

Curriculum Vitae

Xingong Li

Department of Geography and Atmospheric Science
University of Kansas
1475 Jayhawk Blvd
Lawrence, KS 66045 USA

phone: (785) 864-5545
fax: (785) 864-5378
email: lix@ku.edu

Education

Ph.D. Geography, University of South Carolina
M.S. Geography, Nanjing University (China)
B.S. Geology, Nanjing University (China)

Academic Appointments

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| Professor 2017-present | Department of Geography and Atmospheric Science, University of Kansas |
| Associate Professor 2010-2017 | Department of Geography and Atmospheric Science, University of Kansas |
| Assistant Professor 2003-2010 | Department of Geography, University of Kansas |
| Assistant Professor 2000-2002 | Department of Geography & Planning, Appalachian State University |

Refereed Publications (*Italics denotes a student or visiting scholar under my advisement and * indicates corresponding author*)

1. Zhang, X. Li*, J. She and X. Peng (in press) Assimilating Remote Sensing Data into GIS-based All Sky Solar Radiation Modeling for Mountain Terrain, *Remote Sensing of Environment*.
2. Yang, M., X. Yan, X. Zhang, and X. Li* (in press) Constrained trajectory simplification with speed preservation, *Cartography and Geographic Information Science*.
3. Sun, C., Y. Chen, W. Chen and X. Li (2019) Stable isotope variations in precipitation in the northwesternmost Tibetan Plateau related to various meteorological controlling factors, *Atmospheric Research*, 227(1): 66-78
4. Coll, J. and X. Li* (2018) Comprehensive Accuracy Assessment of MODIS Daily Snow Cover Products and Gap Filling Methods, *ISPRS Journal of Photogrammetry and Remote Sensing*.

5. Grady, C. J. and X. Li* (2018) A distributed approach for calculating inundation height based on Dijkstra's algorithm, *Transactions in GIS*.
6. Li, X. (2017). Buffers. *The Geographic Information Science & Technology Body of Knowledge* (4th Quarter 2017 Edition), John P. Wilson (ed.). DOI: 10.22224/gistbok/2017.4.10
7. Li, J., X. Li*, and T. Xie (2017) Morphing of building footprints using a turning angle function, *International Journal of Geo-Information*, 6, 173; doi:10.3390/ijgi6060173.
8. She, J., Y. Zhou, X. Tan, X. Li*, and X. Guo (2017) A parallelized screen-based method for rendering polylines and polygons on terrain surfaces, *Computers & Geosciences*, 99: 19-27, doi: 10.1016/j.cageo.2016.10.011.
9. Sun, C., X. Li*, Y. Chen (2017) Climate change and runoff response in an arid mountain watershed of western Kunlun Mountains, *Hydrological Science Journal*, 62(2), DOI: 10.1080/02626667.2016.1224885.
10. Li, H., X. Li*, and P. Xiao (2016) Impact of Sensor Zenith Angle on MOD10A1 Data Reliability and Modification of Snow Cover Data for the Tarim River Basin, *Remote Sensing*, 8, 750, doi:10.3390/rs8090750.
11. Liu, W. and X. Li* (2016) Life cycle characteristics of warm-season severe thunderstorms in central united states from 2010 to 2014, *Climate*, 4(3), 45, doi:10.3390/cli4030045.
12. She, J. and X. Li* (2016) Map algebra based analysis for directed flow networks, *Transactions in GIS*, 20(3), DOI10.1111/tgis.12234.
13. Sun, C., J. Yang, Y. Chen, X. Li, Y. Yang, Y. Zhang (2016) Comparative study of streamflow components in two inland rivers in the Tianshan Mountains, Northwest China, *Environmental Earth Sciences*. 75(9): 1-14, DOI: 10.1007/s12665-016-5314-1.
14. Li, X*, S. Zhang, Y. Chen (2016) Error assessment of grid-based diffuse solar radiation models, *International Journal of Geographical Information Science*, 30(10), DOI:10.1080/13658816.2016.1155215.
15. Liu, W., K. Purdon, T. Stafford, J. Paden, X. Li* (2016) Open Polar Server (OPS) – An Open Source Spatial Data Infrastructure for the Cryosphere Community, *ISPRS International Journal of Geo-Information*, 5(32), doi:10.3390/ijgi5030032.
16. Sun, C., X. Li*, Y. Chen (2016) Spatial and temporal characteristics of stable isotope in the Tarim River basin, *Isotopes in Environmental & Health Studies*, 52(3), DOI:10.1080/10256016.2016.1125350.
17. Sun, C., Y. Chen, W. Li, X. Li, Y. Yang (2016) Isotopic time-series partitioning of streamflow components under regional climate change in the Urumqi River, northwest China, *Hydrological Sciences Journal*, 61(8), DOI: 10.1080/02626667.2015.1031757.
18. Liu, P., X. Li*, W. Liu, T. Ai (2016) Fourier-based multi-scale representation and progressive transmission of cartographic curves on the Internet, *Cartography and Geographic Information Science*, 43(5), 10.1080/15230406.2015.1088799.

