-09. "Towards a GIS-Based Analytical Time-Geographic Framework for Physical and Virtual Activities," Shih-Lung Shaw (PI) and Hongbo Yu, funded by the U.S. National Science Foundation's Geography and Regional Science Program (BCS-0616724), \$212,045 (<http://web.utk.edu/~sshaw/NSF-Project-Website/default.htm>).
- 2004-08. "Grid Computing for Ecological Modeling and Spatial Control," Louis Gross (PI), Michael Berry, Suzanne Lenhart, and Shih-Lung Shaw, funded by the U.S. National Science Foundation's ITR Program (IIS-0427471), \$1,416,610 (<http://www.tiem.utk.edu/ITR06/>).
2007. "Geographic Information Systems for Transportation: Principles and Applications," Shih-Lung Shaw (PI), funded by the UT Scholarly Activity and Research Incentive Funds (SARIF) travel grant and the Research Incentive Funds of UTK College of Arts and Sciences to deliver a keynote presentation at the First GIS for Transportation Symposium of China, \$2,000.
- 2005-06. "Environmental Justice Planning Tool," Mary English (PI), Shih-Lung Shaw, Frederick Wegmann, and Jerry Everett, funded by the Tennessee Department of Transportation, \$141,582.
- 2005-06. "A Space-Time GIS for Analyzing Population Migration Histories," Shih-Lung Shaw (PI), funded by the UT Professional Development Awards, \$3,350.
2006. "Comprehensive Geographical Information System Solution, Phase I: Determining Processes and Requirements for KGIS," Shih-Lung Shaw (PI) and Bruce Ralston, funded by the CH2M Hill to work on the City of Knoxville, Knox County, and KUB Geographic Information System (KGIS) migration project, \$14,926.
2005. "GIS for Transportation Workshop," Hui Lin (PI) and Shih-Lung Shaw, funded by the Hong Kong Transport Department, HK\$29,900.
2004. "Human Activities in Physical and Virtual Space: A Spatio-temporal Analysis," Shih-Lung Shaw (PI), funded by the UT Scholarly Activity and Research Incentive Funds (SARIF), \$3,000.
- 2003-04. "An Evaluation of the Automated GPS/Roadway Inventory Data Collection and TRIMS Update Process," Shih-Lung Shaw (PI) and Jerry Everett, funded by the Tennessee Department of Transportation, \$273,551.
2002. "Teleworking, Urban Travel Patterns, and Changing Urban Forms: A Pilot Study of the Atlanta Metropolitan Area," Shih-Lung Shaw (PI), funded by the UT Scholarly Activity and Research Incentive Funds (SARIF), \$3,000.
- 2001-03. "Initiative in Computational Ecology," Louis Gross (PI) and other research team members, funded by the UT President's Research Initiatives, \$300,000.

- 2000-03. "Identification of Equilibrium of Land Use and Transportation Investments Using Spatiotemporal Analysis Tools," Fang Zhao (PI) and Shih-Lung Shaw, funded by the Florida Department of Transportation, \$175,000.
- 2000-01. "Investigation of Laser Swath Mapping," Shih-Lung Shaw (PI) and Jerry Everett, funded by the Tennessee Department of Transportation, \$82,500.
2001. "Development of Geographic Shopping Cart for MPC's in-Link Agenda Notification System," Shih-Lung Shaw (PI), funded by the Knoxville/Knox County Metropolitan Planning Commission, \$1,874.
2001. "GIS Workshop," Bruce Ralston (PI) and Shih-Lung Shaw, funded by the Municipal Technical Advisory Service, University of Tennessee, \$1,750.
2000. "Evaluation of Software Platforms for Geographic Information Systems," Robert Russell (PI), Shih-Lung Shaw, and Michael Schultze, funded by the Tennessee Department of Transportation, \$30,484.
2000. "Teaching Enhancement Equipment Grant," Shih-Lung Shaw (PI), funded by the UT National Alumni Association/CUE/ITC Grant, \$493.
1999. "A Conceptual Framework for Activity-based Travel Demand Modeling using Geographic Information Systems," Shih-Lung Shaw (PI), funded by the UT Faculty Research Development Award, \$2,000.
1998. "GIS Student Assistantship Program," Shih-Lung Shaw (PI), funded by the Broward County Government, Florida, \$9,600.
1997. "Transportation and Land Use Connection," Marie York (PI) and Shih-Lung Shaw, funded by the Florida Department of Transportation, \$79,913.
1996. "GIS and Location-Allocation Analysis Training Course," Shih-Lung Shaw (PI), funded by the South Florida Water Management District, \$1,500.
1996. "Canal Network GIS Database Development," Shih-Lung Shaw (PI), funded by the South Florida Water Management District, \$20,000.
1996. "Introduction to GIS Workshop," Shih-Lung Shaw (PI), funded by the Palm Beach County Government, Florida, \$3,200.
1996. "Introduction to ArcView Workshop," funded through the Florida Atlantic University Continuing Education and Open University, \$12,000.
1995. "Natural Vegetation Database: A Pilot Study," Charles Roberts (PI) and Shih-Lung Shaw, funded by the South Florida Water Management District, \$25,000.
1995. "Historical Vegetation Mapping," Charles Roberts (PI), Shih-Lung Shaw, and Dan Austin, funded by South Florida Water Management District, \$75,000.
1995. "Boating Activity Study for the Waters of St. Lucie and Martin Counties," Ronald Schultz (PI) and Shih-Lung Shaw, funded by the Florida Department of Environmental Protection, \$92,595.
1994. "New Trip Generation and Distribution Process for FSUTMS," Reid Ewing (PI) and Shih-Lung Shaw, funded by the Florida Department of Transportation, \$150,000.
1994. "Lake Okeechobee Ecosystem Mapping," Charles Roberts (PI), Shih-Lung Shaw, and Dan Austin, funded by the South Florida Water Management District, \$80,000.
1993. "An Integrated Undergraduate Instruction in Digital Geographic Data Handling," Shih-Lung Shaw (PI), Charles Roberts, and Ronald Schultz, funded by the National Science Foundation (DUE-9351053), \$66,043.

- 1993. "A Pilot Research Project of Implementing a Spatio-Temporal GIS with User-friendly Visualization Designs," Shih-Lung Shaw (PI), funded by the Faculty Research Grants, Florida Atlantic University Foundation, \$1,440.
- 1993. International travel grant funded by the Florida Atlantic University Foundation to present a paper at the 3rd International Workshop on GIS and to give a lecture at an Advanced GIS Seminar in Beijing, China, August 1993, \$1,000.
- 1993. "Introduction to GIS Workshop," Shih-Lung Shaw (PI), funded by the Broward County Government, Florida, \$6,000.
- 1992. "GIS Mapping of Emergency Response Times in Palm Beach County," Shih-Lung Shaw (PI), funded by the Palm Beach County Government, Florida, \$1,500.
- 1991. "Management Plan for the Cross Florida Greenbelt State Conservation and Recreation Area -GIS Database Design," Shih-Lung Shaw (PI), funded by the State of Florida, \$3,500.
- 1991. "Development of An Archaeological Site Predictive Model for Palm Beach County," William J. Kennedy (PI), Shih-Lung Shaw, and Charles Roberts, funded by the Palm Beach County Government, Florida, \$29,852.
- 1990. "Palm Beach County Archaeological Survey and Creation of a GIS Database," William J. Kennedy (PI) and Shih-Lung Shaw, funded by Palm Beach County Government, Florida, \$4,999.
- 1990. "Accessibility to the Tri-Rail System: A Case Study of Broward County," Shih-Lung Shaw (PI), funded by the Division of Sponsored Research, Florida Atlantic University, \$4,977.
- 1989. "A GIS-based Cultural Resource Management System for Palm Beach County," William J. Kennedy (PI) and Shih-Lung Shaw, funded by the Florida Atlantic University/Florida International University Joint Center for Environmental and Urban Problems, \$6,722.
- 1989. "Establishment of a Geographic Information System Database for the Coleman Park Revitalization Area," Shih-Lung Shaw (PI), funded by the Palm Beach Housing Partnership, Inc., Florida, \$4,000.

C. Invited Presentations at Research Workshops and Other Research Exchange Activities

- 2016. Invited to give a keynote presentation at the Second International Conference on Location-based Social Media Data, Shanghai, China, August 26-28, 2016.
- 2016. Invited to give a keynote presentation at the 17th International Symposium on Spatial Data Handling, Beijing, China, August 18-20, 2016.
- 2016. Invited to give a presentation in the Speaker Series of Advanced Geoinformatics Research Topics, Wuhan University, Wuhan, China, March 14, 2016.
- 2016. Invited to give a presentation in the Department of Traffic Engineering, Tongji University, Shanghai, China, March 10, 2016.
- 2016. Invited to give a presentation in the Department of Geography, University of North Carolina, Greensboro, NC, February 19, 2016.
- 2015. Invited to give a keynote presentation at the Urban Informatics Conference, Shenzhen, China, December 12, 2015.

2015. Invited to give a presentation at the 11th Workshop on Spatial Behavior and Planning: Spatial-temporal Behavior Theory and Application Frontiers, Guangzhou, China, December 11, 2015.
2015. Invited to give a presentation in the Research Center for Intelligent Transportation System, Sun Yat-Sen University, Guangzhou, China, September 10, 2015.
2015. Invited to give a presentation in the Institute of Remote Sensing and Geographical Information Systems, Peking University, Beijing, China, September 6, 2015.
2015. Invited to give a presentation at the NSF-CDI Specialist Meeting of Human Dynamics in the Mobile Age, San Diego, California, August 11, 2015.
2015. Invited to give a keynote presentation at the International Conference on Location-based Social Media Data, Athens, Georgia, March 13, 2015.
2014. Invited to give a presentation at the Robinson Colloquium, Department of Geography, The Ohio State University, Columbus, Ohio, November 21, 2014.
2014. Invited to give a presentation at the Institute of Space and Earth Information Science, Chinese University of Hong Kong, Hong Kong, China, October 31, 2014.
2014. Invited to give a presentation at the Experian R&D Data Lab, San Diego, California, August 14, 2014.
2014. Invited to give a presentation at the NSF-CDI Specialist Meeting of Human Dynamics in the Mobile Age, San Diego, California, August 11, 2014.
2014. Invited to give a presentation at the Research Center for Humanities and Social Sciences, Academia Sinica, Taipei, Taiwan, July 21, 2014.
2014. Invited to give a presentation at the Supergeo Technologies, Taipei, Taiwan, July 5, 2014.
2014. Invited to give a keynote presentation at the International Conference on Geoinformatics, Kaohsiung, Taiwan, June 26, 2014.
2014. Invited to give a presentation at the International Time-Geography Days, Linköping University, Linköping, Sweden, May 14, 2014.
2014. Invited to give a presentation in the Department of Geography, National Taiwan University, Taipei, Taiwan, January 8, 2014.
2014. Invited to give a presentation in the Department of Geomatics, National Cheng Kung University, Tainan, Taiwan, January 6, 2014.
2013. Invited to give a presentation in the School of Remote Sensing and Information Engineering, Wuhan University, Wuhan, China, December 26, 2013.
2013. Invited to serve as an organizer and a mentor of the Silk-Net GIScience Summer Institute sponsored by the Institute of Geographic Sciences and Natural Resources Research, the Chinese Academy of Sciences, Suzhou, China, June 25-29, 2013.
2013. Invited to give a presentation at the GIScience Forum, Tongji University, Shanghai, China, June 24, 2013.
2013. Invited to give a presentation in a “Geocomputation in the Era of Big Data” panel session at the GeoComputation Conference, Wuhan, China, May 25, 2013.
2013. Invited to give a presentation at the Geospatial Information for Smart City Summit (GIS-SmartCity 2013), Wuhan, China, May 16, 2013.
2013. Invited to give a presentation at Shenzhen Institutes of Advanced Technology, the Chinese Academy of Sciences, Shenzhen, China, May 10, 2013.
2013. Invited to give a presentation in the Department of Civil and Environmental Engineering, University of Tennessee, Knoxville, Tennessee, March 14, 2013.

