

Nina Siu-Ngan Lam

Professor &
E. L. Abraham Distinguished Professor of Louisiana Environmental Studies
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Education

1977-80 University of Western Ontario, London, Ontario – Ph.D. in Geography
1976-77 University of Western Ontario, London, Ontario – M.Sc. in Geography
1971-75 Chinese University of Hong Kong – B.S.Sc. in Geography

Employment History

2013-pres E.L. Abraham Distinguished Professor of Louisiana Environmental Studies,
Department of Environmental Sciences, Louisiana State University (LSU)
2007-10 Chair, Department of Environmental Sciences
2006-pres Professor, Department of Environmental Sciences, Louisiana State University
2007-16 Adjunct Professor, Dept. of Oceanography and Coastal Sciences, LSU
2006-16 Adjunct Professor, Dept. of Geography & Anthropology, LSU
1997-06 Richard J. Russell Louisiana Studies Distinguished Professor, Dept. of Geography &
Anthropology, LSU
1999-01 Program Director, Geography and Regional Science Program, National Science Foundation
1994-97 Professor, Department of Geography and Anthropology, LSU
1994-97 Adjunct Professor, Department of Epidemiology and Community Health, LSU
1985-94 Associate Professor, Department of Geography and Anthropology, LSU
1991-94 Adjunct Associate Professor, Department of Epidemiology and Community Health, LSU
1980-85 Assistant Professor, Department of Geography, Ohio State University

Research Interests

Geographic information science, remote sensing, spatial modeling, environmental health, disaster resilience

1.1 History of Assignments

50% teaching, 50% research, 9-month appointment.

1.2 Teaching

1.2.1 Documentation of Teaching Activities

Courses Taught At LSU-Environmental Sciences (since Fall 2006):

ENVS 4149 – Design of Environmental Management Systems
 ENVS 7050 – Spatial Modeling of Environmental Data
 ENVS 7700 – Integrated Environmental Issues
 ENVS 7900 – Special Problems in Environmental Sciences
 ENVS 7975 – Integrated Environmental Issues (replaced with ENVS 7700)
 ENVS 8000, ENVS 9000, GEOG 8000, GEOG 9000

Courses Taught At LSU-Geography (Fall 1985-Spring 2006):

Teaching load – two courses per semester
 GEOG 4045 – Environmental Remote Sensing
 GEOG 4047 – Geographic Information Systems
 GEOG 4049 – Advanced Computer Cartography
 GEOG 7935 – Quantitative Methods for Geographical Analysis
 GEOG 7973 – Advanced GIS Seminar
 GEOG 8000, GEOG 9000

Graduate Student Advising:

Theses and Dissertations Directed as Major Professor & Immediate Student Placement

PhD (20):

- Volodymyr Mihunov. 2018. Dynamics of the community resilience to drought Hazard in the south-central United States (Postdoc, LSU)
- Cai, Heng. 2017. Assessing and modeling community resilience to coastal hazards using a Bayesian network. (Postdoc, LSU; currently Texas A&M teaching assistant professor)
- Zou, Lei. 2017. Mining social media data for improved understanding of disaster resilience. (Postdoc, LSU, currently Texas A&M tenure-track assistant professor)
- Li, Kenan. 2015. A spatial dynamic model of population changes in a vulnerable coastal environment. (Postdoc, University of Southern California, Keck School of Medicine; currently Research Scientist, USC).
- Kulkarni, Amit. 2012. An object-based image analysis approach for detecting urban impervious surfaces (GIS company in Dallas)
- Arenas, Helbert. 2011. An Agent-based simulation model for business reopenings in New Orleans Post Hurricane Katrina (post-doc in France)
- Liang, Wei. 2009. *An integrated agent-based microsimulation model for hurricane evacuation in New Orleans*. (USGS Wetlands Research Center through ASci Corporation, Lafayette, LA)
- Ju, Wenxu. 2008. *A genetic Bayesian approach for texture-aided urban land-use/land-cover classification*. (ESRI, Redlands, CA)
- Wang, Fei. 2007. Land-cover and land-use study using genetic algorithms, petri nets, and cellular

- automata. (Tenure-track assistant professor, Louisiana Tech University, Ruston)
- Vinnakota, Srinivas. 2006. *Socioeconomic characteristics of cancer mortality in the United States of America: A spatial data mining approach*. (ESRI, Redlands, CA)
- Zhou, Guiyun. 2006. *Detecting the socioeconomic conditions of urban neighborhoods through wavelet analysis of remotely sensed imagery*. (Post-doc, Cal. State LA; currently professor, University of Electronic Science and Technology of China in Chengdu, Sichuan, China)
- Xiao, Ke. 2003. *Fractal compression and analysis of remotely sensed imagery*. (LSU Medical Center)
- Zhao, Wei. 2001. *Multiscale analysis for characterization of remotely sensed images*. (ESRI, Redlands, CA)
- Myint, Soe Win. 2001. *Wavelet analysis and classification of urban environment using high-resolution multispectral image data*. (Tenure-track asst. professor, U Oklahoma; now Professor at Arizona State U)
- Ozdenerol, Esra. 2000. *A spatial inquiry of infant low birth weight and cancer mortality in East Baton Rouge Parish, Louisiana*. (Tenure-track asst. professor, now Professor at U. Memphis)
- Bark, Mihye. 2000. *Cancer mortality and environment in Louisiana: A geographical inquiry*. (Louisiana Department of Economic Development)
- Read, Jane. 1999. *Land-cover change detection for the tropics using remote sensing and geographic information systems*. (Tenure-track asst. Professor, now associate professor, Syracuse U)
- Cherukuri, Rajabhushanam. 1997. *Land/water interface delineation using neural networks*. (NASA contractors, MD)
- Weigel, Stephanie. 1996. *Scale, resolution and resampling: Representation and analysis of remotely sensed landscapes across scale in geographic information systems*. (Post-doc, Colorado State U)
- Cao, Changyong. 1994. *Detecting the scale and resolution effects in remote sensing and GIS*. (Naval office, Washington DC)

M.S. Environmental Sciences (12):

- Prosser, Madeline. 2022. *Replacement hydrofluorocarbons and how they affect Earth's stratospheric ozone through industrial and residential use: a systematic literature review* (non-thesis research paper).
- Wang, Kejin. 2019. *Twitter use in Hurricane Isaac and its implications to disaster resilience*.
- Cheng, Weijia. 2016. *Effects of landscape fragmentation on land loss*.
- Li, Chi. 2013. *Community resilience to coastal hazards: An analysis of two geographical scales in Louisiana*.
- Mata, Lillian. 2013. *An analysis of the prevalence of the West Nile Virus in relation to health resilience along the Gulf of Mexico*.
- Tran, Quang. 2011. *Estimating greenhouse gas emissions in Louisiana at the parish scale*.
- LaRock, Danielle. 2011. *Temporal Changes in Quality of Life and Environment in New Orleans after Hurricane Katrina*.
- Li, Kenan. 2011. *Temporal changes of coastal community resilience in the Gulf of Mexico region*.
- Smith, Rebekah. 2010. *Historic Sediment Accretion Rates in a Louisiana Coastal Marsh and Implications for Sustainability*. (Co-chair with Dr. Jaye Cable).
- Perera, Priyan. 2009. *An environmental justice assessment of the Mississippi River industrial corridor in Louisiana*. 2009. (non-thesis research paper only)
- Baker, Ariele. 2009. *Creating an empirically derived community resilience index of the Gulf of Mexico region*.
- Tyrna, Abby. 2008. *Wetland mitigation banks and the no-net-loss requirement: an evaluation of the Section 404 Permit program in southeast Louisiana*.

M.S. Geography (15):

- Qin, Xiaojun. 2009. *A social vulnerability-based genetic algorithm to locate/allocate transit bus stops for disaster evacuation in New Orleans, Louisiana*.

- Challuri, Sainath. 2006. *An analysis of public transit accessibility using the distance constrained P-median problem approach: Bus stop consolidation for the Capital Area Transit System of East Baton Rouge Parish, Louisiana.*
- Kulkarni, Amit. 2004. *Evaluation of the impacts of Hurricane Hugo on the land cover of Francis Marion National Forest, South Carolina using remote sensing.*
- DeWeese, Georgina. 2001. *Bottomland forest reconstruction and classification using General Land Office Surveys, remote sensing, and geographic information systems.*
- Feng, WeiWen. 1998. *Predicting the spread of AIDS using artificial neural networks.*
- Nicholas, Dennis. 1998. *Measuring development in the Lower Mississippi Delta: an integrated environmental approach.*
- Hou, Ren-Rong. 1998. *A local-level approach in detecting scale effects on landscape indices.*
- Hupp, Robert. 1997. *Hazards analysis of extremely hazardous substance transport in Northwest Louisiana.*
- Duvic, Lisa. 1996. *Evaluation of location-allocation analysis and GIS for site selection of potential Louisiana state parks.*
- Dia, Ibrahima. 1996. *Assessing agricultural suitability of Senegalese landscape using GIS.*
- Cherukuri, Rajabhushanam. 1994. *Evaluation of methods for the delineation of land/water conditions using AVHRR imagery.*
- Campanella, Richard. 1993. *Mapping and measuring the cloud forests of Honduras for effective delimitation as natural reserves.*
- Graham, Keith. 1987. *Conversion of the Louisiana Railroad Safety Information System to a geographic information system using the Intergraph computer system.*
- Kuchar, Victor. 1984. *Line generalization: A comparison of three methods.* (at OSU)
- Jiang, Ruo-Shan. 1984. *An evaluation of three curve generation methods.* (at OSU)

Master of Engineering Sciences (As Co-chair) (3):

Eragani, Anuradha 2003; Kambalapally, Swathi 2002; Sagari, Vijay 2002

Master of Natural Sciences MNS (2):

Hampton Peele; Xiaoyun Kan 2004

I am presently serving as the major professor for four Ph.D. students (Rachel Correll, Kejin Wang, Jennifer Irving, Madeline Prosser) and one MS students (Robert Allison) in Environmental Sciences.

I have served as the major advisor for 9 postdoctoral research associates. In reverse chronological order they are: Volodymyr Mihunov, Zheyue Wang, Heng Cai, Lei Zou, Yi Qiang, Kenan Li, Fei Wang, Amit Kulkarni, Helbert Arenas.

Since 1980, I have served as a co-advisor, minor professor, and/or committee member for over 350 Masters and Ph.D. students in both Ohio State University and Louisiana State University.

1.2.6 Awards, lectureships or prizes that show recognition of teaching achievement

- 2023 Research Award, University Consortium on Geographic Information Science (UCGIS)
- 2020 Fellow, American Association of Geographers (AAG)
- 2016 Fellow, University Consortium on Geographic Information Science (UCGIS)
- 2016 The Inaugural Carolyn Merry Mentoring Award, UCGIS
- 2011 Outstanding Faculty Research Award, School of the Coast and Environment, LSU
- 2009 LSU Distinguished Research Master
- 2008 LSU Rainmaker (Top 100 research and creative faculty at LSU)

- 2006 LSU Distinguished Faculty Award
- 2004 Outstanding Contributions in Remote Sensing Award, AAG Remote Sensing Specialty Group
- 1980- Six PhD students and one postdoc researcher landed in doctoral granting departments as tenure-track assistant professors (Syracuse University, Arizona State University, University of Memphis, Texas A&M (2), University of Hawaii, Saint Louis University)
- 1993- Mentored one PhD student to obtain a four-year SREB (Southern Regional Education Board) fellowship, which is awarded to a first-generation college student with an outstanding record; Mentored one PhD student to obtain a 4-year NASA graduate fellowship (Stephanie Weigel) Mentored five PhD students to compete and successfully acquire NSF Dissertation Research Grants (Jane Read, Guiyun Zhou, Wenxue Ju, Wei Liang, Helbert Arenas)

1.2.7 Research Support/Grant Activities aimed at advancing one's ability to teach

(Note: this list of grants is extracted from a complete list under the Research section. This list includes only grants specifically for equipment and infrastructure enhancement.)

- Leitner M. and others. 2022. Teaching technology for the Humanities, Social-, Natural-, Environmental-, and Engineering Sciences in the digital age and era of big data. LSU Student Technology Fee (STF) Program. \$118,939. (Lam was one of the investigators: \$10,887 to RSGIS Lab)
- Leitner M. and others. 2017. Geospatial data collection technology for the Social-, Natural-, Environmental-, and Engineering Sciences. LSU Student Technology Fee (STF) Program. \$69,077. (Lam was one of the investigators)
- Voyiadjis G. and others. 2016. Acquisition of gravimetric instrumentation in support of a new quasigeoid model for accurate elevations in Louisiana. Louisiana Board of Regents. \$153,000. (Lam was one of the investigators)
- Reynolds A, Zeynep A, Brown P. Environmental communication for coastal Louisiana. 2013. LSU Coastal Sustainability Studio. \$11,220. 08/01-13-07/31/14. (Lam was an investigator)
- Lam NSN.** 2004-2008. Understanding and measuring regional economic development using and integrated spatial data mining approach. Economic development assistantship to support a PhD student for four years. Funded by LSU Office of Research and Graduate Studies. Total: \$100,000
- Lam NSN,** Leitner M, Curtis A, Braud D, Lewis A. 2002. A proposal to enhance research and instruction in geographic information science at LSU. Funded by LSU-CAPITAL, \$100,000.
- Curtis A, **Lam NSN,** Leitner M, Anderson J. 2002. Funded by LSU Tech. Fee, primarily to upgrade facilities in the Computer Mapping Sciences Laboratory and the Map Library. \$47,342.
- Lam NSN,** Leitner M, Braud D, Jones F. 1997-99. Geographic information systems and image processing equipment for the analysis and display of spatial data: enhancement in the era of information technology. Louisiana Board of Regents. \$150,000.
- Braud D, **Lam NSN,** Lewis AJ, Veeck G, Jones F. 1994-95. Establishment of a comprehensive, statewide, on-line geographic information system of Louisiana. Louisiana Board of Regents. \$190,000.
- McKillop, H., et al. 1994-1995. Mapping the past: archaeological field equipment to record spatial and temporal information. Louisiana Board of Regents. Approx: \$14,000. I am one of the investigators.
- Lam NSN.** 1991-92. Geographic information systems and image processing equipment for the analysis of spatial data. Louisiana Board of Regents. \$110,000. Other investigators are: Kesel R, Liu KB, Hirschboeck K, Veeck G, Jones F, Edwards J, Mckillop H.
- National Resource Center Grant from the U.S. Department of Education at the Ohio State University. 1981. \$140,000 est. for the first year. My role was to develop a new course on Geography of China.