19. Liu, W., X. Li*, D. A. Rahn (2016) Storm event representation and analysis based on a directed spatiotemporal graph model, *International Journal of Geographical Information Science*, 30(5), doi: 10.1080/13658816.2015.1081910.
20. Sun, C., Y. Chen, X. Li, W. Li (2016) Analysis on the stream flow components of the typical inland river, Northwest China, *Hydrological Sciences Journal*, 61(5), DOI: 10.1080/02626667.2014.1000914.
21. Zhang, S., X. Li*, Y. Chen (2015) Error assessment of grid-based direct solar radiation models, *International Journal of Geographical Information Science*, 29(10), doi: 10.1080/13658816.2015.1055273.
22. She, J., Y. Zhang, X. Li*, X. Feng (2015) Spatial and temporal characteristics of snow cover in the Tizinafu watershed of western Kunlun Mountains, *Remote Sensing*, 7(4), 3426-3445; doi: 10.3390/rs70403426.
23. Sun, C., W. Li, Y. Chen, X. Li, Y. Yang, (2015) Isotopic and hydrochemical composition of runoff in the Urumqi River, Tianshan Mountains, China, *Environmental Earth Sciences*, 74(2), DOI 10.1007/s12665-015-4144-x.
24. Sheng, B., and X. Li*, (2015) Accuracy assessment of TRMM3B43 data in Tarim River Basin, *Arid Land Geography* (in Chinese), 38(4): 703-712.
25. Peterson, T.A. and X. Li (2015) Niche-based projections of wetlands shifts with marine intrusion from sea level rise: an example analysis for North Carolina, *Environmental Earth Sciences*, 73(4), DOI 10.1007/s12665-014-3498-9.
26. Fan, Y., Y. Chen, X. Li, W. Li, and Q. Li (2015) Characteristics of water isotopes and ice-snowmelt quantification in the Tizinafu River, north Kunlun Mountains, Central Asia, *Quaternary International*, 380-381(4), doi:10.1016/j.quaint.2014.05.020.
27. Li, X. *, C. J. Grady, and T. A. Peterson (2014) Delineating Sea Level Rise Inundation Using a Graph Traversal Algorithm, *Marine Geodesy*, 37(2): 267-281, DOI: 10.1080/01490419.2014.902884.
28. She, J., Y. Zhang, X. Li*, and Y. Chen (2014) Changes of Snow and Glacier Cover in an Arid Watershed of Western Kunlun Mountains Using Multisource Remote Sensing Data, *International Journal of Remote Sensing*, 35(1): 234-251, DOI: 10.1080/01431161.2013.866296.
29. Wu, S., S. Zhou, D. Chen, Z. Wei, L. Dai, and X. Li (2014) Determining the contributions of urbanisation and climate change to NPP variations over the last decade in the Yangtze River Delta, China. *Science of the Total Environment*, 472(2): 397-406, DOI: 10.1016/j.scitotenv.2013.10.128.
30. Islam, M. Z., S. Menon, X. Li, and A. T. Peterson (2013) Forecasting ecological impacts of sea-level rise on coastal conservation areas in India, *Journal of Threatened Taxa*, 5(9): 4349-4358, DOI: 10.11609/JotT.o3163.4349-58.
31. Gali, R. K., K. R. Douglas-Mankin, X. Li, and T. Xu (2012) Assess NEXRAD P3 data effects using SWAT model in an agricultural watershed, *Journal of Hydraulic Engineering*, 17:1245-1254.