2012. Invited to give a presentation in the School of Civil and Environmental Engineering, Georgia Institute of Technology, Atlanta, Georgia, March 8, 2013.
2012. Invited to give a presentation at Shenzhen University, Shenzhen, Guangdong, China, December 31, 2012.
2012. Invited to give a presentation at the *Space-Time GIScience and Analysis Forum* sponsored by the Chinese Academy of Sciences and Wuhan University. This forum was held at the Chinese Academy of Sciences in Beijing and Wuhan University in Wuhan, China, on November 13 & 15, 2012, respectively.
2012. Invited to participate in the *Visualizing Flow and Movement in the Humanities Workshop* sponsored by the National Endowment of Humanities (NEH) at the University of Redlands, Redlands, California, October 29-30, 2012.
2012. Invited to give a presentation in the School of Civil and Environmental Engineering, Georgia Institute of Technology, Atlanta, Georgia, September 25, 2012.
2012. Invited to give a presentation at Kunming University of Science and Technology, Kunming, Yunnan, China, July 9, 2012.
2012. Invited to give a presentation at Chang'an University, Xi'an, Shaanxi, China, May 22, 2012.
2012. Invited to give a presentation at Changsha University of Science and Technology, Changsha, Hunan, China, March 19, 2012.
2012. Invited to give a colloquium presentation in the Department of Geography, University of Georgia, Athens, Georgia, February 3, 2012.
2011. Invited to give a presentation at the State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing (LIESMARS), Wuhan University, Wuhan, China, December 27, 2011.
2011. Invited and funded to give a presentation at an *ICT Experts Group Meeting*, which was held at the German Aerospace Center (DLR), Berlin, Germany, November 30 - December 2, 2011.
2011. Invited and funded to give a presentation and have meetings in the Department of Human Geography, Stockholm University, Stockholm, Sweden, November 22, 2011.
2011. Invited and funded to give a presentation at the Swedish Road and Traffic Institute and have meetings in the Department of Thematic Studies, Linköping University, Linköping, Sweden, November 25, 2011.
2011. Invited to give a presentation at the Shi-Jian Forum, State Key Laboratory of Resources and Environmental Information System (LREIS), Institute of Geographic Sciences and Natural Resources Research, the Chinese Academy of Sciences, Beijing, China, October 21, 2011.
2011. Invited to give a presentation at the Center for Intelligent Systems and Machine Learning, University of Tennessee, Knoxville, Tennessee, April 18, 2011.
2011. Invited to give a presentation at the Transportation Seminar sponsored by the Department of Geography and the Department of Civil and Environmental Engineering, University of Connecticut, Storrs, Connecticut, March 28, 2011.
2010. Invited to give a presentation at the *Specialist Meeting of Spatio-Temporal Constraints on Social Networks*, which was held at Upham Hotel, Santa Barbara, California, December 13-14, 2010.

2010. Invited to give a keynote presentation at *2010 Asia GIS International Conference*, which was held at Garden Villa Hotel, Kaohsiung, Taiwan, November 5-6, 2010.
2010. Invited to give a keynote presentation at *2010 Digital Archives GIScience Conference*, which was held at National Taiwan University, Taipei, Taiwan, October 12-13, 2010.
2010. Invited to give a presentation at the Center for Urban and Regional Analysis, Department of Geography, The Ohio State University, Columbus, Ohio, September 3, 2010.
2010. Invited to organize and give presentations at the *Advanced GIScience Research Workshop*, which was held at the Academia Sinica, Taipei, Taiwan, July 14-16, 2010.
2010. Invited to give a presentation at the *Space-Time Modeling and Analysis Workshop*, which was held at the Environmental Systems Research Institute (ESRI), Redlands, California, February 22-23, 2010.
2010. Invited to give an online presentation to researchers at the Center for Wireless and Population Health System, University of California at San Diego, February 8, 2010.
2009. Invited to give a keynote presentation at *2009 International Workshop on GIS for Transportation*, which was held in Wuhan, China, December 4-6, 2009.
2009. Invited to give a presentation at the *International Conference of GIS in the Humanities and Social Sciences*, which was held at Academia Sinica, Taipei, Taiwan, October 7-9, 2009.
2009. Invited to give a presentation at the *Second Spatial Socio-cultural Knowledge Workshop*, which was held at the Defense Academy of the United Kingdom, Shrivenham, UK, June 16, 2009.
2009. Invited to give a presentation at Microsoft Research Institute (Asia), Beijing, China, May 26, 2009.
2009. Invited to give a presentation at the Institute of Geographic Sciences and Natural Resources Research, the Chinese Academy of Sciences, Beijing, China, May 20, 2009.
2008. Invited to give a presentation at the *Conference on Energy Resources and Green Economy*, which was held at Shanghai University, Shanghai, China, October 19-20, 2008.
2008. Invited to give a presentation to the President and selected administrators of Chinese Culture University, Taipei, Taiwan, June 10, 2008.
2008. Invited to give a presentation at the Graduate Institute of National Development, National Taiwan University, Taipei, Taiwan, June 3, 2008.
2008. Invited to give a presentation at the GIS Research Center, Feng Chia University, Taichung, Taiwan, May 29, 2008.
2008. Invited to give a presentation in the Department of Geography, National Taiwan University, Taipei, Taiwan, May 27, 2008.
2008. Invited to give a presentation at the *Third Specialists Meeting on Information and Communications Technology (ICT), Everyday Life and Urban Change* sponsored by the Faculty of the Built Environment and the Center for Transport and Society, University of the West of England, Bristol, UK, March 16-19, 2008.
2007. Invited to participate in the *Workshop for Advanced Research in Geospatial Information Technologies for Transportation* sponsored by the U.S. Transportation Research Board. This workshop, with an objective of looking forward 5-20 years and formulating a research and development agenda for solving major challenges facing transportation systems using geospatial information technologies, was held at the Keck Center, U.S. National Academies, Washington, DC, September 20-21, 2007.

2007. Invited and funded to give a keynote presentation at the *First GIS for Transportation (GIS-T) Symposium of China*, which was held at Wuhan University, Wuhan, China, June 18-26, 2007.
2006. Invited to conduct research exchange activities and to give lectures on GIS for Transportation (GIS-T) at Wuhan University, Wuhan, China, June 1-30, 2006.
2006. Invited with Harvey Miller at the University of Utah to give presentations of time geography and GIS for transportation (GIS-T) at the Chinese Academy of Sciences, Beijing University, Tsinghua University, Beijing Normal University, China Eastern Normal University, and Nanjing University. This tour of research exchanges with Chinese universities in three different cities (Beijing, Shanghai and Nanjing) was sponsored by the Chinese Academy of Sciences and various universities, May 15-28, 2006.
2005. Invited to give a presentation at the *Research Symposium on Societies and Cities in the Age of Instant Access* sponsored by the University of Utah. This research symposium was held at the University of Utah, Salt Lake City, Utah, November 10-12, 2005.
2005. Invited to give a presentation at the *GPS Tracking, Time-Geography Applications for Activity Modeling and Microsimulation Specialists Meeting* sponsored by the U.S. Federal Highway Administration. This meeting, which assembled experts to discuss potential approaches on using GPS vehicle traces for defining space-time paths and prisms to be used in activity modeling and microsimulation for transportation analysis, was held at Upham Hotel, Santa Barbara, California, November 10-11, 2005.
2004. Invited to give a presentation at the *Information and Communications Technologies (ICT): Mobilizing Persons, Places, and Spaces Specialists Meeting* sponsored by the Netherlands Organization for Scientific Research and the Utrecht University. This meeting, which focused on assessing the effects of ICT on individual activity and travel behavior as well as their implications, was held in Doorn, The Netherlands, November 4-7, 2004.
2004. Invited to give a presentation at the *Third Focus Group Meeting on Information and Communication Technologies, Innovation and the Transport System – Sustainable Transport in Europe and Links and Liaisons with America (STELLA)/Sustainable Transportation Analysis and Research (STAR)*. This Focus Group focused on a comparative North American and European analysis of the ways in which information and communication technology (ICT) are intersecting with new ways of living and working within metropolitan regions. This trans-Atlantic research network project was funded by the European Commission's 5th Framework Programme for Research and Development (STELLA project), the U.S. National Science Foundation (STAR project), and the Transport Canada for three years (2002-2004). The third focus group meeting was held in Budapest, Hungary, April 22-23, 2004.
2003. Invited to give a presentation at the *Second Focus Group Meeting on Information and Communication Technologies, Innovation and the Transport System – Sustainable Transport in Europe and Links and Liaisons with America (STELLA)/Sustainable Transportation Analysis and Research (STAR)*. This meeting was held in Newcastle, United Kingdom, May 8-10, 2003. The aim of this meeting was for consolidation and exploration of research themes.
2002. Invited to participate in discussions at the *Action-Oriented Approaches in Geographic Information Science Workshop* sponsored by the U.S. National Science Foundation. This meeting was held in Holden, Maine, November 2-4, 2002. The aim of this workshop was

to lay the foundations for a principled account of dynamic features of geographic space and to clarify and define a research agenda for action-oriented approaches in geographic information science.

2002. Invited to participate in discussions at the *First Focus Group Meeting on Information and Communication Technologies, Innovation and the Transport System – Sustainable Transport in Europe and Links and Liaisons with America (STELLA)/Sustainable Transportation Analysis and Research (STAR)*. This meeting was held at the National Science Foundation, Arlington, Virginia, January 15-17, 2002.
1999. Invited to give a presentation at the *International Workshop on GIS for Transportation (GIS-T) and Intelligent Transportation Systems (ITS)* sponsored by the Chinese University of Hong Kong, the U.S. National Center for Geographic Information and Analysis, and the Chinese Academy of Sciences. This workshop, which served as a forum of knowledge exchanges between researchers and professionals working on theories, applications, and implementations of GIS-T and ITS, was held at the Chinese University of Hong Kong, Satin, Hong Kong, April 26-28, 1999.