1.3 Research

1.3.1 Research Publications

* Refers to the students/post-doc of whom I was/am major advisor/sponsor.

Books:

- Quattrochi DA, Wentz E, **Lam NSN**, Emerson CW. Eds. 2017. *Scale in Remote Sensing and GIScience Applications*. New York: Routledge. 401p.
- Lam NSN** and De Col L, eds. 2002. *Fractals in Geography*. Caldwell, NJ: The Blackburn Press. 308p. (A reprint of the 1993 edition).
- Lam NSN** and De Cola L, eds. 1993. *Fractals in Geography*. Englewood Cliffs, NJ: Prentice Hall. 308p.

Contributed Books/Special Journal Issues:

- Lam NSN**, Cai H, Zou L. Eds. 2022. Human-Environmental Interactions Research Using Remote Sensing. A Special Issue in *Remote Sensing*. Basel, Switzerland: MDPI.
- Xu YJ, **Lam NSN**, Liu KB. Eds. 2018. *Resilience and Sustainability of the Mississippi River Delta as a Coupled Natural-Human System*. London: MDPI. (Collected articles from the special issue published in *Water*).
- Lam NSN**, Kemp K, eds. 2012. A special issue on Reflections on Geographic Information Science: Papers in Honor of Michael Goodchild. *International Journal of Geographic Information Science* 26 (12):2193-2196.
- National Research Council. 2012. *Effective Tracking of Building Energy Use: Improving the Commercial Buildings and Residential Energy Consumption Surveys*. Panel on Redesigning the Commercial Building and the Residential Energy Consumption Surveys W.F. Eddy and K. Marton eds. Washington, DC: The National Academies Press. (Lam was on the committee and contributed to writing the book).
- Committee on Review of GIS Research and Applications at Housing and Urban Development, National Research Council. 2003. *GIS for Housing and Urban Development*. Washington, DC: The National Academies Press. (Lam was on the committee and contributed to writing the book).
- Committee on Earth System Science for Decisions about Human Welfare: Contributions of Remote Sensing, National Research Council. 2008. *Contributions of Land Remote Sensing for Decisions about Food Security and Human Health*. Washington, DC: The National Academies Press. (Lam was on the committee and contributed to writing the book).

Book Chapters:

19. **Lam NSN**. 2019. Resolution. The Geographic Information Science & Technology Body of Knowledge. (2nd Quarter 019 Edition), J. P. Wilson ed. DOI: 10.22224/gistbok/2019.2.11.
18. **Lam NSN**, Xu YJ, Pace RK, Liu KB, *Qiang Y, Narra S, Bianchette TA, *Cai H, *Zou L, *Li K, Joshi S, *Mihunov V. 2019. Collaboration across boundaries: Reflections on studying the sustainability of the Mississippi River Delta as a coupled natural-human system. In *Collaboration across Boundaries for Interdisciplinary Social-Ecological Systems Science*, eds. S. Perz. London: Palgrave Macmillan.
17. **Lam NSN**, *Zhou GY, *Ju W. 2008. Relating visual changes in images with spatial metrics. In *Understanding Dynamics of Geographic Domains*. Yuan M. and K. Hornsby, eds. Taylor & Francis, chapter 7, pp.115-130.
16. **Lam NSN**. 2008. Methodologies for mapping land cover/land use and its change. *Advances in Land*

- Remote Sensing: System, Modeling, Inversion and Application*. Liang, S. eds. Springer, Chap. 13.
15. **Lam NSN**, Catts D, McMaster R, Quattrochi D, Brown D. 2005. Scale. In *A Research Agenda for Geographic Information Science*, McMaster R, Usery L, eds., Chapter 4, pp. 93-128. Bacon Raton, FL: CRC Press.
 14. **Lam NSN**, Emerson C, Quattrochi D. 2004. Quantitative spatial analysis of remotely sensed imagery. In *WorldMinds: Geographical Perspectives on 100 Problems*, Janelle DG, Warf B, Hansen K, eds., pp. 559-564. Dordrecht, Netherlands: Kluwer Academic Publishers.
 13. *Ozdenerol E, **Lam NSN**. 2004. Detecting Spatial Clusters of Cancer Mortality in East Baton Rouge Parish, Louisiana. In *WorldMinds: Geographical Perspectives on 100 Problems*, Janelle DG, Warf B, Hansen K, eds., pp. 75-80. Dordrecht, Netherlands: Kluwer Academic Publishers.
 12. **Lam NSN**. 2004. Fractals and scale in environmental assessment and monitoring. In *Scale and Geographic Inquiry: Nature, Society, Method*, Sheppard E, McMaster R, eds., Chapter 1. Oxford, UK: Blackwell Publishing.
 11. Quattrochi DA, Emerson CW, **Lam NSN**, Qiu HL. 2001. Fractal characterization of multitemporal remote sensing data. In *Modelling Scale in Geographical Information Science*, Tate N, Atkinson P, eds., pp. 13-34.
 10. *Cao CY, **Lam NSN**. 1997. Understanding the scale and resolution effects in remote sensing and GIS. In *Scaling in Remote Sensing and GIS*, D. Quattrochi and M. Goodchild, eds., pp. 57-72. Boca Raton, Florida: CRC/Lewis Publishers.
 9. Quattrochi DA, **Lam NSN**, Qiu HL, *Zhao W. 1997. Image characterization and modeling system (ICAMS): A geographic information system for the characterization and modeling of multiscale remote sensing data. In *Scaling in Remote Sensing and GIS*, D. Quattrochi and M. Goodchild, eds., pp. 295-307. Boca Raton, Florida: CRC/Lewis Publishers.
 8. Quiroga CA, Singh VP, **Lam NSN**. 1996. Land-use hydrology. In *Geographical Information Systems in Hydrology*, V. P. Singh and M. Fiorentino, eds., pp. 389-414. Netherlands: Kluwer Academic Publishers.
 7. **Lam NSN**, De Cola L. 1993. Fractal measurement. In *Fractals in Geography*, Lam NSN and De Cola L, eds, pp. 23-55. Englewood Cliffs, NJ: Prentice Hall.
 6. **Lam NSN** and De Cola L. 1993. Fractal simulation and interpolation. In *Fractals in Geography*, Lam NSN and De Cola L, eds, pp. 56-74. Englewood Cliffs, NJ: Prentice Hall.
 5. De Cola L, **Lam NSN**. 1993. Introduction to fractals in geography. In *Fractals in Geography*, Lam NSN and De Cola L, eds., pp. 3-22. Englewood Cliffs, NJ: Prentice Hall.
 4. De Cola L, **Lam NSN**. 1993. A fractal paradigm for Geography? In *Fractals in Geography*, Lam NSN and De Cola L, eds, pp. 75-83. Englewood Cliffs, NJ: Prentice Hall.
 3. **Lam NSN**, Qiu HL, Zhao R, *Jiang N. 1993. A fractal analysis of cancer mortality patterns in China. In *Fractals in Geography*, Lam NSN and De Cola L, eds, pp. 247-261. Englewood Cliffs, NJ: Prentice Hall.
 2. **Lam NSN**, Qiu HL. 1992. The fractal nature of the Louisiana coastline. In *Geographical Snapshots of North America*, Janelle DG, ed., pp. 270-274. New York: The Guilford Press.
 1. Quattrochi DA, **Lam NSN**. 1991. Perspectives on integrating multiscale, multitemporal remote sensing data with geographic information systems. In *Proceedings: The Integration of Remote Sensing and Geographic Information Systems*, J. L. Star, ed., pp. 151-163. Bethesda, MD: American Society for Photogrammetry and Remote Sensing.

Articles in Refereed Journals:

117. **Lam NSN**, Meyer M, Reams M, Yang S, Lee K, *Zou L, *Mihunov V, *Wang K, Kirby R, *Cai H. 2023. Improving social media use for disaster resilience: challenges and strategies. *International Journal of Digital Earth*. (forthcoming).

116. *Mihunov V, *Wang K, *Wang Z, **Lam NSN**, Sun M. 2023. Social media and volunteer rescue requests prediction with Random Forest and algorithm bias detection: a case of Hurricane Harvey. *Environmental Research Communications* 5, 065013. <https://doi.org/10.1088/2515-7620/acde35>.
115. Kirby R, Reams M, **Lam NSN**. 2023. Social media challenges and emerging best practices among governmental and non-governmental organizations involved in emergency management. *Journal of Homeland Security and Emergency Management*. (in press)
114. *Zou L, Liao DQ, **Lam NSN**, Meyer MA, Gharaibeh NG, *Cai H, Zhou B, Li DY. 2023. Social media for emergency rescue: An analysis of rescue requests on Twitter during Hurricane Harvey. *International Journal of Disaster Risk Reduction* <https://doi.org/10.1016/j.ijdr.2022.103513>.
113. *Wang K, **Lam NSN**, *Mihunov V. 2023. Correlating Twitter use with disaster resilience at two spatial scales: A case study of Hurricane Sandy. *Annals of GIS*. <https://doi.org/10.1080/19475683.2023.2165545>
112. *Wang Z, **Lam NSN**, Sun M, Huang X, Shang J, *Zou L, Wu Y, *Mihunov V. 2022. A machine learning approach for detecting rescue requests from social media. *ISPRS International Journal of Geo-Information*. 11(11), 570; <https://doi.org/10.3390/ijgi11110570>.
111. *Mihunov V, Jafari N, *Wang K, **Lam NSN**, Govender D. 2022. Disaster impacts surveillance from social media with topic modeling and feature extraction: Case of Hurricane Harvey. *International Journal of Disaster Risk Science*. <https://doi.org/10.1007/s13753-022-00442-1>
110. Hoque MUL, Lee, K, Beyer JL, Curran SR, Gonser KS, **Lam NSN**, *Mihunov VV, *Wang K. 2022. Analyzing tweeting patterns and public engagement on Twitter during the recognition period of the COVID-19 pandemic: A study of two U.S. states. *IEEE Access*, Vol. 10, pp. 72879-72894. DOI: 0.1109/ACCESS.2022.3189670
109. **Lam NSN**, Cai H, Zou L. 2022. Editorial for the Special Issue: Human-Environmental Interactions Research Using Remote Sensing. *Remote sensing*, 14, 2720. <https://doi.org/10.3390/rs14112720> .
108. Wang XT, Zhang WG, Yin J, Wang J, Wu JP, **Lam NSN**. 2022. Spatial heterogeneity of land use along the coast of the Yangtze River Delta and implications for exposure assessment to erosion hazard. *Anthropocene Coasts*. <https://doi.org/10.1007/s44218-022-0001-7> .
107. *Cai H, **Lam NSN**, *Zou L. 2022. Incorporating neighborhood scale effects into land loss modeling using semivariograms. *Journal of Geographical Systems*. <https://doi.org/10.1007/s10109-021-00372-4> .
106. Zhang WG, Xu YJ, Guo LC, **Lam NSN**, Xu K, Yang SL, Yao Q, Liu KB. 2022. Comparing the Yangtze and Mississippi Deltas in the light of coupled natural-human dynamics: Lessons learned and implications for management. *Geomorphology*, 399, 108075.
105. Wang XT, Zhang WG, Yin J, Wang J, Ge Jianzhong, Wu Jianping, Luo W, **Lam NSN**. 2021. Assessment of coastal erosion vulnerability and socio-economic impact along the Yangtze River Delta. *Ocean and Coastal Management* 215. <https://doi.org/10.1016/j.ocecoaman.2021.105953>
104. *Lin W, Zeng CC, **Lam NSN**, Liu ZF, Tao JY, Zhang XX, Lyu BY, Li N, Li D, Chen QB. 2021. Study of the relationship between the spatial structure and thermal comfort of a pure forest with four distinct seasons at the microscale level. *Urban Forestry & Urban Greening* 62 (2021) 127168. <https://doi.org/10.1016/j.ufug.2021.127168>
103. Gao WL, Shen F, Tan K, Zhang WG, Liu QX, **Lam NSN**, Ge JZ. 2021. Monitoring terrain elevation of intertidal wetlands by utilizing the spatial-temporal fusion of multi-source satellite data: A case study in the Yangtze (Changjiang) Estuary. *Geomorphology*, 383, 107683, <https://doi.org/10.1016/j.geomorph.2021.107683>
102. *Wang K, **Lam NSN**, *Zou L, *Mihunov V. 2021. Twitter use in Hurricane Isaac and its implications for disaster resilience. *ISPRS International Journal of Geo-Information* 10, 116. <https://doi.org/10.3390/ijgi10030116> .
101. *Correll RM, **Lam NSN**, *Mihunov VV, *Zou L, *Cai H. 2020. Economics over risk: Flooding is not the only driving factor of migration considerations on a vulnerable coast. *Annals of the American Association of Geographers*. DOI: 10.1080/24694452.2020.1766409
100. Yao Q, Liu KB, Aragon-Moreno AA, Rodrigues E, Xu YJ, **Lam NSN**. 2020. A 5200-year