32. Fan, Y., Y. Chen, W. Li, H. Wang, **X. Li** (2011) Impacts of temperature and precipitation on runoff in the Tarim River during the past 50 years *Journal of Arid Land*, 3(3): 220-230.
33. Leng, C., Y. Chen, **X. Li**, Y. SUN (2011) Evaluation of oasis stability in the lower reaches of the Tarim River, *Journal of Arid Land*, 3(2): 123-131.
34. Wu, S., S. Zhou, **X. Li** (2011) Determining the anthropogenic contribution of heavy metal accumulations around a typical industrial town: Xushe, China. *Journal of Geochemical Exploration*, 110 (2), 92-97, DOI: 10.1016/j.gexplo.2011.04.002.
35. Li, Q., Y. Chen, Y. Shen, and **X. Li**. (2011) Spatial and temporal trends of climate change in Xinjiang, China, *Journal of Geographical Sciences*, 21(6): 1007-1018. DOI: 10.1007/s11442-011-0896-8.
36. Peterson, A.T., S. Menon, and **X. Li**. (2010) Recent Advances in the Climate Change Biology Literature: describing the whole elephant, *Interdisciplinary Reviews: Climate Change*, 1(4): 548-555.
37. Peterson, A.T., A.G. Navarro-Siguenza, and **X. Li**. (2010) Joint effects of marine intrusion and climate change on the Mexican avifauna, *Annals of the Association of American Geographers*, 100(4): 908-916, DOI: 10.1080/00045608.2010.497351.
38. Menon, S., J. Soberon, **X. Li**, and A.T. Peterson. (2010) Preliminary global assessment of terrestrial biodiversity consequences of sea-level rise mediated by climate change, *Journal of Biodiversity and Conservation*, 19(6): 1599-1609, DOI 10.1007/s10531-010-9790-4.
39. Wu, S., S. Zhou, **X. Li**, T. Jackson, Q. Zhu. (2010) An approach to partition the anthropogenic and natural components of heavy metal accumulations in roadside agricultural soil, *Environmental Monitoring and Assessment*, 173(1), DOI 10.1007/s10661-010-1430-7.
40. French, K. and **X. Li*** (2010) Feature-based cartographic modeling, *International Journal of Geographical Information Science*. 24(1): 141-164. DOI: 10.1080/13658810802492462.
41. Setiadi, M.I., A. Hamidy, Z. Abidin, D. Susanto, R. Brown, A.T. Peterson, **X. Li**, and B.J. Evans. (2010) Genetic structure of herpetofauna on Halmahera Island, Indonesia: implications for the Aketajawe-Lolobata National Park, *Journal of Conservation Biology*. 24(2): 553-562. DOI: 10.1111/j.1523-1739.2009.01384.x.
42. Wu, S., S. Zhou, **X. Li**, W.C. Johnson, H. Zhang, and J. Shi. (2010) Heavy-metal accumulation trends in Yixing, China: an area of rapid economic development, *Environmental Earth Sciences* (formerly *Journal of Environmental Geology*), 61(1), DOI 10.1007/s12665-009-0321-0.
43. Tucker, D.F., and **X. Li**. (2009) Characteristics of warm season precipitating storms in the Arkansas-Red River basin, *Journal of Geophysical Research—Atmospheres*, 114(D13), D13108, doi:10.1029/2008JD011093.
44. **Li, X.**, R.J. Rowley, J.C. Kostelnick, D. Braaten, J. Meisel, and K. Hulbutta (2009) GIS analysis of global impacts from sea level rise. *Photogrammetric Engineering & Remote Sensing*, 75(7): 807-818.