D. Presentations/Panel Discussions/Lectures Delivered at Professional Meetings

2016. Chen, J. and Shaw, S-L. “Representing the Spatial Extent of Places based on Flickr Photos with a Representativeness-weighted Kernel Density Estimation,” presentation at the GIScience 2016 Conference, Montreal, Canada.
2016. Shaw, S-L. “GIScience beyond the Conventional Spatial Data Handling,” invited keynote presentation at the Second International Conference on Location-based Social Media Data, Shanghai, China.
2016. Shaw, S-L. “GIScience beyond the Conventional Spatial Data Handling,” invited keynote presentation at the 17th International Symposium on Spatial Data Handling, Beijing, China.
2016. Shaw, S-L. “Some reflections on Human Dynamics Research Using Mobile Phone Location Data,” presentation at the Annual Meeting of the Association of American Geographers, San Francisco, California.
2016. Chen, J. and Shaw, S-L. “Estimating Place Extent from Geotagged Photos Using Kernel Density Estimation with Consideration of Photo Representativeness,” presentation at the Annual Meeting of the Association of American Geographers, San Francisco, California.
2016. Tran, L., Chen, J. and Shaw, S-L. “How Cab Drivers in Wuhan, China Make Routing Decisions - Determine the Relative Importance of Interrelated Variables in a Large Spatial Dataset,” presentation at the Annual Meeting of the Association of American Geographers, San Francisco, California.
2016. Yue, Y., Zhuang, Y., Tu, W., Chang, X. and Shaw, S-L. “Can We Reestablish the Fact from Fragmented Information? - Using Travel Survey as An Example,” presentation at the Annual Meeting of the Association of American Geographers, San Francisco, California.
2016. Chen, B., Yuan, H., Li, Q. and Shaw, S-L. “Spatiotemporal Data Model for Network Time Geographic Analysis in the Era of Big Data,” presentation at the Annual Meeting of the Association of American Geographers, San Francisco, California.

2016. Chang, X., Yue, Y., Tu, W., Jian, Z., Li, Q. and Shaw, S-L. “Deriving commuting Origin-destination Data from Large-scale Human Tracking Data,” presentation at the Annual Meeting of the Association of American Geographers, San Francisco, California.
2016. Tu, W., Cao, R., Cao, J., Li, Q. and Shaw, S-L. “Spatial-Temporal Variation of Public Transit Ridership Inferring from Smart Card Data and Mobile Phone Data,” presentation at the Annual Meeting of the Association of American Geographers, San Francisco, California.
2015. Shaw, S-L. “Understanding Human Dynamics with Mobile Phone Location Data”, invited keynote presentation at the Urban Informatics Conference, Shenzhen, China.
2015. Shaw, S-L. “Potentials and Limitations of Using Mobile Phone Location data to Study Human Dynamics”, invited presentation at the 11th Workshop on Spatial Behavior and Planning: Spatial-temporal Behavior Theory and Application Frontiers, Guangzhou, China.
2015. Xu, Y., Shaw S-L., Yin, L. and Zhao, Z. “Understanding Individual Daily Activity Space Based On Large Scale Mobile Phone Location Data,” presentation at the GeoComputation 2015 Conference, Dallas, Texas.
2015. Shaw, S-L. “Comments on Spatial Data Mining and Big Data Analytics,” invited presentation at the Spatial Data Mining and Big Data Analytics Panel Session of the Annual Meeting of the Association of American Geographers, Chicago, Illinois.
2015. Shaw, S-L., Lu, S. and Fang, Z. “How Big Is Big Enough? – A Case Study of Spatial Interaction Model,” presentation at the Annual Meeting of the Association of American Geographers, Chicago, Illinois.
2015. Lu, S., Fang, Z. and Shaw, S-L. “Using Mobile Phone Tracking Data to Improve the Performance of Huff Model,” presentation at the Annual Meeting of the Association of American Geographers, Chicago, Illinois.
2015. Shaw, S-L. “Social Media Analytics for Physical, Virtual and Social Spaces,” invited keynote presentation at the International Conference on Location-based Social Media Data, Athens, Georgia.
2015. Zhao, Z., Shaw, S-L., Xu, Y. and Yin, L. “Extract and Compare Generalized Urban Population Movement Patterns Derived from Different Tracking Datasets,” presentation at the International Conference on Location-based Social Media Data, Athens, Georgia.
2014. Shaw, S-L. “Big Data, Human Dynamics, and Space-Time GIS,” invited presentation at the NSF-CDI Specialist Meeting of Human Dynamics in the Mobile Age, San Diego, California.
2014. Shaw, S-L. “Big Data, Human Dynamics, and Space-Time GIS,” keynote presentation at the International Conference on Geoinformatics, Kaohsiung, Taiwan.
2014. Shaw, S-L. “Integrating Time Geography and Space-Time GIS for Human Dynamics Research,” presentation at the International Time-Geography Days, Linköping University, Linköping, Sweden.
2014. Shaw, S-L. “Potentials and Challenges of Understanding Human Dynamics with Space-Time Analysis of Individual Tracking Data,” presentation at the Annual Meeting of the Association of American Geographers, Tampa, Florida.
2014. Shaw S-L. “Space and Time in Human Dynamics Research,” presented in a Spatiotemporal Thinking, Computing, and Applications panel session at the Annual Meeting of the Association of American Geographers, Tampa, Florida.

2014. Chen, J. and Shaw S-L. "Arranging Daily Activities based on A Space-Time Prism Approach," presentation at the Annual Meeting of the Association of American Geographers, Tampa, Florida.
2014. Fang, Z., Lu, S., Shaw S-L. and Xu, J. "Impacts of Grid-based Scaling on Urban Human Mobility," presentation at the Annual Meeting of the Association of American Geographers, Tampa, Florida.
2014. Xu, Y., Shaw S-L., Zhao, Z., Yin, L. and Fang, Z. "Understand Individual and Aggregate Human Mobility Patterns from Mobile Phone Location Data - A Case Study of Shenzhen, China," presentation at the Annual Meeting of the Association of American Geographers, Tampa, Florida.
2014. Yin, L., Shaw S-L., Hu, J., Wang, Q. and Xu, N. "Privacy Risk versus Privacy Preservation for Research Using Individual Mobile Phone Tracking Data," presentation at the Annual Meeting of the Association of American Geographers, Tampa, Florida.
2014. Zhao, Z., Shaw S-L., Xu, Y., Yin, L. and Fang, Z. "Mobile Phone Towers as Sensors: Uncovering the Pulse of A City Using Mobile Phone Location Data," presentation at the Annual Meeting of the Association of American Geographers, Tampa, Florida.
2013. Shaw S-L. "Integrating Geo-information in Physical and Virtual Spaces," presentation at the GIScience Forum, Shanghai, China.
2013. Shaw, S-L. "Big Data, Big Opportunities and Big Challenges," presented at a "Geocomputation in the Era of Big Data" panel session at the GeoComputation 2013 Conference, Wuhan, China.
2013. Wang, D., Zhao, Z., Shaw, S-L., Raghianti, G. and Wei, Y. "Building a High Performance ArcGIS Cluster and its Application to Climate Data Processing," presentation at the GeoComputation 2013 Conference, Wuhan, China.
2013. Shaw, S-L. "Exploring Urban Dynamics with Individual Tracking Data," presentation at the Geospatial Information for Smart City Summit on Smart City (GIS-SmartCity 2013), Wuhan, China.
2013. Chang, X., Shaw, S-L., Li, Q. and Chen, B.Y. "Geographic Patterns of Microblog Interactions in China," presentation at the Annual Meeting of the Association of American Geographers, Los Angeles, California.
2013. Xu, Y. and Shaw, S-L. "Exploring Spatio-temporal Changes of User Generated Contents from Flickr Data," presentation at the Annual Meeting of the Association of American Geographers, Los Angeles, California.
2013. Zhao, Z., Shaw, S-L. and Fang, Z. "Exploring the Evolving Collaboration Patterns of IIGIS Authorship Network," presentation at the Annual Meeting of the Association of American Geographers, Los Angeles, California.
2012. Shaw, S-L. "Space-Time GIScience and Analysis: Time Geography and Beyond," presentation at the GIScience Forum, Beijing, China.
2012. Zhao, Z. and Shaw, S-L. "An Object-Oriented Space-Time GIS Data Model for Time-Geographic Research," presentation at the Time Geography Workshop of the GIScience 2012 Conference, Columbus, Ohio.
2012. Chen, J., Shaw, S-L., Xu, Y., Li, Q., Fang, Z. and Li, Y. "Where and When Taxi Drivers Deviate from the Shortest Path in Their Route Choices: A Case Study of Wuhan, China," presentation at the GIScience 2012 Conference, Columbus, Ohio.

2012. Xu, Y., Shaw, S-L., Chen, J., Li, Q., Fang, Z. and Li, Y. "Uncovering Repeated Spatio-temporal Behavioral Patterns Embedded in GPS-based Taxi Tracking Data," presentation at the GIScience 2012 Conference, Columbus, Ohio.
2012. Shaw, S-L. "From Physical Space to Virtual Space," presentation at the Specialists Meeting of NSF CDI Project of Mapping Ideas: Discovering and Information Landscapes, San Diego, California.
2012. Shaw, S-L. and Yin, L. "A Space-Time GIS of Integrating Physical, Virtual and Social Activities," presentation at the Geoinformatics 2012 Conference, Hong Kong, China.
2012. Shaw, S-L. "Space-Time Geography (Time Geography)", presented at the "Spatiotemporal thinking, computing and applications" panel session at the Geoinformatics 2012 Conference, Hong Kong, China.
2012. Shaw, S-L. and Yin, L. "An Extension of Time Geography to Integrate Physical, Virtual and Social Activities in A Space-Time Context," presentation at the Annual Meeting of the Association of American Geographers, New York City, New York.
2012. Yin, L. and Shaw, S-L. "Exploring Dynamic Relationships between Physical Proximity and Virtual Interactions," presentation at the Annual Meeting of the Association of American Geographers, New York City, New York.
2012. Zhao, Z., Shaw, S-L. and Wang, D. "An Object-Oriented Space-Time GIS Data Model for Raster," presentation at the Annual Meeting of the Association of American Geographers, New York City, New York.
2012. Chen, J., Shaw, S-L., Lu, F., Yu, H., Chai, Y. and Zhou, S. "Comparison of People's Daily Activities in Beijing and Guangzhou, China: A Space-Time GIS," presentation at the Annual Meeting of the Association of American Geographers, New York City, New York.
2011. Shaw, S-L. "Extending Time Geography for Studying Physical, Virtual and Online Social Activities," presentation at an Information and Communication Technology (ICT) Experts Group Meeting, Berlin, Germany.
2011. Shaw, S-L. "Tracking and Analyzing Individual Activities and Interactions: A Space-Time GIS Approach," keynote presentation at the GIS Theories and Methods Conference, Changchun, China.
2011. Shaw, S-L. "Space, Time and Human Activities in Physical and Virtual Spaces," presentation at the Specialists Meeting of NSF CDI Project of Mapping Ideas: Discovering and Information Landscapes, San Diego, California.
2011. Shaw, S-L. and Yu, H. "Time Geography and Space-Time Integration," presentation at the Annual Meeting of the Association of American Geographers, Seattle, Washington.
2011. Yin, L. and Shaw, S-L. "A GIS-based Time-Geographic Framework for Human Interaction in Virtual Space," presentation at the Annual Meeting of the Association of American Geographers, Seattle, Washington.
2011. Yu, H. and Shaw, S-L. "A Study of Similarity Measures for Space-Time Paths," presentation at the Annual Meeting of the Association of American Geographers, Seattle, Washington.
2011. Chen, J., Shaw, S-L., Lu, F., Yu, H., Chai, Y. and Jia, Q. "Exploring Human Activity Patterns in Beijing, China based on A Space-Time GIS Approach," presentation at the Annual Meeting of the Association of American Geographers, Seattle, Washington.