- paleoecological and geochemical record of coastal environmental changes and shoreline fluctuations in southwestern Louisiana: Implications for coastal sustainability. *Geomorphology*. <https://doi.org/10.1016/j.geomorph.2020.107284>
99. *Mihunov VV, **Lam NSN**. 2020. Modeling the dynamics of drought resilience in South-Central United States using a Bayesian network. *Applied Geography*. <http://doi.org/10.1016/j.apgeog.2020.102224>
 98. Cheng Q, Wang F, Chen J, Ge C, Chen Y, Zhao X, Nian X, Zhang W, Liu KB, Xu YJ, **Lam NSN**. 2020. Combined chronological and mineral magnetic approaches to reveal age variations and stratigraphic heterogeneity in the Yangtze River subaqueous delta. *Geomorphology* 359, 107163. <https://doi.org/10.1016/j.geomorph.2020.107163>
 97. *Wang Z, **Lam NSN**. 2020. Extending Getis–Ord statistics to account for local space–time autocorrelation in spatial panel data, *The Professional Geographer* 72(3): 411–420. <https://doi.org/10.1080/00330124.2019.1709215>
 96. *Mihunov VV, **Lam NSN**, *Zou L, *Wang Z, *Wang K. 2020. Use of Twitter in disaster rescue: lessons learned from Hurricane Harvey. *International Journal of Digital Earth*, 1-13. DOI: 10.1080/17538947.2020.1729879.
 95. *Mihunov VV, **Lam NSN**, Rohli RV, *Zou L. 2019. Emerging disparities in community resilience to drought hazard in south-central United States. *International Journal of Disaster Risk Reduction*, 41, 101302. <https://doi.org/10.1016/j.ijdrr.2019.101302> .
 94. *Wang Z, **Lam NSN**, Obradovich N, Ye X. 2019. Are vulnerable communities digitally left behind in social responses to natural disasters? An evidence from Hurricane Sandy with Twitter data. *Applied Geography* 108:1-8. <https://doi.org/10.1016/j.apgeog.2019.05.001>.
 93. Kirby RH, Reams MA, **Lam NSN**, *Zou L, Dekker GGJ, Fundter DOP. 2019. Assessing social vulnerability to flood hazards in the Dutch Province of Zeeland. *International Journal of Disaster Risk Science*. <https://doi.org/10.1007/s13753-019-0222-0> .
 92. Bushra N, Rohli RV, **Lam NSN**, *Zou L, bin Mostafiz R, *Mihunov V. 2019. The relationship between the Normalized Difference Vegetation Index and drought indices in the South-Central United States. *Natural Hazards* 96:791-808. <https://doi.org/10.1007/s11069-019-03569-5>.
 91. *Zou L, **Lam NSN**, Shams S, *Cai H, Meyer MA, Yang S, Lee K, Park S, Reams MA. 2019. Social and geographical disparities in Twitter use during Hurricane Harvey. *International Journal of Digital Earth*. Doi: 10.1080/17538947.2018.1545878.
 90. Xu YJ, **Lam NSN**, Liu KB. 2018. Assessing Resilience and Sustainability of the Mississippi River Delta as a Coupled Natural-Human System. *Water* 10, 1317, doi:10.3390/w10101317.
 89. **Lam NSN**, Xu YJ, Liu KB, Dismukes DE, Reams M, Pace RK, *Qiang Y, Narra S, *Li K, Bianchette TA, *Cai H, *Zou L, *Mihunov V. 2018. Understanding the Mississippi River Delta as a coupled natural-human system: Research methods, challenges, and prospects. *Water* 2018, 10, 1054; doi:10.3390/w10081054.
 88. *Cai H, **Lam NSN**, *Qiang Y, *Zou L, *Correll R, *Mihunov V. 2018. A synthesis of disaster resilience measurement methods and indices. *International Journal of Disaster Risk Reduction*. <https://doi.org/10.1016/j.ijdrr.2018.07.015>.
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 86. **Lam NSN**, *Qiang Y, *Li K, *Cai H, *Zou L, *Mihunov V. 2018. Extending resilience assessment to dynamic system modeling: Perspectives on human dynamics and climate change research. *Journal of Coastal Research*, Special Issue No. 85, pp. 1401-1405.
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Theses/Dissertations:

Lam NSN 1980. *Methods and Problems of Areal Interpolation*. Ph.D. Dissertation, The University of Western Ontario, London, Ontario, Canada.

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1.3.3 Other Creative and Artistic Contributions

Lam NSN, Quattrochi, D. A., Qiu, H.-L., Zhao, W. 1996. Developed ICAMS (Image Characterization And Modeling System), a software system to compute fractal dimensions and other spatial statistics for remote sensing images.

Lam NSN 1989. Created *the China County Boundary File*. Baton Rouge, LA: Geosciences Publications, Louisiana State University. (This was the first-ever digital boundary file of China, which included more than 2000 counties in China and was available in different mapping software formats.)

Lam NSN 1989. Coordinated the publication of *Quick Guides to Software Holdings of Computer Mapping Sciences Laboratory*, Documentation No. 2, Department of Geography and Anthropology, LSU.

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1.3.4 Participation in Professional Meetings, Symposia, Workshops, and Conferences

Paper Presentation with Abstracts:

Mihunov V, **Lam NSN**, Wang K, Wang Z, Sun M. 2023. Fairness and explainability of random forest regression in predicting social media rescue requests with socio-environmental features: case of

- Hurricane Harvey. Paper presented at the Annual Meeting of the American Association of Geographers, Denver, March 24. (online)
- Wang K, Mihunov V, **Lam NSN**. 2023. Mining social media for improved fairness: A case study of Hurricane Harvey. Paper presented at the Annual Meeting of the American Association of Geographers, Denver, March 23.
- Mihunov V, Wang K, Wang Z, **Lam NSN**, Sun M. 2022. Fairness and explainability of random forest regression in predicting social media rescue requests with socio-environmental features: case of Hurricane Harvey. Paper presented at the 2022 American Geophysical Union Meeting, Chicago, December 12, 2022.
- Liu KB, Yao Q, Cohen MCL, Rodrigues E, Ryu J, Aragon-Moreno AA, **Lam NSN**. 2022. Holocene history of mangrove distribution and migration along the Northern Gulf of Mexico Coast, U.S.A. Paper presented at the 10th Biennial Conference of the International Biogeography Society, Vancouver, Canada, June 2-6.
- Wang KJ, **Lam NSN**, Mihunov V. 2022. Mining Twitter data for disaster resilience at two spatial scales: A case study of Hurricane Sandy. Poster presented at the UCGIS meeting, Syracuse University. June 7-9.
- Wang KJ, **Lam NSN**, Mihunov V. 2022. Mining Twitter data for disaster resilience at two spatial scales. Annual Meeting of the American Association of Geographers, New York, March 1. (online)
- Liu KB, Yao Q, Rodrigues E, Ryu J, Cohen MCL, Aragon-Moreno AA, **Lam NSN**. 2022. Holocene biogeography of mangroves along the Northern Gulf of Mexico Coast, U.S.A. Annual Meeting of the American Association of Geographers, New York, March 1. (online)
- Zou L, **Lam NSN**, Cai H, Zhou B. 2022. Social media for emergency rescue: An analysis of rescue requests on Twitter during Hurricane Harvey. Annual Meeting of the American Association of Geographers, New York, March 1 (online)
- Lam NSN**. 2021. The Mississippi River Delta as a coupled natural-human system. Paper presented at the 7th International Conference on Estuaries and Coasts (ICEC2021), Shanghai, October 20. (online)
- Cai H, Lam NSN, Zou L. 2021. Incorporating neighborhood effect into land loss modeling in the Lower Mississippi River Delta. Annual Meeting of the American Association of Geographers, Seattle, April 10. (online)
- Mihunov V, Zou L, **Lam NSN**, Wang Z, Wang K. 2021. Analyzing the use of Twitter in hurricanes and floods: common approaches, lessons learned, and emerging trends. Annual Meeting of the American Association of Geographers, Seattle, April 9. (online)
- Zou L, **Lam NSN**, Qiang Y, Cai H. 2021. Geographical disparities of community resilience in the United States. Annual Meeting of the American Association of Geographers, Seattle, April 7. (online)
- Wang K, **Lam NSN**, Zou L, Mihunov V. 2021. Twitter use in Hurricane Isaac and its implications to disaster resilience. Annual Meeting of the American Association of Geographers, Seattle, April 7. (online)
- Correll R, **Lam NSN**, Zou L, Mihunov V, Cai H. 2020. Flood risk and economic opportunity: Moving forward in a changing Louisiana.. (Meeting cancelled)
- Liao D, Zou L, Meyer M, **Lam NSN**, Li D. 2020. Social media for emergency rescue: An analysis of rescue requests on Twitter during Hurricane Harvey. Annual Meeting of the American Association of Geographers, Denver, April 9. (Meeting cancelled)
- Wang K, **Lam NSN**, Zou L, Mihunov V. 2020. Twitter use in Hurricane Isaac and its implications to disaster resilience. Annual Meeting of the American Association of Geographers, Denver, April 7. (Meeting cancelled)
- Li K, **Lam NSN**, Cai H, Zou L, Wilson J. 2020. Assessing the sustainability of coupled natural-human systems using coupled differential equations. Annual Meeting of the American Association of Geographers, Denver, April 7. (Meeting cancelled)
- Cai H, **Lam NSN**. A coupled natural-human modeling of the land loss probability in the Mississippi River Delta. Annual Meeting of the American Association of Geographers, Denver, April 7. (Meeting cancelled)

- Mihunov V, **Lam NSN**, Zou L, Wang Z, Wang K. 2020. Use of Twitter in disaster rescue: Lessons learned from Hurricane Harvey. Annual Meeting of the American Association of Geographers, Denver, April 7. (Meeting cancelled)
- Wang Z, **Lam NSN**, Obradovich N, Ye X. 2020. Are vulnerable communities digitally left behind in social responses to natural disasters? An evidence from Hurricane Sandy with Twitter data. Annual Meeting of the American Association of Geographers, Denver, April 6. (Meeting cancelled)
- Liu KB, Yao Q, Ryu J, Cohen MCL, Aragon-Moreno AA, Rodrigues ESF, **Lam NSN**. 2019. Holocene paleoecology of black mangrove (*avicennia germinans*) along the Northern Gulf of Mexico Coast, U.S.A. International Quaternary Association (INQUA) meeting, Dublin, Ireland. July 26.
- Lam NSN**, Cai H, Zou L, Liu KB. 2019. Scale effects on land loss modeling in the Mississippi River Delta. International Cartographic Conference, Tokyo, Japan, July 17.
- Correll R, **Lam NSN**, Zou L, Mihunov V, Cai H. 2019. Economics and flood risk: Modeling population migration. Annual Meetings of the American Association of Geographers, Washington DC, Apr. 4.
- Wang F, **Lam NSN**. 2019. The spatio-temporal processes of land cover land use change and the process-based prediction of urban growth in the Texas Triangle. Annual Meetings of the American Association of Geographers, Washington DC, Apr. 4.
- Mihunov V, **Lam NSN**. 2019. Dynamics of the community resilience to drought hazard in the south-central United States. Annual Meetings of the American Association of Geographers, Washington DC, Apr. 3.
- Zou L, **Lam NSN**, Cai H. 2019. Sensing and improving disaster resilience through social media data mining. Annual Meetings of the American Association of Geographers, Washington DC, Apr. 3.
- Cai H, **Lam NSN**, Zou L. 2019. Coupled natural-human land loss modeling in the Lower Mississippi River Basin. Annual Meetings of the American Association of Geographers, Washington DC, Apr. 3.
- Lam NSN**. 2018. Understanding the Mississippi River Delta as a coupled natural-human system: Research methods, challenges, and prospects. American Geophysical Union (AGU) Fall Meeting 2018, Washington, DC. Dec. 14, 2018.
- Zou L, **Lam NSN**, Cai H, Meyer MM, Yang SW, Lee KS, Park SJ, Reams M. 2018. Sensing, building, and improving disaster resilience through social media data mining. American Geophysical Union (AGU) Fall Meeting 2018, Washington, DC. Dec. 11, 2018.
- Twilley R, Bentley SJ, Hagen SC, Edmonds DA, Xu KH, **Lam NSN**, Chen Q. 2018. DELTA SEES: Sustainability of deltaic coastlines. American Geophysical Union (AGU) Fall Meeting 2018, Washington, DC. Dec. 14, 2018
- Qiang Y, Bittenfield BP, **Lam NSN**, Van de Weghe N. 2018. Novel models for multi-scale spatial and temporal analyses. 2018 GIScience Meeting, Melbourne, Australia, Aug 28-30, 2018.
- Lam NSN**, Meyer M, Reams M, Park S, Yang S, Lee K, Zou L. 2018. Understanding social and geographical disparities in disaster resilience through the use of social media. In *Plenary: Identifying new frontiers for rapid reconnaissance research, Natural Hazards Workshop*, Broomfield, Colorado. July 11, 2018.
- Lam NSN**, Qiang Y, Li K, Cai H, Zou L, Mihunov V. 2018. Extending resilience assessment to dynamic system modeling: Perspectives on human dynamics and climate change research. *International Coastal Symposium (ICS) 2018*, Busan, Republic of Korea. May 13, 2018.
- Zou L, **Lam NSN**, Cai H. 2018. The changing roles of social media in disaster resilience. *Annual Meetings of Association of American Geographers (AAG) 2018*, New Orleans. April 13, 2018.
- Correll RM, **Lam NSN**, Zou L, Cai H, Mihunov V. 2018. Move or stay? A dilemma for coastal Louisiana residents. *Annual Meetings of Association of American Geographers (AAG) 2018*, New Orleans. April 13, 2018.
- Li K, **Lam NSN**. 2018. Self-taught deep-learning convolutional neural network for features detection in unlabeled remote sensing images. *Annual Meetings of Association of American Geographers*