45. Wu, S., S. Zhou, X. Li, H. Zhang, K. Ren, and Q. Zhao (2009) Estimating the anthropogenic fluxes of heavy metal accumulations in roadside agricultural soils. *Fresenius Environmental Bulletin*, 18(7b): 1336-1340.
46. Li, X. and M. Williams (2008) Snowmelt runoff modeling in an arid mountain watershed, Tarim Basin, China. *Hydrological Processes*, 22(19): 3931-3940.
47. Legra, L., X. Li, and T. A. Peterson (2008) Biodiversity consequences of sea level rise in New Guinea. *Pacific Conservation Biology*, 14(3): 191-199.
48. Rowley, R.J., J.C. Kostelnick, D. Braaten, X. Li, and J. Meisel (2007) Risk of rising sea level to population and land area. *Eos, Transactions, American Geophysical Union*, 88(9): 105-107.
49. Li, X. (2005) Deriving directional variance from covariance matrix. *Transactions in GIS*, 9(3): 443-445.
50. Li, X., C. Larson, and A. Rex (2005) Creating buffers on surfaces. *Cartography and Geographical Information Science*, 32(3): 195-210.
51. Li, X., S. Wang, and M. Harman (2005) Improved lake/reservoir water quality modeling using an environmental model and GIS. *GIScience & Remote Sensing*, 42(4): 320-332.
52. Li, X. and M. Hodgson (2004) Vector field data model and operations. *GIScience & Remote Sensing*, 41(1): 1-24.
53. Hodgson, M., X. Li, and Y. Chen (2004) A parameterization model for transportation feature extraction. *Photogrammetric Engineering & Remote Sensing*, 70(12): 1399-1404.
54. Lin, H., Q. Wan, X. Li, J. Chen, and Y. Kong (1997) GIS-based multi-criteria evaluation support system for investment, *Environment Management and Planning B*, 24(2): 403-414.
55. Li, X. and T. Chi (1995) The design and implementation of a feature-oriented GIS. *Remote Sensing Technology and Applications*. 10(4): 65-70. (in Chinese)
56. Li, X., F. Qiu, and S. Zhan (1995) Application of GPS and GIS in vehicle real-time monitoring. *Remote Sensing Technology and Applications*, 10(2): 33-37. (in Chinese)
57. Wu, B., M. Zhang, and X. Li (1994) Development of GIS. *Acta Geographical Sinica*. 49(8): 632-640. (in Chinese)

Other Publications

1. Li, X. (2010) Map algebra, in *Encyclopedia of Geography* (Ed. B. Warf), SAGE Publications, 1824-1825.
2. Li, X. and T. Xu (2008) Using NEXRAD Precipitation in AnnAGNPS, *Software and Technical Report to USDA*, 28 pages.
3. Harman, M., X. Li, and S. Wang (2004) GIS extension for BATHTUB—software and user manual. *Kansas Biological Survey Publication No. 122*, 35 pages.

4. Li, X. (1998) Distributed storm runoff modeling using GIS. *Proceedings of GIS/LIS'98 Annual Conference*, Fort Worth, Texas, pp: 68-75
5. Li, X. (1997) Development of neural network spatial interpolator for precipitation estimation. *Proceedings of GIS/LIS'97 Annual Conference*, Cincinnati, Ohio. pp: 653-662.

Scholarly Presentations

1. Li, X. and J. Coll, Global Snow Cover Trend Analysis using Cloud-based Geospatial Analysis Engine, 2017 *ASPRS Pecora 20*, Sioux Falls, ND.
2. Li, X. and CJ Grady, Parallelizing Inundation Height Calculation, 2017 *CUAHSI Conference on Hydroinformatics*, Tuscaloosa, AL.
3. J. Glaubius and X. Li, Disentangling Human and Environmental Factors in the Evolution of Terraced Landscapes: A Modeling Approach, 2017 *AAG Boston*, MA.
4. Li, X. and J. Coll, Building a Cloud-based Global Snow Observatory, *American Geophysical Union (AGU) Fall Meeting*, San Francisco, December 2016.
5. Li, X., Modeling Solar Radiation through Cloud Computing. *The 17th International Conference on Spatial Data handling*, Beijing, August 2016.
6. Li, X., Modeling Solar Radiation through Cloud Computing. *NSF Workshop on Geospatial Data Science in the Era of Big Data and CyberGIS*, UIUC, IL, July 2016.
7. Li, X., & Liu, W., Understanding Spatiotemporal Processes through Multivariate Statistics and Event Exploration. *The 2016 University Consortium for Geographic Information Science (UCGIS) Symposium*, Phoenix, AZ, May 2016.
8. Li, X. and T. Slocum, CyberGIS Curriculum at the University of Kansas, *AAG and NSF CyberGIS Curriculum Workshop*, San Francisco, April 2016.
9. Coll, J. and X. Li, Comprehensive Assessment on MODIS Daily Snow Cover Products and Gap-filling Methods, *Association of American Geographers Annual Meeting*, San Francisco, California, March 2016.
10. Coll, J. and X. Li, Global Snow Cover Change Analysis Using Google Earth Engine. *Google Earth Engine Summer Summit*, San Francisco, June 2015.
11. Glaubius, J. and X. Li, Coupled Human and Natural Systems: Testing the Impact of Agricultural Terraces on Landscape Evolution. *Community Surface Dynamics Modeling System Annual Meeting*, Boulder, June 2015.
12. Li, X. and J. Coll, Global Snow Cover Change Analysis Using Google Earth Engine. *China National Snow Mapping Conference*, Nanjing, China, May 2015 (invited).
13. Li, X. and J. Coll, Global Snow Cover Change Analysis Using Google Earth Engine. *Lanzhou University*, Lanzhou, China, May 2015 (invited).
14. Li, X. Change of Snow and Glacier in an Arid Mountain Watershed in Western China. *Johnson County Community College*, Overland Park, Kansas, April 2015 (invited).