2010. Shaw, S-L. "Spatio-Temporal Constraints on Social Networks – The Visualization Perspective," invited presentation at the Specialist Meeting of Spatio-Temporal Constraints on Social Networks, Upham Hotel, Santa Barbara, California.
2010. Shaw, S-L. "Space-Time GIS for A Dynamic and Mobile World," keynote presentation given at 2010 Asia GIS International Conference, Garden Villa Hotel, Kaohsiung, Taiwan.
2010. Shaw, S-L. "Lost Time? – Challenges of Integrating Time into Digital Archives GIScience," keynote presentation given at 2010 Digital Archives GIScience Conference, National Taiwan University, Taipei, Taiwan.
2010. Shaw, S-L. "Space and Time in Geographic Information Science," presentation given at the Advanced GIScience Workshop, Academia Sinica, Taipei, Taiwan.
2010. Shaw, S-L. "Time Geography: Its Past, Present, and Future," presentation at the Annual Meeting of the Association of American Geographers, Washington, DC.
2010. Yin, L. and Shaw, S-L. "Potential Effects of ICT on Face-to-Face Meeting Opportunities: A GIS-based Time-Geographic Exploratory Approach," presentation at the Annual Meeting of the Association of American Geographers, Washington, DC.
2010. Xu, Y. and Shaw, S-L. "A Location-based Spatio-temporal GIS Application for Interactive Meeting Opportunity Analysis," presentation at the Annual Meeting of the Association of American Geographers, Washington, DC.
2010. Shaw, S-L. "A Space-Time GIS for Analyzing Human Activities and Interactions," presentation at the ESRI Space-Time Modeling and Analysis Workshop, Redlands, California.
2009. Shaw, S-L. "From Aggregate Snapshots to Disaggregate Dynamics: Implications of Individual Tracking Data to GIS-T," keynote presentation delivered at the 2009 International Workshop on GIS for Transportation, Wuhan, China.
2009. Shaw, S-L. "A Space-Time GIS for Studying Individual-based Human Activities and Interactions," presentation at the International Conference of GIS in the Humanities and Social Sciences, Taipei, Taiwan.
2009. Shaw, S-L. "A Space-Time GIS for Tracking and Analysis of Human Activities and Interactions in a Hybrid Physical-Virtual Space," presentation at the Second Spatial Social-cultural Knowledge Workshop, Defense Academy of the United Kingdom, Shrivenham, the United Kingdom.
2009. Shaw, S-L. "Individual-based Tracking Data: Potentials and Challenges to Transportation Geography," Fleming Lecture delivered at the Annual Meeting of the Association of American Geographers, Las Vegas, Nevada.
2009. Yu, H. and Shaw, S-L. "A Space-Time GIS for Exploring Clusters in A Large Trajectory Dataset," presentation at the Annual Meeting of the Association of American Geographers, Las Vegas, Nevada.
2009. Yin, L. and Shaw, S-L. "A Case Study of Individual Activities and Interactions in a Hybrid Physical-Virtual Space based on Time Geography Framework," presentation at the Annual Meeting of the Association of American Geographers, Las Vegas, Nevada.
2009. Chen, J., Lu, F. and Shaw, S-L. "Trip Planning for Individuals under Space and Time Constraints," presentation at the Annual Meeting of the Association of American Geographers, Las Vegas, Nevada.
2008. Shaw, S-L., "Sustainable Transportation: A Geographic Perspective," presentation at the Conference on Energy Resources and Green Economy, Shanghai, China.

2008. Shaw, S-L., Yu, H., and Yin, L. "A Space-Time GIS for Time Geography: Requirements and Challenges," presentation at the Annual Meeting of the Association of American Geographers, Boston, Massachusetts.
2008. Yu, H., Shaw, S-L., and Bombom, L. "Exploring Patterns in Individual-based Activity Datasets: A Space-Time GIS Approach," presentation at the Annual Meeting of the Association of American Geographers, Boston, Massachusetts.
2008. Yin, L., Shaw, S-L., and Yu, H. "A Time-Geographic Approach for Activity Planning and Scheduling with Virtual Activities," presentation at the Annual Meeting of the Association of American Geographers, Boston, Massachusetts.
2008. Bombom, L., Yu, H., Shaw, S-L., and Zhao, Y. "Visualizing Large Set of Space-Time Paths in GIS," presentation at the Annual Meeting of the Association of American Geographers, Boston, Massachusetts.
2008. Huang, X., Shaw, S-L., Yu, H., and von Reichert, C. "Exploring Migration Patterns in Space and Time: A Case Study of Northern Great Plains," presentation at the Annual Meeting of the Association of American Geographers, Boston, Massachusetts.
2008. Shaw, S-L and Yu, H. "A GIS-Based Time-Geographic Framework for Spatiotemporal Analysis of Individual Activities and Interactions," presentation at the Third Specialists Meeting on Information and Communications Technology (ICT), Everyday Life and Urban Change, Bristol, United Kingdom.
2007. Wong, D. and Shaw, S-L. "Measuring Segregation: Going Beyond the Residential Space and Ecological Approach," presentation at the New Frontiers in the Field of Segregation Measurement and Analysis, Centro Stefano Franscini, Monte Verita Hill, Ascona, Switzerland.
2007. Shaw, S-L. "Geographic Information Systems for Transportation: Principles and Applications," keynote presentation given at the First GIS for Transportation (GIS-T) Symposium of China, Wuhan, China.
2007. Shaw, S-L. and Yu, H. "An Extended Time-Geographic Framework for Studying Human Activities in Physical and Virtual Spaces," presentation at the Annual Meeting of the Association of American Geographers, San Francisco, California.
2007. Yu, H. and Shaw, S-L. "A Temporal GIS Approach for the Exploration of Spatiotemporal Patterns of Acquisition Projects," presentation at the Annual Meeting of the Association of American Geographers, San Francisco, California.
2007. Yin, L., Shaw, S-L., Wang, D., Buchanan, N., Gross, L., and Berry, M. "Spatial Control Model for Fire Suppression using Cellular Automata, Genetic Algorithm, and Parallel Computing," presentation at the Annual Meeting of the Association of American Geographers, San Francisco, California.
2006. Shaw, S-L. "A Space-Time GIS for Tracking and Analyzing Human Activities and Interactions," presentation at the Annual East Tennessee Regional GIS Conference, Knoxville, Tennessee.
2006. Shaw, S-L. "What about 'Time' in Transportation Geography?" panelist of the "Transport Geography: Assessing the Current State of the Subdiscipline" session at the Annual Meeting of the Association of American Geographers, Chicago, Illinois.
2006. Shaw, S-L., Lu, F., Chen, J., and Zhou, C. "Network Structures and Competitions of Passenger Airlines in China," presentation at the Annual Meeting of the Association of American Geographers, Chicago, Illinois.

2006. Zhao, Y., Shaw, S-L., and English, M. "Application of GIS in Transportation Environmental Justice Assessment," presentation at the Annual Meeting of the Association of American Geographers, Chicago, Illinois.
2006. von Reichert, C., Shaw, S-L., Zhao, Y., and Yu, H. "Applications of Spatio-temporal GIS in Migration Research," presentation at the Annual Meeting of the Association of American Geographers, Chicago, Illinois.
2005. Yu, H. and Shaw, S-L. "Revisiting Hägerstrand's Time-Geographic Framework for Individual Activities in the Age of Instant Access," presentation at the Research Symposium on Societies and Cities in the Age of Instant Access, Salt Lake City, Utah.
2005. Shaw, S-L. "An Extended Time-Geographic Framework for Human Activities and Interactions in Physical and Virtual Spaces," presentation at the Annual Meeting of the Association of American Geographers, Denver, Colorado.
2005. von Reichert, C., Shaw, S-L., and Yu, H. "Migration Histories as Time-Space Paths," poster presented at the Annual Meeting of the Association of American Geographers, Denver, Colorado.
2004. Shaw, S-L. "Spatial Patterns of Telecommuting in the Atlanta Metropolitan Area," invited paper presentation at the "Information and Communications Technologies (ICT): Mobilizing Persons, Places, and Spaces" Specialist Meeting, Doorn, The Netherlands.
2004. Shaw, S-L. "Applications and Prospects of GIS for Transportation," keynote presentation at the GIS for Transportation Workshop, the Chinese Academy of Sciences, Beijing, China.
2004. Shaw, S-L. "Changing Spatial Concepts: A GIS Approach of Extending Time Geography for Human Activities in Physical and Virtual Spaces," presentation at the Institute of Geographical Sciences and Natural Resources Research, the Chinese Academy of Sciences, Beijing, China.
2004. Shaw, S-L. "Geographic Information Science for Transportation," lecture presented at the Graduate School, the Chinese Academy of Sciences, Beijing, China.
2004. Shaw, S-L. "An extended time-geographic framework for physical and virtual activities: GIS design and implementation," invited paper presentation at the Third STELLA Focus Group 2 Research Workshop, Budapest, Hungary.
2004. Shaw, S-L. "Space-time redistribution patterns associated with information and communications technologies," presentation at the Annual Meeting of the Association of American Geographers, Philadelphia, Pennsylvania.
2003. Shaw, S-L. "ICTs, temporal GIS, and visualization for analysis of space-time dynamics," invited presentation at the Second STELLA Focus Group 2 Research Workshop, New Castle, United Kingdom.
2003. Shaw, S-L. and Tharpe, J. "A study of teleworking in the Atlanta metropolitan area," presentation at the Annual Meeting of the Association of American Geographers, New Orleans, Louisiana.
2002. Shaw, S-L. and Xin, X. "Temporal GIS for analysis of land use and transportation interactions," presentation at the Annual Meeting of the Association of American Geographers, Los Angeles, California.
2002. Xin, X. and Shaw, S-L. "Design and implementation of COM-compliant temporal Transland," presentation at the Annual Meeting of the Association of American Geographers, Los Angeles, California.