- (AAG) 2018, New Orleans. April 12, 2018.
- Qiang Y, **Lam NSN**, Zou L, Cai H. 2018. Artificial intelligence and deep learning in the modeling of coupled natural and *human dynamics*. *Annual Meetings of Association of American Geographers (AAG) 2018*, New Orleans. April 1, 2018.
- Zou L, **Lam NSN**, Cai H. 2017. Leveraging social media data to understand disaster resilience: A case study of Hurricane Isaac. Poster presented at the *American Geophysical Union (AGU) Fall Meeting*, New Orleans, December 13, 2017.
- Lam NSN**, Qiang Y, Cai H, Zou L. 2017. A national assessment of exposure to flood hazards in the United States. Paper presented at the *American Geophysical Union (AGU) Fall Meeting*, New Orleans, December 12, 2017.
- Cai H, **Lam NSN**, Zou L. 2017. A coupled natural-human modeling of the land loss probability in the Lower Mississippi River Basin. Paper presented at the *American Geophysical Union (AGU) Fall Meeting*, New Orleans, December 11, 2017.
- Lam NSN**, Cheng W. 2017. Scale matters: Identifying the effects of landscape fragmentation on land loss. Paper presented at the *28th International Cartographic Conference (ICC2017)*. Washington, DC. July 6, 2017.
- Zou L, **Lam NSN**, Cai H, Qiang Y. 2017. Visualizing Social Media Data for Improved Understanding of Disaster Resilience. Paper presented at the *28th International Cartographic Conference (ICC017)*, Washington D.C. July 5, 2017.
- Cai H, **Lam NSN**, Zou L, Qiang Y. Assessing the dynamics of resilience using a Bayesian Network in the Lower Mississippi River Basin. Paper presented at the International Cartographic Conference (ICC2017). Washington, DC. July 5, 2017.
- Mihunov V, Zou L, **Lam NSN**. 2017. Temporal changes of community resilience to drought hazard in South-Central United States. Paper presented at the *28th International Cartographic Conference (ICC2017)*, Washington D.C. July 3, 2017.
- Zou L, **Lam NSN**, Cai H, Qiang Y. 2017. Visualizing and Mining Twitter Data for Improved Understanding of Disaster Resilience. Paper presented at the *International Symposium on Location-based Social Media and Tracking Data (LSMTD) 2017*, Washington D.C. July 2, 2017.
- Liu, K.B., Bianchette, T.A., Zou, L., Qiang, Y., and **Lam NSN**. 2017. Contribution of recent hurricanes to wetland sedimentation in coastal Louisiana, Paper presented at the *European Geosciences Union (EGU) meeting*, Vienna, Austria, April 26, 2017.
- Cai H, **Lam NSN**. 2017. Modeling the dynamics of resilience using a Bayesian network: The case in the Lower Mississippi River Basin. *Annual Meetings of Association of American Geographers (AAG) 2017*, Boston MA. April 8, 2017
- Zou L, **Lam NSN**. 2017. Mining Social Media Data for Improved Understanding of Disaster Resilience. *Annual Meetings of Association of American Geographers (AAG) 2017*, Boston MA. April 7, 2017
- Bianchette, T.A., Liu, K.B., Zou, L., **Lam NSN**, and Qiang, Y. 2017. Spatial and temporal variability of wetland accretion rates throughout southern Louisiana: Impacts from Hurricanes Gustav and Isaac, Paper presented at the *Annual Meeting of the Association of American Geographers*, Boston, April 6, 2017.
- Mihunov V, Zou L, **Lam NSN**. 2017. Temporal changes of community resilience to drought hazard in South-Central United States. Paper presented at the *Annual Meeting of the Association of American Geographers*, Boston, April 6, 2017.
- Lam NSN**, Qiang Y, Li K, Cai H, Zou L, Mihunov V, 2017. Modeling coastal resilience: The case of the Mississippi River Delta. Paper presented at the *2017 Annual Meeting of the Association of American Geographers*, Boston. April 5, 2017.
- Zou L, **Lam NSN**, Cai H, Qiang Y. 2016. Social Sensing of Disaster Resilience through Twitter: A Case Study of Hurricane Sandy. *3rd International Conference on CyberGIS and Geospatial Data Science*, Urbana IL, U.S. (Poster presentation) July 26-28, 2016.
- Lam NSN**. 2016. A transdisciplinary approach to modeling coastal sustainability: the case of Mississippi

- River Delta. Paper presented at the *Association for Environmental Studies and Sciences (AESS)*, Washington DC. June 11, 2016.
- Qiang Y, **Lam NSN**, Zou L, Cai H, Li K. 2016. Modeling long-term human dynamics in response to natural hazard using remote sensing data. *Abstracts, the 2016 Annual Meeting of the American Association of Geographers*, San Francisco. April 1, 2016.
- Li K, **Lam NSN**. 2016. An agent-based model of population changes in a vulnerable coastal environment. *Abstracts, the 2016 Annual Meeting of the American Association of Geographers*, San Francisco. April 1, 2016.
- Cai H, **Lam NSN**. 2016. Assessing community resilience to coastal hazards in the Lower Mississippi River Basin. *Abstracts, the 2016 Annual Meeting of the American Association of Geographers*, San Francisco. March 30, 2016.
- Mihunov V, Zou L, **Lam NSN**. 2016. Community resilience to drought hazard in South-Central U.S. *Abstracts, the 2016 Annual Meeting of the American Association of Geographers*, San Francisco. March 29, 2016.
- Zou L, **Lam NSN**. 2016. The impact of Hurricane Katrina on population dynamics in the Lower Mississippi River Basin. *Abstracts, the 2016 Annual Meeting of the American Association of Geographers*, San Francisco. March 29, 2016.
- Lam NSN**, Qiang Y, Li K, Cai H, Zou L, Mihunov V. 2016. From resilience assessment to dynamic system modeling: some perspectives on human dynamics and climate change research. *Abstracts, the 2016 Annual Meeting of the American Association of Geographers*, San Francisco. March 29, 2016.
- Bianchette T, Liu KB, *Qiang Y, **Lam NSN**. 2016. Wetland accretion rates along coastal Louisiana: Spatial and temporal variability in light of Hurricane Isaac's impacts. Paper presented at 2016 Ocean Science Meeting, New Orleans, Feb 25.
- Bushra N, Rohli R, **Lam NSN**, Zou L, Mihunov V, Reams M, Argote J. 2015. Drought indices as drought predictors in the South-central United States. Poster presented at American Geophysical Union (AGU) fall meeting, San Francisco, December 14, 2015.
- Lam NSN**. 2015. Mapping and assessing coastal resilience in the Caribbean region. *Cartography and Geographic Information Science*. Paper presented at the ICC 2015 (International Cartographic Conference) in Rio de Janeiro, August 27.
- Lam NSN**, Qiang Y, Liu KB. 2015. Analysis of land use and land cover changes in Mississippi Delta using a coupled natural-human system framework. Paper presented at the 2015 EARSeL Symposium (European Association of Remote Sensing Laboratories), June 18, 2015.
- Zou L, **Lam NSN**, Qiang Y, Li K, Cai H. 2015. A genetic algorithm optimized agent-based modeling of land loss and urban growth in the lower Mississippi River basin. *Abstracts, the 2015 Annual Meeting of the Association of American Geographers*, Chicago. April 25, 2015.
- Cai H, **Lam NSN**, Qiang Y, Li K, Zou L. 2015. Assessing the dynamics of coastal resilience using Bayesian networks. *Abstracts, the 2015 Annual Meeting of the Association of American Geographers*, Chicago. April 25, 2015.
- Li K, **Lam NSN**, Qiang Y, Zou L, Cai H. 2015. A cyberinfrastructure for community resilience assessment and visualization. *Abstracts, the 2015 Annual Meeting of the Association of American Geographers*, Chicago. April 23, 2015.
- Qiang Y, **Lam NSN**, Li K, Cai H, Zou L. 2015. Modeling the coupled natural and human dynamics in a vulnerable coastal system using cyberinfrastructure. *Abstracts, the 2015 Annual Meeting of the Association of American Geographers*, Chicago. April 21, 2015.
- Lam NSN**, Liu KB, Qiang Y, Reams M, Xu J, Rivera-Monroy V. 2014. Coupled natural-human dynamics in the Mississippi Delta. Paper presented at *the Deltas in Times of Climate Change II*. Rotterdam. September 25, 2014.
- Li K, **Lam NSN**. 2014. A hybrid model of cellular automata, Markov, and logistic regression for land change prediction in the Lower Mississippi River Basin. Student Poster Competition, the 30th Louisiana Remote Sensing and GIS Workshop, New Orleans, May 12-14. (Won the 3rd Prize).

- Zou L, **Lam NSN**, Cai H. 2014. Assessment of community resilience to drought hazards in Texas and Louisiana. Student Poster Competition, the 30th Louisiana Remote Sensing and GIS Workshop, New Orleans, May 12-14.
- Cai H, **Lam NSN**, Zou L. 2014. Predicting the resiliency of the East Coast counties after Hurricane Sandy. Student Poster Competition, the 30th Louisiana Remote Sensing and GIS Workshop, New Orleans, May 12-14.
- Lam NSN**, Arenas H*, Brito P*, Liu KB. 2014. Assessment of vulnerability and adaptive capacity to coastal hazards in the Caribbean region. Paper presented at the 2014 International Coastal Symposium, Durban, South Africa, April 13-16.
- Liu KB, McCloskey TA, Bianchette TA, Keller G, **Lam NSN**, Cable JE, Arriola J. 2014. Hurricane Isaac storm surge deposition in a coastal wetland along Lake Pontchartrain, Southern Louisiana. Paper presented at the 2014 International Coastal Symposium, Durban, South Africa, April 13-16.
- Li K, **Lam NSN**. 2014. Incorporating vulnerability in modeling population changes in a coastal environment. *Abstracts, the 2014 Annual Meeting of the Association of American Geographers* (CD-ROM), Tampa. April 12, 2014.
- Qiang Y, **Lam NSN**. 2014. Modeling land use and land cover changes in a vulnerable coastal region using artificial neural network. *Abstracts, the 2014 Annual Meeting of the Association of American Geographers* (CD-ROM), Tampa. April 11, 2014.
- Cai H, **Lam NSN**, Zou L. 2014. Predicting the resiliency of the east coast counties after Hurricane Sandy. *Abstracts, the 2014 Annual Meeting of the Association of American Geographers* (CD-ROM), Tampa. April 9, 2014.
- Nyerges T, Roderick M, Bennett D, Lam NSN, Prager, S. 2014. Towards resilient thinking about sustainable systems using CyberGIS. *Abstracts, the 2014 Annual Meeting of the Association of American Geographers* (CD-ROM), Tampa. April 9, 2014.
- Qiang Y, **Lam NSN**. 2014. Modeling land use and land cover changes in coastal Louisiana using artificial neural network. Paper presented at the 2014 State of the Coast Conference, New Orleans, March 18-20.
- Reams M, **Lam NSN**, Kirby R, Funder D. 2014. Assessing coastal community resilience in Louisiana and the Netherlands: conceptual and methodological challenges. Paper presented at the 2014 State of the Coast Conference, New Orleans, March 18-20.
- Reams M, **Lam NSN**, DeFrank L. 2014. Influences on community resilience: An examination of population return to New Orleans post-Katrina. Paper presented at the 2014 State of the Coast Conference, New Orleans, March 18-20.
- Goote E, Reams M, **Lam NSN**, Wilkins J, Daigle M, Land L, Sattler M, Atlinay Z. 2014. Influences on household and community-level mitigation efforts and adaptations to coastal hazards in Louisiana. Paper presented at the 2014 State of the Coast Conference, New Orleans, March 18-20.
- Paille B, Reams M, **Lam NSN**, Carney J. 2014. Planning and the pursuit of resilience in post-Katrina Louisiana: An examination of parish-level attitudes and actions. Paper presented at the 2014 State of the Coast Conference, New Orleans, March 18-20.
- Qiang Y, **Lam NSN**. 2013. Comparing the land use and land cover change between the north and south Louisiana using data mining. Paper presented at the 29th Louisiana Remote Sensing and GIS Workshop, Lafayette, April 23, 2013.
- Li C, **Lam NSN**, Reams M, Mata L. 2013. Coastal community resilience in Louisiana, 1995-2010. *Abstracts, the 2013 Annual Meeting of the Association of American Geographers* (CD-ROM), Los Angeles. April 10, 2013.
- Li K, **Lam NSN**. 2013. Modeling the coupled natural and human system in the Lower Mississippi River Delta region: Critical transitions simulation from a resilient perspective. *Abstracts, the 2013 Annual Meeting of the Association of American Geographers* (CD-ROM), Los Angeles. April 9, 2013.
- Lam NSN**, Reams M, Li K, Wang F, LaRock D, Baker A. 2012. On community resilience measurement:

- Bridging geospatial analysis and adaptive management. Paper presented at the Geoinformatics 2012 conference, Hong Kong, June 16, 2012.
- Lam NSN**, Li K, Wang F, Reams M, Baker A, LaRock D. 2012. Bridging geospatial analysis and adaptive management: An approach to resilience measurement. Paper presented at the University Consortium for Geographic Information Science 2012 Symposium. Washington DC, May 31, 2012.
- Li K, **Lam NSN**, Reams M. 2012. Temporal changes of coastal community resilience in the Gulf of Mexico region. Student poster competition in the 28th Louisiana Remote Sensing and GIS Workshop, Baton Rouge, April 24-25, 2012. (The poster won the first prize).
- Lam NSN**, Reams M, Li K*, Mata L*, Li C*. 2012. On community resilience. Paper presented at the 28th Louisiana Remote Sensing and GIS Workshop, Baton Rouge, April 24, 2012.
- Wang F, **Lam NSN**, Reams M, Kulkarni A, Li K. 2012. A self-organization-based approach for measuring community resilience. *Abstracts, the 2012 Annual Meeting of the Association of American Geographers* (CD-ROM), New York. February 24, 2012.
- Reams M, **Lam NSN**. 2011. Influences on environmental risk perceptions and adaptive behaviors among residents of Louisiana's upper industrial corridor. Poster presented in the American Public Health Association, Washington DC, October 2011.
- Lam NSN**, Arenas H. 2011. Modeling and mapping the spatial-temporal dynamics of business recovery in New Orleans after Hurricane Katrina. *Abstract of the 25th International Cartographic Conference*. Paris, July 3-8, 2011.
- Lam NSN**, Liu KB, Liang W, Bianchette TA, Platt WJ. 2011. Effects of hurricanes on the Gulf Coast Ecosystems: A remote sensing study of land cover change around Weeks Bay, Alabama. *Abstract of the 11th International Coastal Symposium*, Lisbon, Szczecin, Poland, May 10, 2011.
- Arenas H, **Lam NSN**. 2011. Spatio-temporal dynamics of the business reopening process in New Orleans after Hurricane Katrina. *Abstracts, the 2010 Annual Meeting of the Association of American Geographers* (CD-ROM), Washington DC. April 15, 2010.
- LaRock D, **Lam NSN**, Braud D. 2011. Temporal changes in quality of life and environment in New Orleans after Hurricane Katrina. *Abstracts, the 2010 Annual Meeting of the Association of American Geographers* (CD-ROM), Washington DC. April 15, 2010.
- Li, K, LaRock D, **Lam NSN**, Reams M. 2011. Temporal changes of coastal community resilience in the Gulf of Mexico Region. *Abstracts, the 2010 Annual Meeting of the Association of American Geographers* (CD-ROM), Washington DC. April 15, 2010.
- Lam NSN**, Arenas H. 2011. Modeling and mapping the spatial-temporal dynamics of business recovery in New Orleans after Hurricane Katrina. *Abstract of the 25th International Cartographic Conference*. Paris, July 3-8, 2011.
- Lam NSN**, Liu KB, Liang W, Bianchette TA, Platt WJ. 2011. Effects of hurricanes on the Gulf Coast Ecosystems: A remote sensing study of land cover change around Weeks Bay, Alabama. *Abstract of the 11th International Coastal Symposium*, Lisbon, Szczecin, Poland, May 10, 2011.
- Arenas H, **Lam NSN**. 2011. Spatio-temporal dynamics of the business reopening process in New Orleans after Hurricane Katrina. *Abstracts, the 2010 Annual Meeting of the Association of American Geographers* (CD-ROM), Washington DC. April 15, 2010.
- LaRock D, **Lam NSN**, Braud D. 2011. Temporal changes in quality of life and environment in New Orleans after Hurricane Katrina. *Abstracts, the 2010 Annual Meeting of the Association of American Geographers* (CD-ROM), Washington DC. April 15, 2010.
- Li, K, LaRock D, **Lam NSN**, Reams M. 2011. Temporal changes of coastal community resilience in the Gulf of Mexico Region. *Abstracts, the 2010 Annual Meeting of the Association of American Geographers* (CD-ROM), Washington DC. April 15, 2010.
- Lam NSN**, Pace K, LeSage J, Campanella R. 2010. Modeling business return amid post-disaster uncertainties: New Orleans after Katrina. NSF-HSD (Human Social Dynamics) Grantees Conference. September 27-28, 2010. Washington DC.
- Lam NSN**, Reams M. 2010. On the development of a community resilience index. Meeting of the Center