15. Glaubius, J. and X. Li, Simulating the Evolution of Terraced Terrain with a Landscape Evolution Model Coupled With an Agent-based Model. *Association of American Geographers Annual Meeting*, Chicago, April 2015.
16. Coll, J. and X. Li, Global Analysis of Snow Cover Trends Using MODIS and Google Earth Engine. *Annual Meeting of American Association of Geographers*, Chicago, April 2015.
17. Coll, J. and X. Li Introduction to Google Earth Engine Workshop. *Annual Meeting of American Association of Geographers*, Chicago, April 2015.
18. Liu, W. and X. Li, A Spatiotemporal Graph Model for Rainfall Event Identification and Representation. *Annual Meeting of American Association of Geographers*, Tampa, Florida, April 2014.
19. Slocum, T. and X. Li, Teaching mapping and analysis in the cloud. *The Second International Conference on CyberGIS and GeoDesign*, Redlands, California, August 2014.
20. Li, X., Change of Snow and Glacier in the Tizinafu Watershed in Western Kunlun Mountains. *CGIS Global Food for Thought*, University of Kansas, Lawrence, Kansas, April 2014 (invited).
21. W. Liu and X. Li, Event identification, representation, and exploration in hydrometrological spatiotemporal data, *University Consortium for Geographic Information Science (UCGIS) Symposium*, George Mason University, Fairfax, VA, May 2013.
22. Li, X., J. She, L. Usery, J. Simley, Web-based Network Neighborhood Analyst for the NHD, *AWRA Spring Specialty Conference-GIS and Water Resources VII*, New Orleans, Louisiana, March 2012
23. Li, X., Comparison of GIS-based sea level rise inundation delineation methods, *Annual Meeting of American Association of Geographers*, Seattle, April 2011.
24. Li, X., Map algebra and event-based precipitation data analysis, *LREIS*, Chinese Academy of Sciences, Beijing, China, November 2010.
25. Li, X., GIS and its applications in water resources management, *Nanjing University*, Nanjing, China, June 2010.
26. Li, X., GIS and its applications in water resources management, *Zhenzhou University*, Zhengzhou, China, June 2010.
27. Li, X., Impacts from sea level rises, *Zhongshan University*, Guangzhou, China, June 2010.
28. Tucker, D. and X. Li., Warm season precipitating storms in the southern great plains, *AAG GPRM meeting*, Lawrence, October 2010.
29. Li, X., Delineating potentially inundated areas from sea level rise with tiled DEMs, *Annual Meeting of American Association of Geographers*, Washington D.C., April 2010.
30. Bentlage, B., A.T. Peterson, X. Li, A.G. Collins, and P. Cartwright, Biogeography of open ocean jellyfishes: integrating ecological niche modeling and phylogeography in

a 3D environment, *The 10th International Congress of Ecology (INTECOL)*, Brisbane, Australia, August 2009.