2002. Shaw, S-L. and Ralston, B. "GIS for transportation education at the University of Tennessee," invited presentation in a panel session at the Annual Meeting of the Association of American Geographers, Los Angeles, California.
2002. Ralston, B. and Shaw, S-L. "Transportation geography education at the University of Tennessee," invited presentation in a panel session at the Annual Meeting of the Association of American Geographers, Los Angeles, California.
2002. Zhan, B., Ralston, B. and Shaw, S-L. "Dynamic GIS for modeling swarm intelligence and collective behavior," research proposal presented at the University Consortium of Geographic Information Science Summer Assembly, Athens, Georgia.
2002. Shaw, S-L. "GIS-T and logistics," "Accessing geographic data for logistics," and "Advanced descriptive analysis for logistics," three invited presentations at the Advanced Workshop on Geographic Information Systems for Logistics, Chinese University of Hong Kong, Satin, Hong Kong.
2001. Shaw, S-L and Xin, X. "Spatiotemporal GIS model of transportation and land use interactions," presentation at the Annual Meeting of the Association of American Geographers, New York City, New York.
2001. Shaw, S-L. "GIS and society: Applications and implications," presentation at the Annual Meeting of the Chinese-American Academic and Professional Association in Southeastern United States, Atlanta, Georgia.
2000. Shaw, S-L. "Potentials of GIS for spatiotemporal activity-based travel analysis," presentation at the Annual Meeting of the Association of American Geographers, Pittsburgh, PA.
1999. Shaw, S-L. "Design considerations of integrating transportation planning information system with GIS," presentation at the Annual Meeting of the Association of American Geographers, Honolulu, Hawaii.
1999. Shaw, S-L. "An introduction to GIS" and "Making sense of data: Thematic maps," invited presentation at the GIS for Business and Logistics Workshop sponsored by the Center for Executive Education, College of Business Administration, University of Tennessee, Knoxville, Tennessee.
1998. Shaw, S-L. and Wang, D. "Handling diversified transportation data sets within GIS," presentation at the Annual Meeting of the Association of American Geographers, Boston, Massachusetts.
1998. Shaw, S-L. "Sources of GIS data and software," invited presentation at the GIS for Business and Logistics Workshop sponsored by the Center for Executive Education, College of Business Administration, University of Tennessee, Knoxville, Tennessee.
1997. Shaw, S-L. "GIS challenges in urban transportation planning applications," presentation at the GIS AM/FM Asia '97 & GeoInformatics '97 Conference, Taipei, Taiwan.
1997. Shaw, S-L. "Challenges to the design of a GIS-T for business curriculum," presentation at the Annual Meeting of the Association of American Geographers, Fort Worth, Texas.
1996. Shaw, S-L. and Conaway, M. "Data quality assessment: From photo interpretation to GIS," presentation at the Annual Meeting of the Association of American Geographers, Charlotte, North Carolina.
1996. Schultz, R., Shaw, S-L. and Roberts, C. "Establishment of an integrated digital geographic data handling curriculum," presentation at the Annual Meeting of the Association of American Geographers, Charlotte, North Carolina.

1995. Shaw, S-L. "GIS and transportation modeling," invited presentation at the Lehman Center for Transportation Research, Florida International University, Miami, Florida.
1995. Shaw, S-L. "Research and application issues in transportation GIS," invited presentation at the Advanced GIS Seminar sponsored by the Chinese Natural Science Foundation and Beijing University, Beijing, China.
1995. Shaw, S-L. "Issues of integrating multi-agency databases for a regional transportation GIS," presentation at the Annual Meeting of the Association of American Geographers, Chicago, Illinois.
1994. Shaw, S-L. and Donnelly, J. "Spatiotemporal Evolution of Airline Networks with Visualization Considerations," presentation at the Annual Meeting of the Association of American Geographers, San Francisco, California.
1993. Shaw, S-L. "GIS for Transportation," invited presentation at the Advanced GIS Seminar sponsored by the Chinese Natural Science Foundation and Beijing Normal University, Beijing, China.
1993. Shaw, S-L. "The Interplay between Travel Demand Models and GIS," presentation at the Annual Meeting of the Association of American Geographers, Atlanta, Georgia.
1993. Shaw, S-L. and Lee, J. "From Spatial Autocorrelation to Network Autocorrelation," presentation at the Annual Meeting of the Association of American Geographers, Atlanta, Georgia.
1992. Shaw, S-L. "Where Does Florida Stand in the U.S. Air Passenger Transport Networks?" presentation at the Annual Meeting of the Chinese-American Scholars Association of Florida, Miami Beach, Florida.
1992. Shaw, S-L. "Towards a More Realistic Modeling of Airline Hub Networks," presentation at the Annual Meeting of the Association of American Geographers, San Diego, California.
1991. Shaw, S-L. and Roberts, C. "Integration of GIS and Remote Sensing Technologies from a Data Accuracy Perspective," presentation at the Annual Meeting of the Southeastern Division of the Association of American Geographers, Asheville, North Carolina.
1991. Shaw, S-L. "GIS and Structural Analysis of Transportation Networks," presentation at the Annual Meeting of the Association of American Geographers, Miami, Florida.
1990. Shaw, S-L. "A GIS Application of Studying a Commuter Rail System," presentation at the Annual Meeting of the Association of American Geographers, Toronto, Canada.
1990. Shaw, S-L. invited panelist at the GIS in Higher Education Workshop, Columbus, Ohio.
1989. Shaw, S-L. "Ridership Profile of the Tri-County Commuter Rail System in Southeast Florida," presentation at the Annual Meeting of the Florida Society of Geographers, Cedar Key, Florida.
1989. Shaw, S-L. "Geographic Information Systems in Transportation Network Analysis," presentation at the Annual Meeting of the Association of American Geographers, Baltimore, Maryland.
1989. Shaw, S-L. invited panelist at the GIS in Higher Education Workshop, Columbus, Ohio.
1988. Shaw, S-L. "Post-Behavior Cognitive Adjustments in Urban Travel Mode-Choice Behavior," presentation at the Annual Meeting of the Association of American Geographers, Phoenix, Arizona.

1988. Shaw, S-L. and Becker, D. "An Integrated Transportation Management System using GIS," presentation at the Annual Meeting of the Association of American Geographers, Phoenix, Arizona.
1987. Shaw, S-L. and Williams, J. "Transportation Developments and Problems in Taiwan," presentation at the Annual Meetings of the Association of American Geographers, Portland, Oregon.
1986. Shaw, S-L. "An Attitudinal Model of Urban Travel Choice Behavior with Constraints," presentation at the Annual Meetings of the Association of American Geographers, Minneapolis, Minnesota.
1985. Shaw, S-L. "Effects of Deregulation on Air Transport Pattern of Columbus, Ohio," presentation at the Annual Meetings of the Association of American Geographers, Detroit, Michigan.

E. Research Reports Submitted to Sponsors

2014. *Final Technical Report for Upgrade the Geographic Information System*, report completed for a project funded by the Federal Highway Administration (FHWA), U.S. Department of Transportation (USDOT).
2011. *Integration of Space-Time GIS with Climate Informatics for Climate Change Research*, report completed for a project funded by Joint Directed Research Development (JDRD), University of Tennessee and Oak Ridge National Laboratory.
2011. *Tennessee One Road: Integration of Road Attributes on A Common Geometry*, a report completed for a research project funded by the Tennessee Department of Transportation.
2006. *Technical Documentation of Tennessee Department of Transportation Environmental Justice GIS Tools*, report completed for a project funded by the Tennessee Department of Transportation.
2006. *User Guide of Tennessee Department of Transportation Environmental Justice GIS Tools*, report completed for a project funded by the Tennessee Department of Transportation.
2004. *Recommended Future Services and Applications of An Automated GPS/Roadway Inventory Data Collection and TRIMS Update Process*, report completed for a project funded by the Tennessee Department of Transportation.
2004. *A Cost-Benefit Study of the Automated GPS/Roadway Inventory Data Collection and TRIMS Update Process*, report completed for a project funded by the Tennessee Department of Transportation.
2003. *Identifying the Equilibrium of Land Use and Transportation Investments using Spatiotemporal Analysis Tools – Temporal GIS Databases Construction and Spatiotemporal Analysis Tools Development*, report completed for a project funded by the Florida Department of Transportation.
2002. *Telework: A Case Study of Atlanta, Georgia*, report completed for a project funded by the UT Scholarly Activity and Research Incentive Funds (SARIF) Summer Graduate Research Assistantship Award.
2001. *Identifying the Equilibrium of Land Use and Transportation Investments using Spatiotemporal Analysis Tools – Temporal GIS Database Design*, report completed for a project funded by the Florida Department of Transportation.

2001. *Identifying the Equilibrium of Land Use and Transportation Investments using Spatiotemporal Analysis Tools – Literature Review*, report completed for a project funded by the Florida Department of Transportation.
2001. *Investigation of Airborne Laser Swath Mapping (ALSM) – ALSM Data Assessment*, report completed for a project funded by the Tennessee Department of Transportation.
2000. *Geographic Information Systems Software Evaluation*, report completed for a project funded by the Tennessee Department of Transportation.
1999. *Activity-based Travel Demand Modeling using Geographic Information Systems*, report completed for a project funded by the University of Tennessee Faculty Research Award.

V. TEACHING

A. University Courses Offered

University of Tennessee, Knoxville (1998-present):

- GEOG 411: Introduction to Geographic Information Science
- GEOG 415: Quantitative Methods in Geography
- GEOG 449: Geography of Transportation
- GEOG 491: Foreign Study – Experiencing the Geography of China (Study Abroad)
- GEOG 501: Colloquium in Geography
- GEOG 517: Geographic Information Management and Processing
- GEOG 518: Geographic Information Systems Project Management
- GEOG 549: Topics in Geography of Transportation
- GEOG 611: Seminar in Geographic Information Science
- GEOG 649: Seminar in Geography of Transportation

Florida Atlantic University (1988-1998):

- GEOG 3985: Business GeoGraphics
- GEOG 4022: Quantitative Methods
- GEOG 4141C: Principles of Geographic Information Systems I
- GEOG 4142C: Principles of Geographic Information Systems II
- GEOG 4184C: Computer Cartography and Map Pattern Analysis
- GEOG 4500: Economic Geography
- GEOG 4704: Transportation and Spatial Organization
- GEOG 6146: Geographic Information Systems
- GEOG 6147: Technical Issues and Applications in Geographic Information Systems
- GEOG 6930: Advanced GIS Seminar
- URP 6714: Urban Transportation Planning and Demand Analysis

B. Dissertation/Thesis/Paper Awards/Honors Received by Advisees

- 2010 Ling Yin, *Finalist, Student Paper Competition*, awarded by the Geographic Information Science and Systems Specialty Group, The Association of American Geographers.

- 2006 Hongbo Yu, *Best Ph.D. Dissertation Award*, awarded by the Transportation Geography Specialty Group, The Association of American Geographers
- 2005 Hongbo Yu, *First Place, Student Paper Competition*, awarded by the Geographic Information Science and Systems Specialty Group, The Association of American Geographers.
- 2004 Hongbo Yu, *Cartography and Geographic Information Science Award*, awarded by the University Consortium for Geographic Information Science (UCGIS)
- 2004 Jessica Tharpe, *Best Master's Thesis Award*, awarded by Transportation Geography Specialty Group, The Association of American Geographers.
- 2003 Xiaohong Xin, *Best Ph.D. Dissertation Award*, awarded by Transportation Geography Specialty Group, The Association of American Geographers.