- for Natural Resources Economics and Policy (CNREP), New Orleans, May 26-28, 2010.
- Reams M, **Lam NSN**. 2010. On the development of a community resilience index. 16th Annual International Symposium on Society and Resource Management (ISSRM), Corpus Christi, Texas, June 6-10, 2010.
- Arenas H, **Lam NSN**. 2010. Temporal dynamics of business reopening predictors in New Orleans after Katrina. *Abstracts, the 2010 Annual Meeting of the Association of American Geographers* (CD-ROM), Washington DC. April 15, 2010.
- Liu KB, Bianchette TA, **Lam NSN**, Platt WJ, Yao Q. 2010. Effects of hurricanes on coastal ecosystems around Weeks Bay, Alabama: Integrating paleotempestology with palynology and remote sensing. *Abstracts, the 2010 Annual Meeting of the Association of American Geographers* (CD-ROM), Washington DC. April 15, 2010.
- Wang F, **Lam NSN**. 2010. Detecting the processes of land-cover land-use change: A genetic Petri net based approach. *Abstracts, the 2010 Annual Meeting of the Association of American Geographers* (CD-ROM), Washington DC. April 14, 2010.
- Lam NSN**, Arenas H, Liu KB, Brito P. 2009. Assessing the coastal population at risk to sea level rise in the Caribbean Region. *Proceedings of the International Cartographic Conference*, Santiago, Chile. November 20, 2009.
- Reams M, **Lam NSN**. 2009. A framework for measuring community resilience, Association of Environmental Sciences and Studies (AESS), Inaugural Meeting, Madison, Wisconsin, October 13-17, 2009.
- Lam NSN**, Arenas H, Li Z, Liu KB. 2009. An estimate of population impacted by climate change along the U.S. coast. Paper presented at the 10th International Coastal Symposium, Lisbon, Portugal, April 14, 2009.
- Bianchette TA, Liu KB, **Lam NSN**, Kiage LM. 2009. Ecological impacts of Hurricane Ivan on the Gulf Coast of Alabama: A remote sensing study. Paper presented at the 10th International Coastal Symposium, Lisbon, Portugal, April 15, 2009.
- Lam NSN**, Reams M, Baker A, DeFrank L, Martin A. 2009. On the development of a community resilience index. *Abstracts, the 2009 Annual Meeting of the Association of American Geographers* (CD-ROM), Las Vegas, Nevada. March 26 2009.
- Arenas H, **Lam NSN**. 2009. Evaluating predictors for business recovery in New Orleans after Hurricane Katrina. *Abstracts, the 2009 Annual Meeting of the Association of American Geographers* (CD-ROM), Las Vegas, Nevada. March 26, 2009.
- Baker A, **Lam NSN**, Reams M, DeFrank L, Martin A. 2009. Creating an empirically derived resilience index for Louisiana and the Gulf of Mexico Region. *Abstracts, the 2009 Annual Meeting of the Association of American Geographers* (CD-ROM), Las Vegas, Nevada. March 25, 2009.
- Qin X, **Lam NSN**, Liang W. 2009. Using social vulnerability-based genetic algorithm to improve CAEP plan for disaster evacuation in New Orleans, Louisiana. *Abstracts, the 2009 Annual Meeting of the Association of American Geographers* (CD-ROM), Las Vegas, Nevada. March 23, 2009.
- Liang W, **Lam NSN**, Qin X. 2009. The simulation of different evacuation strategies for regional evacuation. *Abstracts, the 2009 Annual Meeting of the Association of American Geographers* (CD-ROM), Las Vegas, Nevada, March 23, 2009.
- Lam NSN**. 2008. Relating visual changes in images with spatial metrics. *Abstracts, the 2008 Annual Meeting of the Association of American Geographers* (CD-ROM), Boston, April 15.
- Ju W, **Lam NSN**. 2008. Integrating lacunarity analysis and support vector machines for land use/cover classification. *Abstracts, the 2008 Annual Meeting of the Association of American Geographers* (CD-ROM), Boston, April 17.
- Kulkarni A, **Lam NSN**. 2008. Impervious surface detection using object-based image analysis. *Abstracts, the 2008 Annual Meeting of the Association of American Geographers* (CD-ROM), Boston, April 17.
- Wang F, **Lam NSN**. 2008. Data mining, process mining, and spatiotemporal modeling for land-cover and land-use study. *Abstracts, the 2008 Annual Meeting of the Association of American Geographers*

- (CD-ROM), Boston, April 17.
- Lam NSN**, Pace K, Campanella R. 2007. Decision making among businesses in post-catastrophe uncertainty: How economic geographies re-form in New Orleans. *Abstracts, the 2007 Annual Meeting of the Association of American Geographers* (CD-ROM), San Francisco, April 20.
- Ju W, **Lam NSN** 2007. A genetic Bayesian approach for texture-aided urban land use/cover classification. *Abstracts, the 2007 Annual Meeting of the Association of American Geographers* (CD-ROM), San Francisco, April 20.
- Wang F, **Lam NSN** 2007. Land cover/land use classification, change detection, and predictive modeling using genetic algorithm and cellular automata. *Abstracts, the 2007 Annual Meeting of the Association of American Geographers* (CD-ROM), San Francisco, April 18.
- Lam NSN**, Pace K, Campanella R. 2006. Business return or not: The economic impacts of Katrina disaster on New Orleans. North American Regional Science Association Conference, Toronto, Canada, November 15-19, 2006
- Lam NSN**, Pace K, Campanella R. 2006. Decision making among businesses in post-catastrophe uncertainty: How economic geographies re-form in New Orleans. Workshop on Social science research of the Katrina Aftermath" organized by University of North Carolina-Charlotte on November 3-4, 2006, New Orleans.
- Lam NSN** 2006. Reducing uncertainties in health risk assessment: A spatial analysis framework. *IGU 2006 Brisbane Conference Proceedings* (CD-ROM), July 3-7.
- Zhou GY, **Lam NSN**, Pace K, Campanella R. 2006. Decision making among businesses in post-catastrophe uncertainty: How economic geographies re-form in New Orleans. *Abstracts, the 2006 Annual Meeting of the Association of American Geographers* (CD-ROM), Chicago.
- Wang F, **Lam NSN**. 2006. Machine learning algorithms for land-cover and land-use classification. *Abstracts, the 2006 Annual Meeting of the Association of American Geographers* (CD-ROM), Chicago, March 9.
- Kulkarni A, **Lam NSN** 2006. Change detection for Hurricane Hugo using local fractal triangular pris approach. *Abstracts, the 2006 Annual Meeting of the Association of American Geographers* (CD-ROM), Chicago, March 9.
- Lam NSN**, Emerson, C.W., and Quattrochi, D.A. 2005. A spatial metric for land cover identification and change detection. *Abstracts, The 9th International Symposium on Physical Measurement and Signature in Remote Sensing*. Beijing, China. October 17-19.
- Emerson, C.W., Chinniah, S., **Lam NSN**, and Quattrochi, D.A. 2005. A region quadtree-based framework for similarity searches of image databases. *Geocomputation Workshop, Abstracts*. Ann Arbor, Michigan. August.
- Lam NSN**, Emerson, C.W., and Quattrochi, D.A. 2004. From fractals, wavelets to homeland security: Use of spatial techniques for change detection. *GIScience 2004 Abstracts*, Maryland, October.
- Lam NSN** 2004. From fractals, wavelets to homeland security: Use of spatial technologies for change detection. Paper presented at the 20th Annual Louisiana Remote Sensing and GIS Workshop, Lafayette, April 20.
- Emerson, C.W., Quattrochi, D.A., and **Lam NSN** 2004. An analysis of texture-based urban land cover classification. *Abstracts, The Association of American Geographers 100th Annual Meeting*, Philadelphia, March 17 (in CD-ROM).
- Lam NSN** 2003. Challenges in spatial analysis: An assessment. Keynote Speaker, Spatial Analysis and Modeling Specialty Group. *Abstracts, The Association of American Geographers 99th Annual Meeting*, New Orleans, March 6 (in CD-ROM).
- Emerson, C. W., **Lam NSN**, and Quattrochi, D. A. 2002. Image segmentation and classification using local fractal dimension and spatial autocorrelation. Poster presented at the American Geophysical Union Meeting, San Francisco, December.
- Emerson, C. W., Quattrochi, D. A., and **Lam NSN** 2002. Spatial metadata for global change investigations using remote sensing. *GIScience 2002 Abstracts*. Santa Barbara, CA: University of California Regents. pp. 239-241.

- Lam NSN** 2002. Trends and directions in GIS research: Some Perspectives. Keynote Speaker, GIS Specialty Group Plenary Session. *Abstracts, The Association of American Geographers 98th Annual Meeting*, Los Angeles, March 20 (in CD-ROM).
- Zhao, W. and **Lam NSN** 2002. Multiscale image characterization using fractal and wavelet techniques. *Abstracts, The Association of American Geographers 98th Annual Meeting*, Los Angeles, March 21 (in CD-ROM).
- Read, J. and **Lam NSN** 2000. Comparison of digital spatial pattern recognition indices for characterizing land cover from remote sensing data. *Abstracts, The Association of American Geographers 96th Annual Meeting*, Pittsburgh, April 3-9, 2000.
- Bark, M. and **Lam NSN** 2000. Detection of spatial clusters of lung cancer mortality in Louisiana, USA. Abstract, the International Geographical Congress, Seoul, Korea, August 2000.
- Lam NSN** 1999. Virtual seminar in GIS. *Abstracts, The Association of American Geographers 95th Annual Meeting*, March.
- Lam NSN** 1998. Spatial analysis in human health risk assessment. *Abstracts, the International Conference on China and the World in the 21st Century*, Hong Kong, August 13-15, p. 190 (in Chinese).
- Lam NSN**, Dugas, D., and Smith, K. 1998. A spatial analysis framework for human health risk assessment. *Abstracts, The Association of American Geographers 94th Annual Meeting*, 444. Boston.
- Qiu, H.-L., **Lam NSN**, Quattrochi, D. A. 1998. Characterizing hyperspectral imagery (AVIRIS) using fractal technique. *Abstracts, The Association of American Geographers 94th Annual Meeting*, 657. Boston.
- Quattrochi, D. A., Emerson, C. W., **Lam NSN**, and Laymon, C. 1998. Fractal analysis of Landsat satellite data using the Image Characterization And Modeling Systems. *Abstracts, The Association of American Geographers 94th Annual Meeting*, 658. Boston.
- Lam NSN**, Qiu, H.-L., Quattrochi, D. 1997. An evaluation of fractal surface measurement methods using ICAMS (Image Characterization And Modeling System). Paper presented in the ACSM/ASPRS Annual Convention in conjunction with Auto-Carto, Seattle, April.
- Quattrochi, D. A., **Lam NSN**, and Qiu, H.-L. 1997. The ICAMS (Image Characterization and Modeling System) for measuring, characterizing, and modeling multiscale remote-sensing data. Invited paper presented at the Annual Conference of Royal Geographic Society - Institute of British Geographers (RGS-IBG) , Exeter, UK, January
- Qiu, H.-L., **Lam NSN**, and Quattrochi, D. 1997. Characterizing remote-sensing images using ICAMS. *Abstracts, The Association of American Geographers 93rd Annual Meeting*, 216. Fort Worth.
- Read, J. and **Lam NSN** 1997. Methods of land-cover change detection for the Tropics using Landsat TM. *Abstracts, The Association of American Geographers 93rd Annual Meeting*, 220. Fort Worth.
- Zhao, W., **Lam NSN**, Qiu, H.-L., and Quattrochi, D. 1997. A fractal module for multispectral image analysis in ICAMS. *Abstracts, The Association of American Geographers 93rd Annual Meeting*, 299. Fort Worth.
- Lam NSN** and Liu, K. B. 1996. On generating a national rural sampling frame for HIV/AIDS research. *Annual Meeting of the Association of American Geographers Abstracts*, 162. Charlotte.
- Lam NSN**, Quattrochi, D., and Qiu, H. L. 1995. A GIS for the characterization and modeling of multi-scale remote-sensing data using fractals. *Proceedings of the Eleventh Annual Louisiana Remote Sensing and Geographic Information Systems Workshop*, 19. Lafayette, LA.
- Lam NSN** and Liu, K. B. 1995. Using a GIS to generate clusters of rural counties for acquired immune deficiency syndrome (AIDS) patient sampling. *Proceedings of the Eleventh Annual Louisiana Remote Sensing and Geographic Information Systems Workshop*, 15. Lafayette, LA.
- Lam NSN** and Quattrochi, D. 1995. A GIS for the characterization and modeling of multiscale remote-sensing data using fractals and selected spatial techniques. *Annual Meeting of the Association of American Geographers Abstracts*, 165-166. Chicago.
- Lam NSN** and Liu, K. B. 1995. Generating clusters of rural counties for AIDS patient sampling. Poster