31. Li, X., Snow-/glacier-melt water in southern Xinjiang, China, *Conference of the opening of western China: problems and prospects*, University of Kansas, Lawrence, April 2009 (invited).
32. Li, X. and D. Tucker, Precipitation events—their spatio-temporal characteristics and movement, *Annual Meeting of American Association of Geographers*, Las Vegas, March 2009.
33. Tucker, D. and X. Li, Climatology of warm season precipitating storms in the southern Great Plains, *AMS Annual Meeting*, Phoenix, January 2009.
34. Tucker, D. and X. Li, Distribution of Warm Season Precipitating Storms in the Southern Great Plains, *AGU Fall Meeting*, San Francisco, December 2008.
35. Li, X., Snowmelt runoff modeling in the Yarkant river basin, *International Workshop of Glaciers in Watershed and Global Hydrology*, Obergurgl, Austria, September 2007.
36. Li, X., GIS Tools for Visualizing and Analyzing the NEXRAD Precipitation Data, *Annual Meeting of American Association of Geographers*, Boston, April 2007.
37. Li, X., R.J. Rowley, J.C. Kostelnick, D. Braaten, J. Meisel, and K Hulbutta, GIS Analysis of Global Inundation Impacts from Sea Level Rise, *Annual Meeting of American Association of Geographers*, San Francisco, March 2006.
38. Li, X., Creating buffers on topographic surfaces, *Annual Meeting of American Association of Geographers*, Denver, March 2005.
39. Li, X., Wind Farm Siting Using GIS in Western North Carolina, *ASPRS Annual Meeting*, Denver, May 2004.
40. Li, X., Viewshed Characterization for Wind Farm Siting in Western North Carolina, *Twenty-fourth annual ESRI international user conference*, San Diego, August 2004.
41. Li, X., Integrating Analytic Hierarchy Process with GIS through the COM technology, *ASPRS Annual Meeting*, Washington D.C., April 2002.
42. Li, X., Data model and operations for vector fields, *The First International Conference on Geographic Information Science*, Savannah, October 2000.
43. Hodgson, M. and X. Li, Shortest path considering the direction of movement, *ASPRS Annual Meeting*, Portland, May 1999.
44. Hodgson, M. and X. Li, Sensitivity analysis on feature extraction algorithm, *ASPRS Annual Meeting*, Tampa, April 1998.
45. Carbone, G., R. Lloyd, R. Bunch, and Li, X., Comparison of different interpolation techniques with monthly precipitation data, *Annual Meeting of American Association of Geographers*, Boston, March 1998.
46. Li, X., Digital road map for vehicle navigation, *International Symposium of Geoinformatics'95 Hong Kong: RS, GIS and GPS in sustainable development and environmental monitoring*, Hong Kong, May 1995.

Research Grants

1. FOSSFlood: The LivingFlood Application Built on Free Open Source Software, **PI**, NOAA, \$15,000, 04/01/2018-03/31/2019.
2. Trend of snow and ice cover in mountainous areas, **PI**, Google Inc., \$42,000, 09/01/2014-08/31/2015.
3. CyberGIS Fellowship, **Co-PI**, NSF, \$7,400, 09/2014 – 05/2015.
4. Geospatial analysis Web services for The National Map, **PI**, USGS, \$63,413, 1/2/2011-6/30/2011.
5. Sea level rise effects on coastal ecosystem distributions and biodiversity status in the U.S. Middle Atlantic region, **PI**, US Department of Energy, \$125,000, 07/01/09 – 10/31/11.
6. NSF Science and Technology Center: Center for Remote Sensing of Ice Sheets, **Participating Faculty**, NSF, \$19,000,000, 08/01/2005--07/31/2015.
7. IGERT: C-CHANGE: Climate Change, Humans, and Nature in the Global Environment, **Participating Faculty**, NSF, \$3,200,000, 2008 - 2013.
8. Geographic and cartographic assistance to the Geneva International Centre for Humanitarian Demining, **Co-PI**, Geneva International Centre for Humanitarian Demining, \$80,000, 3/15/09-12/31/09.
9. Snowmelt runoff modeling in the Sierra-Nevada watersheds, **PI**, University of Kansas Faculty General Research Fund, \$7409, 07/01/2008—06/30/2009.
10. Developing NEXRAD-based precipitation datasets for the Cheney Lake watershed for use in water quality models, **PI**, US Department of Agriculture, \$19,685, 05/01/2007 – 01/31/2008.
11. Conservation Evaluation and Assessment Project for the Cheney Reservoir Watershed, **PI**, US Department of Agriculture, \$18,000, 09/01/2005 – 05/31/2006.
12. Understanding snow and glacier runoff processes in an arid mountain watershed, **PI**, University of Kansas Faculty General Research Fund, \$4,438, 07/01/2005—06/30/2006.
13. Developing a GIS Extension for Lake Water Quality Model BATHTUB, **PI**, US Environment Protection Agency, \$15,000, 06/01/2004—12/31/2004.
14. Multi-resolution representation and analysis of vector GIS data, **PI**, University of Kansas New Faculty General Research Fund, \$7,964, 07/01/2003 – 06/30/2004.

Professional Affiliations

Association of American Geographers (AAG)

American Geophysical Union (AGU)

The Imaging and Geospatial Information Society (ASPRS)