C. Thesis/Dissertation Committees

University of Tennessee, Knoxville (1998-present):

- * Major advisor of 10 doctoral committees:
 - Department of Geography: 6 completed (Xiaohong Xin, Hongbo Yu, Robert Stewart, Ling Yin, Ziliang Zhao, Yang Xu), 4 in progress (Kevin Krivacsy, Jiaoli Chen, Michael Vanderlan, Gengen He)
- * Member of 18 doctoral committees:
 - Department of Geography: 8 completed, 3 in progress
 - Department of Biosystems Engineering and Environmental Science: 1 completed
 - Department of Civil and Environmental Engineering: 2 completed
 - Department of Computer Science: 3 completed
 - Department of Sociology: 1 completed
- * Major advisor of 15 master's committees:
 - Department of Geography: 14 completed (Moinak Chatterjee, Jessica Tharpe, David Ralston, Steve Ahrens, Xumei Liu, Brad Wilson, Xia Huang, Yitu Xu, Ziliang Zhao, Amy Davis, Sumang Liu, Austin Rutledge, Yuan Liu, Yicong Zhong), 1 in progress (Nicholas Schoenborn)
- * Member of 24 master's committees:
 - Department of Geography: 15 completed, 2 in progress
 - Department of Civil and Environmental Engineering: 2 completed
 - Department of Computer Science: 2 completed
 - Department of Ecology and Evolutionary Biology: 1 completed
 - Department of Forestry, Wildlife and Fisheries: 2 completed
- * External Member of 6 Ph.D. dissertation committees:
 - Department of Geographical and Sustainability Sciences, University of Iowa, Iowa City, Iowa, USA: 1 in progress (Junchuan Fan, Dissertation Committee Member)
 - Department of Geography, University of Georgia, Athens, Georgia, USA: 1 completed (Xuebin Wei, Dissertation Committee Member)
 - Department of Geography, University of California, Santa Barbara, California, USA: 1 completed (Alan Glennon, Dissertation Committee Member)
 - Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, Beijing, China: 1 completed (Jie Chen, Co-Advisor)

- Department of Geography, University of Ottawa, Ontario, Canada: 1 completed (Nairne Cameron, External Committee Member)
- Department of Geography, University of Calgary, Calgary, Canada: 1 completed (Dae-Won Kwon, External Committee Member)
- * External Examiner of 1 master's thesis research:
 - Department of Geography, The Chinese University of Hong Kong, Satin, Hong Kong: 1 completed (Hongbo Yu, External Committee Member)

Florida Atlantic University (1988-1998):

- * Major advisor of 11 master's thesis committees:
 - Department of Geography: 11 completed
- * Member of 10 master's thesis committees:
 - Department of Geography: 4 completed
 - Department of Economics: 6 completed

D. Workshops and Training Courses Taught

- 2013. "Silk-Net GIScience Summer Institute" in Suzhou, China, funded by the State Key Laboratory of Resources and Environmental Information System, the Chinese Academy of Sciences.
- 2010. "Advanced GIScience Research Workshop" at the Academia Sinica, funded by the Academia Sinica, Taipei, Taiwan.
- 2007. "Computational Science for Natural Resource Managers Workshop" at The University of Tennessee, Knoxville, Tennessee, funded by the U.S. National Science Foundation and managed by The University of Tennessee, Knoxville.
- 2006. "Computational Science for Natural Resource Managers Workshop" at The University of Tennessee, Knoxville, Tennessee, funded by the U.S. National Science Foundation and managed by The University of Tennessee, Knoxville.
- 2005. "Spatial Perspectives on Analysis for Curriculum Enhancement (SPACE) Workshop – GIS and Spatial Modeling for the Undergraduate Social Science Curriculum" at The Ohio State University, Columbus, Ohio, funded by the U.S. National Science Foundation and managed by University of California, Santa Barbara, The Ohio State University, and the University Consortium for Geographic Information Science.
- 2005. "GIS for Transportation Workshop" at Hong Kong, June 13, 2005, funded by the Hong Kong Transport Department.
- 2005. "GIS for Transportation Workshop" at Hong Kong, March 23, 2005, funded by the Hong Kong Transport Department.
- 2004. "Spatial Perspectives on Analysis for Curriculum Enhancement (SPACE) Workshop – GIS and Spatial Modeling for the Undergraduate Social Science Curriculum" at The Ohio State University, Columbus, Ohio, funded by the U.S. National Science Foundation and managed by University of California, Santa Barbara, The Ohio State University, and the University Consortium for Geographic Information Science.
- 2002. "Advanced GIS for Transportation and Logistics Workshop" at Hong Kong, sponsored by the Chinese University of Hong Kong, Satin, Hong Kong.

2001. “GIS Workshop” at Knoxville, Tennessee, sponsored by the Municipal Technical Advisory Service, University of Tennessee.
1999. “GIS for Business and Logistics Workshop” at Knoxville, Tennessee, sponsored by the Center for Executive Education, College of Business Administration, University of Tennessee.
1998. “GIS for Business and Logistics Workshop” at Knoxville, Tennessee, sponsored by the Center for Executive Education, College of Business Administration, University of Tennessee.
1996. “GIS and Location-Allocation Analysis Training Course” at West Palm Beach, Florida, sponsored by the South Florida Water Management District.
1996. “Introduction to GIS Workshop” at West Palm Beach, Florida, sponsored by the Palm Beach County Government, Florida.
1996. “Introduction to ArcView Training Course” at Boca Raton, Florida, sponsored by the Florida Atlantic University’s Continuing Education and Open University.
1993. “Introduction to GIS Workshop” at Fort Lauderdale, Florida, sponsored by the Broward County Government, Florida.

VI. SERVICE

A. Service to the Profession

Reviewer of manuscripts/grant proposals/standards for the following journals and agencies:

Annals of the Association of American Geographers
Annals of GIS
Applied Geography
Cartography and Geographic Information Systems
Cities
Computers, Environment and Urban Systems
Economic Geography
Environment and Planning A
Environment and Planning B
Geografiska Annaler B
Geographical Analysis
Geographical Review
GeoInformatica
Habitat International
International Journal of Control, Automation, and Systems
International Journal of Digital Earth
International Journal of Geographic Information Science
International Journal of Sustainable Transportation
IET Intelligent Transport Systems
Journal of Geographic Information System
Journal of Geographical Systems
Journal of Transport Geography
Networks and Spatial Economics

Proceedings of the National Academy of Sciences
Science Bulletin
Social Networks
Southeastern Geographer
Spatial Cognition and Computation
The Professional Geographer
Tijdschrift voor Economische en Sociale Geografie
Tourism Management
Transactions in GIS
Transactions on Intelligent Systems and Technologies
Transportation
Transportation Research A
Transportation Research E
Transportmetrica
Travel Behaviour and Society
Urban Affairs Review
Urban Geography
Urban Studies

U.S. National Science Foundation
U.S. Transportation Research Board
U.S. Department of Transportation
Hong Kong Research Grants Council
Netherlands Organization for Scientific Research (NWO)
Social Sciences and Humanities Research Council of Canada (SSHRC)
Natural Science Foundation of China
Academia Sinica of Taiwan
Ministry of Science and Technology of Taiwan

Editorial Board Member, *Journal of Transport Geography*, 2000-present
Associate Editor, *Travel Behaviour and Society*, 2013-present
Editorial Board Member, *International Journal of Geographic Information Science*, 2014-present
Editorial Board Member, *Journal of Geographic Information System*, 2010-present
Editorial Board Member, *Geographical Research (China)*, 2015-present
Editorial Board Member, *Southeastern Geographer*, 2004-2012
Member, Academic Advisory Committee, Research Center for Humanities and Social Sciences, Academia Sinica, Taipei, Taiwan, 2012-present
Co-Chair, WG II/7: Intelligent Spatial Decision Support, International Society for Photogrammetry and Remote Sensing (ISPRS), 2014-present
Member, Program Committee, International Symposium on Location-based Social Media Data and Tracking Data, a Symposium of the 28th International Cartographic Conference, Washington DC, USA, July 1-2, 2017

Member, Technical Program Committee, The Third International Conference on Vehicle Technology and Intelligent Transport Systems (VEHITS 2017), Porto, Portugal, April 22-24, 2017

Member, International Scientific Committee, The Tenth Asian GIS Conference, Hong Kong, January 5-7, 2017

Lead Guest Editor, Special Issue on Intelligent Spatial Decision Support, *ISPRS International Journal of Geo-Information*, 2016

Member, Program Review Committee, Research Center for Humanities and Social Sciences, Academia Sinica, Taipei, Taiwan, November 2-3, 2016

Member, Technical Program Committee, The Tenth International Conference on Mobile Ubiquitous Computing, Systems, Services and Technologies (UBICOMM 2016), Venice, Italy, October 9-13, 2016

Member, Program Committee, The Ninth International Conference on Geographic Information Science (GIScience 2016), Montreal, Canada, September 27-30, 2016

Member, Program Committee, GeoSocial: Social Media and GIScience Workshop, The Ninth International Conference on Geographic Information Science (GIScience 2016), Montreal, Canada, September 27, 2016

Member, Scientific Committee, The Second International Time-Geography Days, Linköping University, Linköping, Sweden, September 21-23, 2016

Member, Steering Committee and Program Committee, The Second International Conference on Location-Based Social Media Data, Shanghai, China, August 26-28, 2016

Member, Program Committee, The Third International Conference on CyberGIS and Geospatial Data Science (CyberGIS'16), Urbana, Illinois, July 26-28, 2016

Associate Editor, Pacific Asia Conference on Information Systems (PACIS) 2016, Track of Context-Aware Geographic Information Systems, Chiayi, Taiwan, June 27–July 1, 2016

Lead Organizer, Symposium on Human Dynamics Research at 2016 AAG Annual Meeting, San Francisco, California, March 29–April 2, 2016

Chair, National Visiting Committee, NSF-CDI: Mapping Cyberspace project (CNS-#1028177, PI: Ming-Hsiang Tsou, San Diego State University), 2010-2015

Lead Guest Editor, Special Issue on Human Dynamics in the Mobile and Big Data Era, *International Journal of Geographical Information Science*, 2015

Member, Technical Program Committee, The Ninth International Conference on Mobile Ubiquitous Computing, Systems, Services and Technologies (UBICOMM 2015), Nice, France, July 19-24, 2015

Member, Programming Committee, International Workshop on Spatiotemporal Computing, Fairfax, Virginia, July 13-15, 2015

Member, Program Committee, Geoinformatics 2015 Conference, Wuhan, China, June 19-21, 2015

Member, Scientific Advisory Board, GeoComputation 2015 Conference, Dallas, Texas, May 20-23, 2015

Co-Organizer, three Time Geography paper sessions, five Human Dynamics in the Mobile Age paper sessions, and two Spatiotemporal Big Data Analytics panel sessions at the Annual Meeting of the Association of American Geographers, Chicago, Illinois, April 21-25, 2015

Member, Organizing Committee, Symposium on Spatiotemporal Thinking, Computing and Applications at the Annual Meeting of the Association of American Geographers, Chicago, Illinois, April 21-25, 2015

Member, Organizing Committee, Symposium on CyberGIS for Fostering New Frontiers of Geographic Research and Education at the Annual Meeting of the Association of American Geographers, Chicago, Illinois, April 21-25, 2015

Member, Program Committee, International Conference on Location-Based Social Media Data, Athens, Georgia, March 13-14, 2015

Member, Conference Scientific Committee, ISPRS TC II Joint International Conference on Geospatial Theory, Processing, Modelling and Applications, together with IGU Commission on Geographical Information Science and Commission on Modelling Geographical Systems, Toronto, Canada, October 6-8, 2014