- presented at the International Symposium on Computer Mapping in Epidemiology and Environmental Health, Tempa, FL. February.
- Lam NSN** and Song, Y. P. 1994. Neural network applications in wetland classification. Abstract of the *10th Annual Workshop on Remote Sensing and Geographic Information Systems for Coastal Management in Louisiana*, 25. LSU, May.
- Lam NSN** and Song, Y. P. 1994. A back-propagation neural network classifier for remote sensing image classification. Annual Meeting of the Association of American Geographers Program Abstract, 205. San Francisco. April.
- Lam NSN**, Algeo, K., Fan, M., and Liu, K. B. 1993. Gravity model-based predictions of the regional spread of AIDS in the United States. *Annual Meeting of the Association of American Geographers Program Abstracts*, 131. Atlanta, April.
- Fan, M., **Lam NSN**, and Liu, K. B. 1993. Using GIS to model the spatial spread of the AIDS epidemic in the United States. Paper presented at the 1993 ACSM/ASPRS Annual Convention, New Orleans, February.
- Lam NSN**, Liu, K. B., and Fan, M. 1992. Mapping and modeling the spread of AIDS in the United States during the last decade based on county data. *Technical Program Abstracts, 27th International Geographical Congress*, Washington, D. C., 340.
- Lam NSN** and Liu, K. B. 1992. Spatial analysis of the AIDS epidemic in the United States based on county data. *Annual Meeting of the Association of American Geographers Program Abstracts*, 129. San Diego.
- Quattrochi, D. A. and **Lam NSN** 1992. Fractal measurement for analysis of landscape characteristics from multiple scaled remote sensing data. *Annual Meeting of the Association of American Geographers Program Abstracts*, 197. San Diego.
- Lam NSN** 1990. The role of geographical scale in analyzing cancer mortality patterns in China. Paper presented at the 1990 IGU Regional Conference on Asian Pacific Countries, Beijing, China.
- Lam NSN**, Zhao, R., Jiang, N., and Qiu, H. L. 1990. The role of geographical scale in analyzing cancer mortality patterns in China. *Abstracts, IGU Regional Conference on Asian Pacific Countries* 2:13-12.
- Lam NSN** and Qiu H. L. 1990. An analysis of cancer mortality patterns in China using fractals. *Annual Meeting of the Association of American Geographers Program Abstracts*, 132.
- Lam NSN** and Liu, K. B. 1989. Geography of the AIDS epidemic in the United States based on county data. *Annual Meeting of the Association of American Geographers Program Abstracts*, 112.
- Lam NSN** and Qiu, H. L. 1988. The measurement and description of polygonal surfaces using fractals. *Abstracts of the 26th Congress of the International Geographical Union* 1:321.
- Liu, K. B. and **Lam NSN** 1988. Geography of the AIDS epidemic in Louisiana. *Annual Meeting of the Association of American Geographers Program Abstracts*, 113.
- Lam NSN**, Grim, P. J., and Jones, F. 1987. Data integration in geographic information systems: An experiment. Paper presented at the 1987 ASPRS-ACSM Annual Convention, Baltimore, Maryland.
- Lam NSN** 1987. Algorithms for generation and measurement of fractals: Do they match? *Annual Meeting of the Association of American Geographers Program Abstracts*, 56.
- Lam NSN** and Jiang R. S. 1986. An evaluation of curve generation methods. *Annual Meeting of the Association of American Geographers Program Abstracts*, 282.
- Liu, K. B. and **Lam NSN** 1985. Discriminant analysis of late Quaternary pollen stratigraphies from Ontario. Paper presented at the Sixteenth Conference on Modeling and Simulation, Pittsburgh.
- Lam NSN** 1985. A method for choropleth inversion. Paper presented at the 45th Annual Meeting of the American Congress on Surveying and Mapping, Washington, D.C.
- Lam NSN** 1985. Estimating small-area data from choropleth maps - An example using China's cancer data. *Annual Meeting of the Association of American Geographers Program Abstracts*, 229.
- Lam NSN** 1984. Cancer mortality patterns in China: A geographic information system approach. *Annual Meeting of the Association of American Geographers Program Abstracts*, 9. Washington DC

- Lam NSN** and Liu, K. B. 1984. A geographic information system for the palynologists: An Ontario example. Paper presented at the Fifteenth Conference on Modeling and Simulation, Pittsburgh.
- Shelberg, M. C., **Lam NSN**, and Moellering, H. 1983. Measuring the fractal dimensions of surfaces. Paper presented at the Sixth International Symposium on Computer-Assisted Cartography, Ottawa.
- Lam NSN** 1983. The effect of areal unit shape on its accuracy: A reassessment. *Annual Meeting of the Association of American Geographers Program Abstracts*, 49. Denver
- Lam NSN** 1983. Estimating small-area data from choropleth maps. Paper presented at the Fourteenth Conference on Modeling and Simulations, Pittsburgh.
- Lam NSN** 1982. Applications of areal interpolation: The case in Columbus, Ohio. *Annual Meeting of the Association of American Geographers Program Abstracts*, 110. San Antonio.
- Shelberg, M. C., Moellering, H., and **Lam NSN** 1982. Measuring the fractal dimensions of empirical cartographic curves. Paper presented at the Fifth International Symposium on Computer-Assisted Cartography. Washington, D.C.
- Lam NSN** 1981. An examination of the effect of interpolation models on isarithmic mapping. *Annual Meeting of the Association of American Geographers Program Abstracts*, 138. Los Angeles.
- Lam NSN** 1981. The reliability problem of spatial interpolation models. Paper presented at the Thirteenth Conference on Modeling and Simulation, Pittsburgh.
- Liu, K. B. and **Lam NSN** 1980. Reconstructing the post-glacial vegetational history of east-central Canada: A statistical approach based on modern and fossil pollen data. *Annual Meeting of the Association of American Geographers Program Abstracts*, 44. Louisville.
- Lam NSN** 1979. An application of automated map overlay procedures in spatial interpolation problems. *Annual Meeting of the Association of American Geographers Program Abstracts*, 189. Philadelphia.
- Liu, K. B. and **Lam NSN** 1979. Application of statistical techniques to the reconstruction of post-glacial vegetational changes from pollen data: An example from eastern Canada. Paper presented at the Annual Meeting of the Canadian Association of Geographers, Victoria, British Columbia.
- Radke, J. and **Lam NSN** 1978. A theoretical disturbance of a regular lattice. Paper presented at the Annual Meeting of the Canadian Association of Geographers, London, Ontario.
- Goodchild, M. F., **Lam NSN**, and Radke, J. 1978. An approach to the study of nodal growth. Paper presented at the Annual Meeting of Canadian Association of Regional Science, Waterloo, Ontario.
- Lam NSN** and Radke, J. 1978. A graph theoretical approach to input and output analysis. *Annual Meeting of the Association of American Geographers Program Abstracts*, 145. New Orleans.

Keynote/ Sponsored Speaker/Panel at Professional Meetings and Universities:

- Lam NSN**. 2023. Panel member, Past, present, and future of GIScience. Annual Meeting of the American Association of Geographers, Denver, March 24, 2023.
- Lam NSN**. 2022. Presenter. Coastal resiliency research initiatives. Conference organized by the Environment and Health Council of Louisiana. November 11, 2022.
- Lam NSN**. 2022. Spatiotemporal Computing Workshop. Organized by George Mason University and University of Washington, Seattle, August 18-19.
- Lam NSN**. 2022. Keynote speaker. How GIScience can contribute to disaster resilience analysis: The development of the Resilience Inference Measurement (RIM) Model. The 2022 Geoinformatics Conference (the 30th Anniversary of CPGIS), Beijing, China. August 15-18.
- Lam NSN**. 2020. Invited as a keynote speaker at the 2020 Chinese Professionals in GIS (CPGIS) Conference in Nanchang, China, June 2020. (Meeting cancelled)
- Lam NSN**. 2020. Panel member, Geography's role of advancing convergence research on urban resilience. Annual Meeting of the American Association of Geographers, Denver, April 10, 2020. (Meeting cancelled)

- Lam NSN.** 2020. Keynote speaker. Scale matters in coupled natural-human system modeling: The case of Mississippi River Delta. SPARC Scale workshop, Arizona State University, Tempe, AZ. Feb 9-10, 2020.
- Lam NSN.** 2019, Faculty three-minutes talk. LSU. Coast and Environment Graduate Student Organization (CEGO). October 4.
- Lam NSN.** 2019. Geographic information science. Seminar sponsored by the LSU Superfund Research Center. April 30.
- Lam NSN.** 2019. Are happiest cities most resilient to disasters? – Challenges in community resilience assessment Invited speaker, Department of Geography, Pennsylvania State University, March 22.
- Lam NSN.** 2018. Invited to participate in the 25th Annual Institute on Teaching and Mentoring in Washington DC, Oct 25-28, 2018. (The Institute is the nation’s largest gathering of racial/ethnic minority PhD scholars seeking careers in Academia.)
- Lam NSN.** 2018. Invited to participate in the Mega-Delta Conference organized by East China Normal University, Shanghai, China, Oct 14-18, 2018.
- Lam NSN.** 2018. Selected to participate in the NSF workshop on Coast and People (CoPe) in San Diego, Sept 25-28, 2018.
- Lam NSN.** 2018. Invited to give a talk titled “Measuring community resilience to natural hazards” at Sichuan Agricultural University, Chengdu, China, Oct 18-22, 2018.
- Lam NSN.** 2017. Panel member, Panel on Mentoring. UCGIS Symposium. Washington DC, May 22, 2017.
- Lam NSN.** 2017. Panel member, Coupled Natural-Human (CNH) Dynamics. *Annual Meeting of the Association of American Geographers*, Boston. April 7, 2017.
- Lam NSN.** 2015. Are happiest cities most resilient to disasters? Challenges in community resilience assessment. Presentation as External Advisor to the NSF IGERT GEEMap (Geoinformatics for Environmental and Energy Modeling and Prediction) Workshop, University of Iowa. October 17.
- Lam NSN.** 2015. UCGIS 20th Anniversary Retrospective Panel. UCGIS 2015 Symposium, Washington DC. May 29.
- Lam NSN.** 2015. Research Panel – Future Directions. UCGIS 2015 Symposium, Washington DC. May 30.
- Lam NSN.** 2015. Big Spatiotemporal (BiST) data analytics. Panelist, *Annual Meeting of the Association of American Geographers*, Chicago. April 25, 2015.
- Lam NSN.** 2015. Looking forward through a 20th year retrospective of UCGIS. Panelist, *Annual Meeting of the Association of American Geographers*, Chicago. April 23, 2015.
- Qiang Y, **Lam NSN.** 2015. Lecture in the CyberGIS workshop. Organized by the University of Illinois at Urbana Champaign. *Annual Meeting of the Association of American Geographers*, Chicago. April 24, 2015
- Lam NSN.** 2015. “Are happiest cities most resilient to disasters? – Challenges in community resilience assessment”. Chinese University of Hong Kong, Feb. 5, 2015.
- Liu KB, **Lam NSN.** 2015. “Pursuit of science – my life and family”. Chinese University of Hong Kong, Feb. 6, 2015.
- Lam NSN.** 2014. “Vulnerability, resilience, sustainability, and coupled natural-human systems: A geospatial research agenda”. C.P. Lo Lecture, University of Georgia. Oct 10, 2014.
- Lam NSN.** 2014. “Are happiest cities most resilient to disasters? – Challenges in community resilience assessment”. School of the Coast and Environment, Louisiana State University, Sept.12, 2014.
- Lam NSN.** 2014. “Geospatial methods for reducing uncertainties in environmental health risk assessment: Challenges and opportunities”. Keynote presentation at the Central and Eastern European Conference on Health and the Environment. Cluj Napoca, Romania. May 25-30, 2014.
- Lam NSN.** 2014. “Business return in New Orleans after Katrina: Empirical findings and their implications to project development”. Presentation at 2014 Interlaw Conference, New Orleans,

- Feb 20-23, 2014.
- Lam NSN.** 2013. "Vulnerability, resilience, sustainability and coupled natural-human systems: A geospatial research agenda". Chinese University of Hong Kong. June 20, 2013.
- Lam NSN.** 2013. CyberGIS symposium: CyberGIS and sustainability sciences – making connections. Panelist. *Annual Meeting of the Association of American Geographers*, Los Angeles. April 9, 2013.
- Lam NSN.** 2013. "Measuring coastal vulnerability, resilience, and sustainability". Workshop on Tropical Cyclones. La Paz, Mexico. March 18-21, 2013.
- Lam NSN.** 2013. Keynote Speaker, Flood Aware Conference, The Netherlands. January 31, 2013. (Keynote lecture title: "On measuring vulnerability, resilience, and sustainability". Also presented a general lecture to undergraduates, titled "The Mississippi River Delta as a coupled natural and human system").
- Lam NSN.** 2013. Community resilience and environmental assessment. *Symposium on Response, Recovery & Resilience*, LSU, Jan 29, 2013.
- Lam NSN.** 2012. The human dimension in coastal sustainability research. Presentation to the Water Institute. Dec. 12, 2012.
- Lam NSN.** 2012. "From disease to disaster: geospatial analysis for environmental decision making". John Borchert Lecturer, University of Minnesota. Nov 14, 2012.
- Lam NSN.** 2012. The human dimension in coastal sustainability. *A Forum on Coupled Natural-Human Dynamics in Vulnerable Coasts: Perspectives from Louisiana and the Netherlands*. Louisiana State University, Oct. 23, 2012.
- Lam NSN.** 2012. Invited Participant. CyberGIS'12: The First International Conference on Space, Time, and CyberGIS. University of Illinois at Urbana-Champaign, Aug. 6-8, 2012.
- Lam NSN.** 2012. External Advisor and presenter. "On Measuring Vulnerability, Resilience, and Sustainability". IGERT (GEEMAP-Geoinformatics for Energy and Environment Modeling and Prediction) Workshop, University of Iowa. July 30, 2012.
- Lam NSN.** 2012. Session organizer and discussant: Reflections on geographic information science: Paper session in honor of Michael Goodchild. *Annual Meeting of the Association of American Geographers*, New York. February 27, 2012.
- Lam NSN.** 2012. Panel member: Reflections on geographic information science: Panel session in honor of Michael Goodchild. *Annual Meeting of the Association of American Geographers*, New York. February 27, 2012.
- Lam NSN.** 2012. Invited Participant. Symposium on Geospatial Frontiers in Health and Social Environments, organized by AAG, San Diego, July 27-28, 2012.
- Lam NSN.** 2011. Invited Participant. UCGIS GEP (Geospatial Extension Program) Workshops, organized by UCGIS, Sept. and Nov. 2011
- Lam NSN.** 2011. Invited Participant. Workshop on a Framework for the Future of the Spatial Sciences. Catalina Island, CA. Apr. 25-27, 2011.
- Lam NSN.** 2009. Defining resilience index for coastal community - the GIS approach. Seminar presented jointly sponsored by the Department of Geography and Resource Management and Institute of Space and Earth Information Science, Chinese University of Hong Kong, June 10, 2009.
- Lam NSN.** 2008. Business return in New Orleans after Katrina: empirical findings and their implications to sustainable management. *Conference on Sustainable Management of Deltaic Ecosystems, School of the Coast and Environment*, LSU, August 2008.
- Lam NSN.** 2008. "Reducing uncertainties in health risk assessment through GIS and spatial analysis." Invited Speaker. *Symposium on GIS Technology: Sustaining the Future, Understanding the Past. Case Western Reserve University*. April 3.
- Lam NSN.** 2007. "Reducing uncertainties in health risk assessment through a spatial analysis framework". Invited talk, Dept. of Geography, Western Michigan University.
- Lam NSN.** 2005. "The crossroads of GIS and health information: Moving ahead to improve cancer control." Invited talk in the Workshop sponsored by National Cancer Institute and National