Member, Program Committee, The Eighth International Conference on Geographic Information Science (GIScience 2014), Vienna, Austria, September 23-26, 2014

Member, Technical Program Committee, The Eighth International Conference on Mobile Ubiquitous Computing, Systems, Services and Technologies (UBICOMM 2014), Rome, Italy, August 24-28, 2014

Member, Academic Program Review Committee, Research Center for Humanities and Social Sciences, Academia Sinica, Taipei, Taiwan, July 7-9, 2014

Co-Chair, International Workshop of Geographical Information Science 2014 (IWGIS 2014), Beijing, China, June 21-22, 2014

Chair and Co-Organizer, GIScience Forum on Emerging GIScience Research Themes and Challenges, International Workshop of Geographical Information Science 2014 (IWGIS 2014), Beijing, China, June 22, 2014

Member, Conference Scientific Committee, International Workshop on Spatial Analysis and Data Mining (SADM 2014), together with WG II/3 Spatial Analysis and Data Mining, Wuhan, China, May 16-18, 2014

Member, Scientific Committee, International Time-Geography Days, Linköping University, Linköping, Sweden, May 14-16, 2014

Member, Membership Committee, Association of American Geographers, 2009-2013

Member, Scientific Committee, International Workshop on Global Spatial Grids and Cloud-based Services, Xuzhou, China, November 11-12, 2013

Member, Program Committee, ICA Workshop on Street Networks and Transport, Dresden, Germany, August 23-24, 2013

Member, Program Committee, Geoinformatics 2013 Conference, Kaifeng, Henan, China, June 20-22, 2013

Guest Editor, Special Issue on Time Geography, *Journal of Transport Geography*, 2011-2012

Delegate, University Consortium for Geographic Information Science, 2002-2012

Member, Program Committee, GIScience 2012 Conference, Columbus, Ohio, September 18-21, 2012

Member, Program Committee, Time Geography Workshop, GIScience 2012 Conference, Columbus, Ohio, September 18-21, 2012

Member, Program Committee, Role of Volunteered Geographic Information in Advancing Science: Quality and Credibility Workshop, GIScience 2012 Conference, Columbus, Ohio, September 18-21, 2012

Member, Program Committee, Geoinformatics 2012 Conference, Chinese University of Hong Kong, Hong Kong, China, June 15-17, 2012

Guest Editor, Special Issue on GIS for Transportation, *Journal of Transport Geography*, 2010-2011

Co-Organizer, Trajectory Data Mining and Analysis Workshop, the 13th ACM International Conference on Ubiquitous Computing, Beijing, China, September 17-21, 2011

Member, Program Committee, Geoinformatics 2011 Conference, East China Normal University, Shanghai, China, June 24-26, 2011

Member, Technical Program Committee, International Workshop on Role of Volunteered Geographic Information in Advancing Science, Zurich, Switzerland, September 14, 2010

Member, Program Committee, Geoinformatics 2010 Conference, Peking University, Beijing, China, June 16-18, 2010

Member, Program Committee, International Workshop on GIS for Transportation, Wuhan University, Wuhan, China, December 4-6, 2009

Panel Review Member, National Science Foundation (NSF) Cyber-enabled Discovery and Innovation (CDI) Program Review Panel, Arlington, Virginia, February 23-24, 2009

Member, Technical Committee, Geoinformatics 2008 Conference, Dr. Sun Yat-Sen University, Guangzhou, China, June 28-29, 2008

Member, International Program Committee, First International Conference on Grid Computing, Universität Leipzig, Leipzig, Germany, September 24-28, 2007

Member, Standards for Geographic Data Committee, Association of American Geographers, 2006-2007

Member, Sustainable Transportation Analysis and Research (STAR) Network, a project funded by National Science Foundation (NSF), 2002-2005

Reviewer, Core Data Content Standards for Transportation, U.S. Department of Transportation, 2002-2005

Chair, Transportation Geography Specialty Group, Association of American Geographers, 2000-2002

Co-Organizer, Advanced Workshop on Geographic Information Systems for Logistics, The Chinese University of Hong Kong, Satin, Hong Kong, 2002

Co-Guest Editor, Special issue of "Geographic Information Systems and Intelligent Transportation Systems," *GeoInformatica*, 2000

Member, Program Committee, Annual Meeting of the Southeastern Division of the Association of American Geographers (SEDAAG), 2000

Member, Organizing Committee, International Workshop on Geographic Information Systems for Transportation (GIS-T) and Intelligent Transportation Systems (ITS), Hong Kong, 1999

Member, Planning Committee, Second National GIS in Transit Conference, Tampa, Florida, 1998

Academic Liaison, ESRI GIS for Transportation Planning Users Group, 1996-1998

Editorial Board Member, *Journal of Geographic Information Sciences*, 1995-1998

Secretary/Treasurer, GIS Specialty Group, Association of American Geographers, 1994-1996

Member, Board of Directors, Transportation Geography Specialty Group, Association of American Geographers, 1992-1997

Organizer, GIS for Transportation Workshop, Association of Chinese Professionals in Geographic Information Systems, 1996

President, Chinese-American Scholars Association of Florida, 1995-1996
 Grant Proposal Review Panelist, U.S. National Science Foundation (NSF), Arlington, Virginia, 1995
 Vice President, Chinese-American Scholars Association of Florida, 1994-1995
 Member, Student Paper Competition Committee, GIS Specialty Group, Association of American Geographers, 1993 & 1994
 Treasurer, Association of Chinese Professionals in Geographic Information Systems, 1993-1994
 Co-Chair, Program Committee, Annual Conference of the Association of Chinese Professionals in Geographic Information Systems, West Palm Beach, Florida, 1993
 Member, Board of Directors, Association of Chinese Professionals in Geographic Information Systems, 1992-1993
 Member, Local Arrangement Committee, Annual Meeting of the Florida Society of Geographers, Boca Raton, Florida, 1992
 Member, Local Arrangement Committee, Annual Meeting of the Association of American Geographers, Miami, Florida, 1991
 External Reviewer, Geographic Information Systems Faculty Search Committee, Department of Geography, University of Miami, Florida, 1991
 Advisor, National Geographic Information Systems Visiting Group from Taiwan, Republic of China, 1990
 Member, Local Coordinating Committee, GIS/LIS Annual Conference, Orlando, Florida, 1989

B. Service to the University

Director, Confucius Institute, University of Tennessee, 2012-present
 Campus Security Authority, University of Tennessee, 2016-present
 Member, Asian Studies Committee, College of Arts and Sciences, University of Tennessee, 2005-present
 Co-Advisor, Chinese Students and Scholars Association, University of Tennessee, 2013-present
 Advisor, Pengyou Project – UT Chapter, University of Tennessee, 2015-present
 Faculty Mentor to Dr. Hyun Kim, Department of Geography, University of Tennessee, 2011-present
 Judge, Research and Creative Achievement Awards, College of Arts and Sciences, University of Tennessee, 2016
 Judge, International Photo Exhibit Contest, International House, Center for International Education, University of Tennessee, 2016
 Research Mentor to Dr. Lisa Lindley for a National Institutes of Health (NIH)/National Institute of Nursing Research (NINR) K01-Mentored Research Scientist Development Award, College of Nursing, University of Tennessee, 2013-2016
 Member, UTK Delegation Team to China and Taiwan led by Provost and Senior Vice Chancellor Susan Martin to attend 2016 annual meeting of Confucius Institute's Board of Advisors at Southeast University in Nanjing, China and to visit other universities in China and Taiwan, July 6-15, 2016
 Member, UT Delegation Team led by Associate Provost Pia Wood and Dean of Libraries Steve Smith to visit universities and recruit students in China, March 20-25, 2016

Member, Spatial Biology Faculty Search Committee, Department of Ecology and Evolutionary Biology/National Institute for Mathematical and Biological Synthesis (NIMBioS), University of Tennessee, 2015-2016

Member, Mid-cycle Program Review Committee, Department of Business Analytics and Statistics, University of Tennessee, November 16-17, 2015

Member, Delegation Team to China led by Provost and Senior Vice Chancellor Susan Martin, University of Tennessee, March 17-21, 2015

Member, Graduate Program Committee, Department of Geography, University of Tennessee, 2011-2015

Member, Space Committee, Department of Geography, University of Tennessee, 2014-2015

Member, Development and Alumni Relations Committee, Department of Geography, University of Tennessee, 2014-2015

Member, Delegation Team to China and Hong Kong led by Senior Vice Chancellor and Provost Susan Martin, University of Tennessee, October 25-30, 2014

Member, Delegation Team to China led by Chancellor Jimmy Cheek, University of Tennessee, October 20-31, 2013

Presentation to the Dean's Advisory Board, invited by the Dean of the College of Arts and Sciences, University of Tennessee, October 4, 2013

Member, Dean's Advisory Council, College of Arts and Sciences, University of Tennessee, 2010-2013 (excluding Fall 2011 when I was on a faculty development leave)

Faculty Mentor to Dr. Jiang Jiang, Postdoctoral Researcher, National Institute for Mathematical and Biological Synthesis (NIMBioS), University of Tennessee, Knoxville, 2013-2014 (NSF-funded Grant)

Chair, Visiting Speakers Committee, Department of Geography, University of Tennessee, 2012-2013

Member, Executive Committee, Department of Geography, University of Tennessee, 2010-2013

Member, Graduate Admissions Committee, Department of Geography, University of Tennessee, 2006-2013

Member, Graduate Examinations Committee, Department of Geography, University of Tennessee, 2011-2013

Member, Development and Alumni Relations Committee, Department of Geography, University of Tennessee, 2011-2013

Member, Fellowships and Scholarships Committee, Department of Geography, University of Tennessee, 2008-2013

Member, McCroskey Fund Committee, Department of Geography, University of Tennessee, 2007-2013

Member, Class Scheduling Committee, Department of Geography, University of Tennessee, 2007-2013

Head, Department of Geography, University of Tennessee, 2007-2010

Chair, Executive Committee, Department of Geography, University of Tennessee, 2007-2010

Chair, Transportation/Spatial Analysis Faculty Search Committee, Department of Geography, University of Tennessee, 2010-2011

Chair, Graduate Program Committee, Department of Geography, University of Tennessee, 2011 Spring.

Chair, Ad Hoc Cumulative Performance Review Committee, College of Arts and Sciences, University of Tennessee, 2008-2011

Member, College Budget Committee, College of Arts and Sciences, University of Tennessee, 2007-2008

Member, Ad Hoc Graduate School Committee on Joint Degrees, Graduate School, University of Tennessee, 2007-08

Co-Coordinator, Computer Laboratory, Department of Geography, University of Tennessee, 1999-2006

Member, Executive Committee, Department of Geography, University of Tennessee, 2006-2007

Member, Graduate Program Committee, Department of Geography, University of Tennessee, 2006-2007

Chair, Graduate Program Committee, Department of Geography, University of Tennessee, 2000-2006 & Spring 2011

Chair, Geographic Information Science/Physical Geography Faculty Search Committee, Department of Geography, University of Tennessee, 2005-2006

Member, Urban/Economic Geography Faculty Search Committee, Department of Geography, University of Tennessee, 2005-2006

Associate Head, Department of Geography, University of Tennessee, 2001-2004

Webmaster, Department of Geography, University of Tennessee, 1998-2003

Chair, Geographic Information Science/Physical Geography Faculty Search Committee, Department of Geography, University of Tennessee, 2002-2003

Member, Executive Committee, Department of Geography, University of Tennessee, 1999-2002

Member, Population Geography Faculty Search Committee, Department of Geography, University of Tennessee, 2001-2002

Coordinator, VolNet Upgrade of the Burchfiel Geography Building, University of Tennessee, 2000-2001

Member, Semester Banking Committee, Department of Geography, University of Tennessee, 1999-2001

Member, Space Committee, Department of Geography, University of Tennessee, 1999-2001

Undergraduate Advisor, Department of Geography, University of Tennessee, 2000-2001

Assistant Coordinator, Relocation to Burchfiel Geography Building, Department of Geography, University of Tennessee, 2000

Member, Planning/Urban Studies/Social Science Curricula Committee, College of Arts and Sciences, University of Tennessee, 1999-2000

Member, Graduate Program Committee, Department of Geography, University of Tennessee, 1998-2000

Director, Geographic Information and Analysis Laboratory, Department of Geography, Florida Atlantic University, 1993-1998

Member, University Distance Learning Council, Florida Atlantic University, 1995-1998

Member, College By-Laws Committee, Florida Atlantic University, 1995-1996

Member, Graduate Studies Committee, Department of Geography, Florida Atlantic University, 1992-1996

Member, Teaching Incentive Program Award Committee, College of Social Science, Florida Atlantic University, 1994-1995

Member, Personnel Committee, College of Social Science, Florida Atlantic University, 1994-1995
Member, University Distance Learning Task Force, Florida Atlantic University, 1994-1995
Member, Salary Equity Appeals Committee, Florida Atlantic University, 1992-1994
Member, University Senate, Florida Atlantic University, 1991-1994
Advisor, Chinese Students Association, Florida Atlantic University, 1991-1993
Member, Undergraduate Teaching and Advising Awards Committee, College of Social Science, Florida Atlantic University, 1991-1992
Member, University Committee on Statistics, Florida Atlantic University, 1991-1992
Co-Director, GIS/Remote Sensing Laboratory, Department of Geography, Florida Atlantic University, 1990-1992
EEO Associate, College of Urban and Public Affairs, Florida Atlantic University, 1989-1990
Member, University Tower Computing Committee, Florida Atlantic University, 1989-1990
Director, Geographic Information Systems Laboratory, Master's Program of Urban and Regional Planning, Florida Atlantic University, 1988-1990
Also, served on various search committees at Florida Atlantic University

C. Service to the Public

Advisor, Federation of Overseas Chinese Associations, 2003-present
Member, Board of Directors, Organization of Chinese Americans – East Tennessee Chapter, 2005-2007 and 2000-2004
Advisor, Overseas Chinese Affairs Commission of the Government of Republic of China, 1998-2002
External Reviewer, Knox County/Blount County Regional Transportation Survey, Knoxville-Knox County Metropolitan Planning Commission, 2000-2001
President, Coral Springs Chinese Cultural Association, Florida, USA, 1992-1993

D. Invited Guest Presentations/Lectures

Guest Speaker, Invited by the Speaker Series of Advanced Geoinformatics Research Topics, Wuhan University, Wuhan, China, March 14, 2016
Guest Speaker, invited by the Department of Traffic Engineering, Tongji University, Shanghai, China, March 10, 2016
Guest Speaker, Invited by the Department of Geography, University of North Carolina, Greensboro, NC, February 19, 2016
Guest Speaker, invited by the Research Center of Intelligent Transportation System, Sun Yat-Sen University, Guangzhou, China, September 10, 2015
Guest Speaker, invited by the Institute of Remote Sensing and Geographical Information System, Peking University, Beijing, China, September 6, 2015
Guest Speaker, invited by the Robinson Colloquium, Department of Geography, The Ohio State University, Columbus, Ohio, November 21, 2014
Guest Speaker, invited by the Institute of Space and Earth Information Science, Chinese University of Hong Kong, Hong Kong, China, October 31, 2014

Guest Speaker, invited by the Chattanooga International Business Council, Chattanooga, Tennessee, August 28, 2014

Guest Speaker, invited to give a presentation at the Experian R&D Data Lab, San Diego, California, August 14, 2014

Guest Speaker, invited by the Research Center for Humanities and Social Sciences, Academia Sinica, Taipei, Taiwan, July 21, 2014

Guest Speaker, invited by the Supergeo Technologies, Taipei, Taiwan, July 5, 2014

Guest Speaker, invited by the Department of Geography, National Taiwan University, Taipei, Taiwan, January 8, 2014

Guest Speaker, invited by the Department of Geomatics, National Cheng Kung University, Tainan, Taiwan, January 6, 2014

Guest Speaker, invited by the School of Remote Sensing and Information Engineering, Wuhan University, Wuhan, China, December 26, 2013

Guest Speaker, invited by the Dean of the College of Arts and Sciences to give a presentation on the Confucius Institute at the annual meeting of the Dean's Board of Advisors, University of Tennessee, October 4, 2013

Guest Speaker, invited by the Institutes of Advanced Technology, the Chinese Academy of Sciences, Shenzhen, China, May 10, 2013

Guest Speaker, invited by the Department of Civil and Environmental Engineering, University of Tennessee, Knoxville, Tennessee, March 14, 2013

Guest Speaker, invited by the Department of Urban and Regional Planning, University of Illinois, Urbana-Champaign, Illinois, March 11, 2013

Guest Speaker, invited by the School of Civil and Environmental Engineering, Georgia Institute of Technology, Atlanta, Georgia, March 8, 2013

Guest Speaker, invited by the Office of the President, Shenzhen University, Shenzhen, China, December 31, 2012

Guest Speaker, invited by the School of Civil and Environmental Engineering, Georgia Institute of Technology, Atlanta, Georgia, September 25, 2012

Guest Speaker, invited by Kunming University of Science and Technology, Kunming, China, July 9, 2012

Guest Speaker, invited by Chang'an University, Xi'an, China, May 22, 2012

Guest Speaker, invited by Changsha University of Science and Technology, Changsha, China, March 19, 2012

Guest Speaker, invited by the Department of Geography, University of Georgia, Athens, Georgia, February 3, 2012

Guest Speaker, invited by the State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing, Wuhan University, Wuhan, China, December 27, 2011

Guest Speaker, invited by the Department of Thematic Studies, Linköping University, Linköping, Sweden, November 25, 2011

Guest Speaker, invited by the Department of Human Geography, Stockholm University, Stockholm, Sweden, November 22, 2011

Guest Speaker, invited by the State Key Laboratory of Resources and Environmental Information System, the Chinese Academy of Sciences, Beijing, China, October 21, 2011

Guest Speaker, invited by the Center for Intelligent Systems and Machine Learning, University of Tennessee, Knoxville, Tennessee, April 18, 2011

Guest Speaker, invited by the Department of Geography and the Department of Civil and Environmental Engineering, University of Connecticut, Storrs, Connecticut, March 28, 2011

Guest Speaker, invited by the Dean of the College of Arts and Sciences to give a presentation to the Dean's Advisory Board, University of Tennessee, Knoxville, Tennessee, October 22, 2010

Guest Speaker, invited by the Center for Urban and Regional Analysis, Department of Geography, The Ohio State University, Columbus, Ohio, September 3, 2010

Guest Speaker (tele-presentation), invited by the Center for Wireless and Population Health Systems, University of California at San Diego, February 8, 2010

Guest Speaker, invited by the Taiwan GIS Center, Taipei, Taiwan, October 12, 2009

Guest Speaker, invited by the Department of Geography, National Taiwan University, Taipei, Taiwan, October 6, 2009

Guest Speaker, invited by the National Transportation Research Center, Oak Ridge, Tennessee, August 12, 2009

Guest Speaker, invited by the Microsoft Research Institute (Asia), Beijing, China, May 26, 2009

Guest Speaker, invited by the Key State Laboratory of Resources and Environmental Information System, Institute of Geographic Sciences and Natural Resources Research, the Chinese Academy of Sciences, Beijing, China, May 20, 2009

Guest Speaker, invited by the Transportation Research Center, Wuhan University, Wuhan, China, October 16, 2008

Guest Speaker, invited by Office of the President, Chinese Culture University, Taipei, Taiwan, June 10, 2008

Guest Speaker, invited by the Graduate Institute of National Development, National Taiwan University, Taipei, Taiwan, June 3, 2008

Guest Speaker, invited by the Geographic Information Systems Research Center, Feng Chia University, Taichung, Taiwan, May 29, 2008

Guest Speaker, invited by the Department of Geography, National Taiwan University, Taipei, Taiwan, May 27, 2008

Keynote Lecturer, invited by the Department of Geography and Earth Sciences, University of North Carolina, Charlotte, October 26, 2007

Guest Lecturer, invited by the Department of Computer Science, University of Tennessee, Knoxville, September 13, 2007

Guest Speaker, invited by the Environmental Systems Research Institute Beijing (ESRI Beijing), Beijing, China, June 27, 2007

Guest Lecturer, invited by the Chinese University of Mining and Technology, Beijing, China, June 27, 2007

Guest Speaker, invited by the Student Chapter of the Institute of Transportation Engineers, University of Tennessee, Knoxville, March 27, 2007

Guest Lecturer, invited by the Department of Computer Science, University of Tennessee, Knoxville, February 13, 2007

Keynote Speaker, invited by the Tennessee Geographic Alliance, October 5, 2006

Guest Speaker, invited by the Technical Society of Knoxville, September 25, 2006

Guest Speaker, invited by the Computational Sciences and Engineering Division, Oak Ridge National Laboratory, April 28, 2006

Guest Lecturer, invited by the Department of Computer Science, University of Tennessee, Knoxville, January 24, 2006

Guest Speaker, invited by the Technical Society of Knoxville, July 21, 2003

Guest Speaker, invited by the Florida Department of Transportation, May 28, 2002

Guest Speaker, invited by the Knoxville Chinese Christian Church, April 23, 2000

Guest Speaker, invited by the Center for Transportation Research, University of Tennessee, December 3, 1999

Guest Speaker, invited by the Florida Department of Transportation, June 11, 1998

Guest Speaker, invited by the Florida Department of Transportation, July 8 & September 9, 1997

Guest Speaker, invited by the Broward County GIS Users Group, March 25, 1997

Guest Speaker, invited by the South Florida Water Management District, March 5, 1997

Guest Speaker, invited by the Florida Department of Transportation, September 22, 1995

Guest Speaker, invited by the IEEE Broward Chapter, May 12, 1994

Guest Speaker, invited by the Palm Beach Countywide GIS Committee, February 16, 1994

Guest Speaker, invited by the Southeast Florida Arc/Info User Group, November 1, 1993

Guest Speaker, invited by the Florida Department of Transportation, September 3, 1992

Guest Speaker, invited by the South Florida Water Management District, March 4, 1992