- Library of Medicine, June 16-17.
- Lam NSN.** 2005. US Operational Global Land Remote Sensing USGS Workshop Outcome. Invited panel member, AAG Annual Meeting, Denver, April 6.
- Lam NSN.** 2005. Women advancing geographic research. Invited panel member, AAG Annual Meeting, Denver, April 7.
- Lam NSN.** 2005. Invited speaker for a lecture and a workshop at Brigham Young University, March 17, 2005.
- Lam NSN.** 2005. Invited participant in the workshop: "U.S. Operational Global Land Remote Sensing: A Perspective for Geography in U.S. Geological Survey." Washington DC, Cosmo Club, September 22-23, 2004.
- Lam NSN.** 2004. Women in administration. Invited panel member, AAG 100th Annual Meeting, Philadelphia, March 18.
- Lam NSN.** 2004. Social Science Pre-NSF Roundtable, panel member, organized by LSU Office of Research and Graduate Studies. Jan. 30.
- Lam NSN.** 2003 Invited participant, Workshop on Homeland Security and GIS, organized by U. of Georgia, Amicalola Falls, GA., November.
- Lam NSN.** 2003. Challenges in spatial analysis: An assessment. Keynote Speaker, Spatial Analysis and Modeling Specialty Group Plenary Session at the Annual Meeting of the Association of American Geographers, New Orleans, March 6. Discussant: Jean Claude Thill.
- Lam NSN** 2002. Fractals for monitoring global change using remote sensing imagery. Invited Seminar at the LSU Department of Experimental Statistics, October 30.
- Lam NSN** 2002. Research strategies in a competitive environment: a geographer's perspective. Seminar presented as a Prominent Overseas Scholar at the University of Hong Kong, September 18.
- Lam NSN** 2002. Trends and directions in GIS research: Some Perspectives. Keynote Speaker, GIS Specialty Group Plenary Session at the Annual meeting of the Association of American Geographers, Los Angeles, March 20. Discussants: Tom Baerwald and Barbara Bittenfield.
- Lam NSN** 2002. Monitoring environment and health via remote sensing and geographic information system technology. Saturday Science Seminar, LSU, Feb. 16, 2002.
- Lam NSN** 2001. Introductory comments. Symposium on Applied Geography, Department of Geography and Anthropology, LSU. March 22.
- Lam NSN** 2001. Reviewing, ethics & professional practice. I am one of the panel members. The session was organized by the Scientific Freedom & Responsibility Committee of the AAG and presented at the annual meeting of the Association of American Geographers, New York. March 2.
- Lam NSN** 2001. Fractals and scale in environmental assessment and monitoring. Invited speaker to the Department of Geography, University of Maryland, April 12.
- Lam NSN** 2000. Reducing uncertainties in applying spatial analysis in environmental health research. Department of Geography, George Washington University, Invited Speaker for the Geography Awareness Week, Washington, DC. November 15.
- Lam NSN** 2000. Grand challenges. Concluding Panel at the GIScience 2000 conference. Savannah, GA. October 29.
- Lam NSN** 2000. Reducing uncertainties in applying spatial analysis in environmental health research. Invited speaker at the Centers for Disease Control and Prevention-National Center for Health Statistics (CDC-NCHS), Hyattsville, Maryland. July 19.
- Lam NSN** 2000. Fractals and scale in environmental assessment and monitoring. Invited speaker to the Department of Geography, University of Minnesota as part of their yearlong lecture series to celebrate their 75th Anniversary, Feb. 18. My presentation was published in the book "*Scale and Geographic Inquiry: Nature, Society, and Method*".
- Lam NSN** 2000. Invited speaker on "Fractals and scale in environmental assessment and monitoring" to the Department of Geography, University of Delaware, March 17.
- Lam NSN** 2000. "Funding Opportunities for GIScience at the National Science Foundation" at the

- UCGIS (University Consortium on Geographic Information Science" meeting at Capitol Hill Club on February 4.
- Lam NSN 1998.** Geography in the 21st Century. Informal presentation in the Department of Geography and Anthropology, LSU. November 30.
- Lam NSN 1998.** Geography in the 21st Century. Invited Speaker for the Geography Awareness Week, Southwest Missouri State University, November 19.
- Lam NSN 1998.** The Faculty Summer Stipend Program. Workshop co-sponsored by the Office of Research and Graduate Studies and the Center for Faculty Development, LSU, October 1998 (I am one of the three panel members).
- Lam NSN 1997.** The Faculty Summer Stipend Program. Workshop co-sponsored by the Office of Research and Graduate Studies and the Center for Faculty Development, LSU, October 1997 (I am one of the three panel members).
- Lam NSN 1997.** Fractal characterization in remote sensing and GIS. Invited Lecture sponsored jointly by University of Alabama at Huntsville (Atmospheric Department) and NASA-Global Hydrology and Climate Center, Huntsville, May 28.
- Lam NSN 1997.** Experience and strategies of successfully funded faculty members. Presented as a member of the Social Sciences and Humanities Panel in "Competing in the World of Research and Sponsored Programs: A Two-Day Grant Proposal Development Conference", Southern University, April 29.
- Lam NSN 1996.** The 1996 Summer Stipend Program. Workshop co-sponsored by the LSU Office of Sponsored Research and the Center for Faculty Development, LSU, October 11, 1995. (I am one of the panelists.)
- Lam NSN 1994.** Spread of AIDS in rural America: 1982-1990. Dept. of Epidemiology and Community Health, School of Veterinary Medicine, LSU, September.
- Lam NSN 1994.** The Summer Stipend Program. Workshop co-sponsored by the Office of Sponsored Research and the Center for Faculty Development, LSU, September. (I am one of the panelists.)
- Lam NSN 1994.** Truth and Consequences: An interactive forum discussion on research and personal responsibility to the people with whom, and the places where, we do our work. Sponsored by the Geography and Anthropology Society, LSU, February. (I am one of the panelists.)
- Lam NSN 1993.** Grant funding opportunities in humanities and social sciences. Workshop co-sponsored by the Office of Research and Economic Development and the Center for Faculty Development, LSU, March. (I am one of the panelists.)
- Lam NSN 1992.** The spatial diffusion of AIDS in the United States: past, present, and future. Presented in Sociology 7351 Seminar (Diffusion of Innovation), LSU, July 14.
- Lam NSN 1991.** Two invited lectures entitled "Future research and development in GIS" and "The use of raster and vector GIS" to the Center for Urban Planning and Environmental Management, University of Hong Kong, Hong Kong.
- Lam NSN 1991.** An invited lecture on "Fractals in geography" to the Department of Geography and Geology, University of Hong Kong, Hong Kong.
- Lam NSN 1991.** An invited lecture on "The geographical patterns of cancer mortality in China" to the Hong Kong Baptist College, Hong Kong.
- Lam NSN 1991.** An invited lecture on "Fractals in remote sensing" to the Gulf Coast Chapter of the Sigma Xi Society, NASA - Stennis Space Center, Mississippi.
- Lam NSN 1990.** Scale, resolution, fractals, cartography, GIS, and remote sensing: Some perspectives. Invited paper at the Second International Workshop on GIS, Beijing, China.
- Lam NSN 1990.** The role of geographical scale in analyzing cancer mortality patterns in China. Invited lecture to Department of Epidemiology and Community Health, School of Veterinary Medicine, LSU.
- Lam NSN 1989.** The new face of freedom - from Berlin to Beijing. LSU.
- Lam NSN 1989.** Geography in the 1990s - Mapping Sciences. Department of Geography and Anthropology Friday Forum, LSU, September.

- Lam NSN 1989.** Issues in designing multipurpose cadastre. Invited panel speaker, 1989 Fall Meeting of the Louisiana Society of Professional Surveyors, LSU.
- Lam NSN 1989.** Research and projects in CADGIS Lab. Presentations at the Chancellors and Deans visit to remote sensing and GIS facilities in LSU.
- Lam NSN 1988.** Fractal analysis of Landsat-TM images. Departmental Friday Forum, November 1988.
- Lam NSN 1987.** Geographic information systems. Invited speaker, 1987 Fall Meeting of the Louisiana Society of Professional Surveyors, LSU.
- Lam NSN 1987.** Theory in geographic information systems. Invited lecturer in a graduate seminar in the School of Forestry, Wildlife, and Fisheries, LSU, April 6.
- Lam NSN 1986.** How long is the coastline of Louisiana? - fractal concepts and applications. Public lecture organized by the LSU Chapter of the American Society for Photogrammetry and Remote Sensing.
- Lam NSN Dec. 1986 - Jan. 1986.** Invited to present a series of lectures on geographic information systems, computer cartography, and remote sensing at Nanjing Institute of Geography, Chinese Academy of Sciences. Among the lecture topics are: recent developments in geographic information systems and remote sensing; applications of spatial analytic methods in cancer mortality studies; and spatial data structures and data base management systems
- Lam NSN 1985.** The concept of inversion: A theory in cartography. Invited paper presented at the First Scientific Geography Meeting, Athens, Georgia.

Organizer and Chair of Meetings and Symposia:

- 2023 Advisory Committee Member, The Global Smart Cities Summit 2023 and 3rd International Conference on Urban Informatics (ICUI 2023), August 21-23, 2023.
- 2023 Chair, Opening Plenary, 2023 AAG Symposium on Geospatial approaches to pressing grand challenges: Global pandemics, climate change, and food security, March 23.
- 2022 Co-organizer, 2023 AAG Symposium on Geospatial approaches to pressing grand challenges: Global pandemics, climate change, and food security.
- 2021 Cai H, Qiang Y, Zou L, Lam NSN. 2020/21. Co-organizers of Symposium on Human Dynamics in Coupled Natural-Human Systems. Annual Meeting of the American Association of Geographers, Seattle, April 7-10.
- 2019 Zou L, Lam NSN, and others. 2019. Co-organizers of paper sessions on social media analysis for the 2020 Annual Meeting of the American Association of Geographers, Denver, April 2020. (meeting cancelled)
- 2018 Qiang Y, Lam NSN. 2018. Co-organizers of paper sessions on Deep Learning and Artificial Intelligence in Coupled Natural and Human Systems in the 2018 Annual Meeting of the American Association of Geographers, New Orleans.
- 2017 Xu Y, Chen Z, Lam NSN, Liu KB. 2017. Co-organizers of paper sessions on Recent Progress in Research of the World's Major River Deltas, AGU Fall Meeting, New Orleans.
- 2017 de Sherbinin A, Cervone G, Lam NSN. 2017. Co-organizers of paper sessions on People & Pixels 20th Anniversary, AGU Fall Meeting, New Orleans
- 2016 Qiang Y, Lam NSN. 2016. Co-organizers of Symposium on Human Dynamics Research: Climate Change I & II, in the 2016 Annual Meeting of the American Association of Geographers, San Francisco.2016.
- 2016 Qiang Y, Lam NSN. 2016. Co-organizers of Symposium on Human Dynamics Research: Climate Change I & II, in the 2016 Annual Meeting of the American Association of Geographers, San Francisco.
- 2012 A Forum on Coupled Natural-Human Dynamics in Vulnerable Coasts: Perspectives from Louisiana and the Netherlands. Louisiana State University, Oct. 23, 2012.
- 2012 Session organizer and discussant: Reflections on geographic information science: Paper session in honor of Michael Goodchild. Annual Meeting of the Association of American Geographers,

- New York. February 27, 2012.
- 2005 Chair, a paper session at the 9th International Symposium on Physical Measurement and Signature in Remote Sensing, Beijing, China, October.
- 2004 Chair, a paper session at GIScience 2004, Aldephi, Maryland. October.
- 2002 Chair, a paper session on "Spatial Uncertainty II" at GIScience 2002 meeting, Boulder, Colorado, Sept. 27.
- 2001 Organizer and co-chair of the session "Funding opportunities at the National Science Foundation" at the annual meeting of the Association of American Geographers, New York. March 1. (Lam, N.S.-N. and Baerwald, T.).
- 2001 Organizer and chair of a panel "Think Big II: Showcase of interdisciplinary projects" at the annual meeting of the Association of American Geographers, New York. March 1.
- 2000 Organizer and co-chair of a session "Funding opportunities at the National Science Foundation: Some advice on proposal writing" at the annual meeting of the Association of American Geographers, Pittsburgh, April 3-9.
- 2000 Organizer and chair of a panel "Think Big: how to develop successful collaborative proposals" presented at the annual meeting of the Association of American Geographers, Pittsburgh, April 3-9.
- 1998 Chair, research panel on "Scale", Univ. Consortium on Geographic Information Sciences
- 1993 Chair, a paper session at the 1993 ACSM/ASPRS Annual Convention, New Orleans, February.
- 1992 Chair, a paper session (on topological data structures) at the 5th International Symposium on Spatial Data Handling, Charleston, SC., August.
- 1991 I was one of eight geographers invited by NSF to participate in a workshop held at Miami on the Computational Geography Initiative in NSF. The workshop was organized by Tom Baerwald, then Program Director of the Geography and Regional Science Section, and John Wooley, then Director of the Division of Instrumentation and Resources, NSF.
- 1990 Chair, a paper session under Section 13 - Mathematical Models and Geographic Information System. IGU Regional Conference on Asian Pacific Countries, Beijing, China.
- 1990 Chair, two paper sessions and an open forum on GIS and remote sensing applications to Epidemiology and Parasitology, International Conference on Remote Sensing Applications to Epidemiology and Parasitology, LSU, June.
- 1987 Chair, a paper session on Geographic Information Systems at the Fourth Annual Symposium of the American Water Resources Association, Louisiana Section, September 25, 1987.
- 1987 Chair, a special paper session on Fractals and Geographic Information Systems sponsored by the mathematical Models and Quantitative Methods Specialty Group at the Annual Meeting of the Association of American Geographers in Portland, Oregon.
- 1987 Invited participant to a special GIS seminar to discuss the field of GIS and the role of geographers in the field. The seminar was sponsored by the Association of American Geographers.
- 1985 Chair, A special paper session sponsored by the Cartography Specialty Group at the Annual Meeting of the Association of American Geographers in Detroit.
- 1985 Chair, a paper session at the First Scientific Geography Meeting in Athens, Georgia.
- 1984 Organizer and Chair, several special paper sessions sponsored by the Mathematical Models and Quantitative Methods Specialty Group at the Annual Meeting of the Association of American Geographers in Washington, D.C.
- 1984 Organizer and Chair, a paper session in Regional Science Session #2, Modeling and Simulation Conference, Pittsburgh.
- 1983 Organizer and Chair, Special Session on Spatial Data Processing, Regional Science Session #2, Modeling and Simulation Conference, Pittsburgh.

1.3.5 Other Scholarly Activities or Other Contributions to the Profession

1.3.5.1 Membership in Professional Organizations

American Association of Geographers (AAG)
 Cartography and Geographic Information Society (CaGIS)
 University Consortium on Geographic Information Science (UCGIS)
 Chinese Professionals in Geographic Information Science (CPGIS)
 American Association for the Advancement of Science (AAAS)
 American Society for Photogrammetry and Remote Sensing (ASPRS, inactive)
 Association of Environmental Studies and Sciences (AESS, inactive)
 American Public Health Association (APHA, inactive)
 American Geophysical Union (AGU, inactive)
 Coastal Education & Research Foundation (CERF, inactive)

1.3.6 Awards, Lectureships, or Prizes that Show Recognition of Scholarly Achievement

2023	Research Award, University Consortium on Geographic Information Science (UCGIS)
2020	Fellow, American Association of Geographers (AAG)
2016	Fellow, University Consortium on Geographic Information Science (UCGIS)
2016	The Inaugural Carolyn Merry Mentoring Award, UCGIS
2011	Outstanding Faculty Research Award, School of the Coast & Environment, LSU
2010	LSU Distinguished Research Master
2008	LSU Rainmaker (Top 100 research and creative faculty at LSU)
2006	LSU Distinguished Faculty Award
2004	Outstanding Contributions in Remote Sensing Award, AAG Remote Sensing Specialty Group
1984	The Andrew McNally Award. (To honor the best paper published by the American Congress on Surveying and Mapping in 1983. The paper entitled "Spatial Interpolation Methods: A Review" was published in <i>The American Cartographer</i> in 1983.)

Other Recognitions

2003	Keynote Speaker, Spatial Analysis and Modeling Group, AAG, March 6.
2002	Prominent Overseas Scholar, University of Hong Kong, Sept. 14-21.
2002	Keynote Speaker, GIS Specialty Group, AAG, March 21.
1997-06	Named as Richard J. Russell Louisiana Studies Distinguished Professor, Department of Geography and Anthropology
1976-80	Special University Scholarship, University of Western Ontario, London, Ontario.
1977-78	McIntosh Award, University of Western Ontario, London, Ontario. (To honor the best incoming PhD student in the Department of Geography.)

1.3.7 Research Support/Grant Activities

External Grants Received as Principal or Co-Principal Investigator:

46. **Lam NSN**, Lee K. 2023. Collaborative Research: HNDS-I: A Cyberinfrastructure for Multiscale Human Dynamics and Resilience (HDR) Research. National Science Foundation #2318203. \$496,988. 09/01/2023-08/31/2026. (This project is a collaboration with Texas A&M University, University of South Florida, and Saint Louis University. Total project amount is: \$1.1 million. LSU is the lead institution).
45. **Lam NSN**, Bui L, de Jesus Crespo R. 2023. Collaborative Research: RII Track-2 FEC: RURAL

- CONFLUENCE: Communities and academic partners uniting to drive discovery and build capacity for climate resilience. National Science Foundation #2316367. \$1,121,341. 08/01/2023-07/31/2027. (This project is a collaboration with Oklahoma State University and University of Nebraska. The total project amount is \$6 million. Oklahoma State University is the lead institution.)
44. Lee K, **Lam NSN**. 2020. RAPID: Investigating public health and social information disparities during the COVID-19 pandemic. National Science Foundation #2032745. \$232,000. 06/15/2020-05/31/2023.
 43. Sun MX, **Lam NSN**. 2019. AI-DCL: EAGER: Fairness-aware Informatics System for Enhancing Disaster Resilience. National Science Foundation #1927513. \$300,000. 09/01/2019-08/31/2022.
 42. Jafari D, **Lam NSN**. 2019. RAPID: Collaborative research: Data mining and fusion between unmanned aerial systems and social media technologies to improve emergency operations. National Science Foundation #1945787. \$106,000. 10/01/2019-09/30/2021
 41. **Lam NSN**, Meyer M, Park SJ, Reams M, Yang SW, Lee KS. 2018. RAPID: The changing roles of social media in disaster resilience: The case of Hurricane Harvey. National Science Foundation #1762600. \$199,989. 01/01/2018-12/31/2019.
 40. **Lam NSN**, Meyer M, Park SJ, Reams M, Yang SW, Lee KS. 2016. IBSS-L: Understanding social and geographical disparities in disaster resilience through the use of social media. National Science Foundation #1620451. \$834,585. 09/01/2016-08/31/2021.
 39. **Lam NSN**, Qiang Y. 2015. A synthesis of resilience measurement methods and indices. Louisiana Sea Grant. \$49,940. 01/15/2015-01/15/2017.
 38. **Lam NSN**, Reams M, Rohli R. 2014. Community resilience to drought hazard: An analysis of drought exposure, impacts, and adaptations in south-central United States. U. S. Geological Survey. \$254,485. 09/01/2014-08/31/2016.
 37. Qiang Y, **Lam NSN**. Using CyberGIS to model the coupled natural and human dynamics in a vulnerable coastal system. University of Illinois at Urbana-Champaign. \$6,400. 08/2014-08/2015.
 36. Twilley R, Bentley S, Chen Q, **Lam NSN**, Xu K. 2014. Coastal SEES Collaborative Research: Changes in actual and perceived coastal flood risks due to river management strategies. NATIONAL SCIENCE FOUNDATION, #1427389. \$1,600,000 (Total award), \$1,097,704 (LSU portion). 09/01/2014-08/31/2019.
 35. Reams M, **Lam NSN**. 2014. Louisiana Coastal Protection and Restoration Authority (CPRA) 2017 Master Plan update: Coastal community resilience program development and assessment. \$99,561. 04/01/2014 – 04/01/2015
 34. Reams M, **Lam NSN**. 2013. Applying insights from resilience theory to encourage “co-producing safety” in the Netherlands. Subaward from Hz University of Applied Sciences, the Netherlands. \$100,000. 04/2013-10/2014.
 33. **Lam NSN**, Liu KB, Reams MA, Rivera-Monroy V, Xu YJ, Pace K, Dismukes D. 2012. CNH: Coupled natural-human dynamics in a vulnerable coastal system. *National Science Foundation*, #1212112. \$1,499,935. 09/01/12-08/31/18.
 32. Liu KB, **Lam NSN**, Bentley S. 2012. Addendum to Paleotempestology of the Caribbean Region: A multi-proxy, multi-site study of the spatial and temporal variability of Caribbean hurricane activity. *Inter-American Institute for Global Change Research (IAI)*. \$299,902. 03/01/12-10/01/15.
 31. **Lam NSN**, Reams M. 2010. Development of an empirical model for measuring community resilience. *U.S. Department of Agriculture/National Science Foundation*. \$390,028. 09/15/2010-09/15/2013.
 30. **Lam NSN**, Arenas H. 2010. Doctoral Dissertation Research: An agent-based simulation model for business reopening in New Orleans post Hurricane Katrina. National Science Foundation, #1003609. \$8,716. 04/15/10-09/30/11.
 29. Pulsipher A, **Lam NSN**. 2009. Geographic Units for Socioeconomic Impact Analysis in the Gulf of Mexico Region. Mineral Management Services. \$439,876. 10/01/09-09/30/11.
 28. Reams M, **Lam NSN**. 2009. Developing indicators to measure socioeconomic impacts of OCS activities: A temporal analysis of counties within the Gulf of Mexico region. Mineral Management

- Services. \$186,564. 10/01/09-09/30/11.
27. **Lam NSN**, Pace K, Campanella R, LeSage J. 2008. Modeling business return in New Orleans after Katrina: Its implications for Gulf of Mexico economic recovery. NOAA Gulf of Mexico Sea Grant Program. Award Total: \$199,982. LSU portion: \$132,148. 02/01/08 – 01/31/11.
 26. Liu KB, **Lam NSN**, Platt W. 2008. Effects of past and recent hurricanes on Gulf Coast ecosystems: Implication for future climate changes. National Institute for Climate Change Research at Tulane University. \$77,000. 06/01/08-08/31/09.
 25. **Lam NSN**, Liang W. 2008. Doctoral Dissertation Research: An integrated agent-based microsimulation model for hurricane evacuation in New Orleans. National Science Foundation, # 0802593. \$7,809. 04/01/08-09/30/09.
 24. **Lam NSN**, Pace K., LeSage J, Campanella R. 2007. Collaborative Research: Modeling business return amid post-disaster uncertainties: New Orleans after Katrina. National Science Foundation, #0729259. Award Total: \$622,412. LSU portion: \$356,474. 11/01/07-10/31/11.
 23. Reams M, **Lam NSN**. 2007. Socio-Economic responses to coastal land loss and hurricanes: Measuring resilience among Outer Continental Shelf (OCS) related coastal communities in Louisiana. MMS. \$209,472. 09/30/07-08/31/09.
 22. **Lam NSN**, Ju W. 2007. Doctoral Dissertation Research: A genetic Bayesian approach for texture-aided urban land use/cover classification. National Science Foundation, #0726512. \$11,816. 07/01/07-01/31/09.
 21. Liu, K.B., Bentley, S., **Lam NSN**, and others. 2006. Paleotempestology of the Caribbean Region: A multi-proxy, multi-site study of the spatial and temporal variability of Caribbean hurricane activity. Inter-American Institute for Global Change Research (IAI). \$698,300. 04/01/06-02/28/12.
 20. **Lam NSN**, Zhou G. 2006. Doctoral Dissertation Research: Detecting the social-economic conditions of urban neighborhoods through a combined methodology of wavelet transform and artificial neural networks. National Science Foundation, #0602111. \$7,142. 03/01/06-03/01/07.
 19. **Lam NSN**, Campanella R, Pace K. 2005. Decision-making among businesses in post-catastrophe uncertainty: How economic geographies re-form in New Orleans. National Science Foundation, #0554937. \$125,626. 11/01/05-10/31/07.
 18. **Lam NSN**. 2004. An integrated spatial data mining system for change and anomaly detection for decision support and risk assessment. Louisiana Board of Regents. \$19,890. 05/04-06/05.
 17. Emerson CW, Quattrochi DA, **Lam NSN**. 2001. Fractal and geostatistical metadata for monitoring global change using remote sensing imagery. NASA Intelligent Systems solicitation. \$519,761. LSU portion: \$153,391. 2001-04
 16. **Lam NSN**. 1998. NASA Summer Faculty Fellowship, Marshall Space Flight Center. \$10,000.
 15. **Lam NSN**, Leitner M, Braud D, Jones F. 1997. Geographic information systems and image processing equipment for the analysis and display of spatial data: enhancement in the era of information technology. Louisiana Board of Regents. \$150,000. 1997-99.
 14. **Lam NSN**. 1995. Creating a world coverage of third-level political boundaries. World Health Organization, Pan American Health Organization, and Centers for Disease Control and Prevention. \$30,000 (est.). 1995-99.
 13. **Lam NSN**. 1996. Parcel mapping of Madison County, Mississippi. Neel-Schaffer, Inc. \$23,577.
 12. **Lam NSN**, Read J. 1996. Land-cover change detection for the Tropics using remote sensing and geographic information systems. National Science Foundation, Doctoral Dissertation Research Grant. \$9,995. 1996-97.
 11. **Lam NSN**. 1996. Cancer statistics review. Louisiana Office of Public Health. \$9,990.
 10. **Lam NSN**. 1994. A geographic information system for the characterization and modeling of multiscale remote-sensing data using fractals and selected spatial techniques. Co-investigators: Dale Quattrochi and Hong-lie Qiu. NASA. \$219,139. 1994-96.
 9. **Lam NSN**, Liu KB. 1993. Development of rural clusters for AIDS patient sampling. RAND Cooperation. \$50,701. 1993-96.
 8. **Lam NSN**, Weigel S. 1993. Scale, resolution, and representation in geographic information systems.

- NASA Graduate Fellowship to Ph.D. student Stephanie Weigel under supervision of Dr. Nina Lam. \$66,000. 1993-96.
7. **Lam NSN**, Liu KB. 1990. Modeling the spatial dynamics of AIDS in the United States: A geographic information systems approach. Louisiana Board of Regents. \$83,219. 1990-92.
 6. Braud D, **Lam NSN**, Lewis AJ, Veeck G, Jones F. 1994. Establishment of a comprehensive, statewide, on-line geographic information system of Louisiana. Louisiana Board of Regents. \$190,000. 1994-95.
 5. **Lam NSN**. 1991. Geographic information systems and image processing equipment for the analysis of spatial data. Louisiana Board of Regents. \$110,000. Other investigators are: Kesel, R., Liu, K.-B., Hirschboeck, K., Veeck, G., Jones, F., Edwards, J., and McKillop, H. 1991-92.
 4. Quattrochi D, **Lam NSN**. 1990. The factor of scale in remote sensing as it affects analysis of landscape characteristics: An application of factor analysis to multiple source remotely sensed data. NASA - Stennis Space Center. \$22,000. 1990-92.
 3. **Lam NSN**. 1990. Travel Grant to IGU Regional Meeting, Beijing, China. Recommended by U.S. National Committee for International Geographical Union (USNC/IGU). \$1,500. (My application which included a paper was ranked second in a national competition.)
 2. **Lam NSN**. 1985. Geographic information system approach to the study of cancer mortality patterns in China. National Program for Advance Study and Research in China, U. S. National Academy of Sciences. \$40,360. 1985-86.
 1. **Lam NSN**. 1983. Designing a geographical information system for the cancer data of China. The Association of American Geographers Research Grant. \$500.

Internal Grants Received (as PI or Co-PI only):

9. Reams M, Wilkins JG, **Lam NSN**. 2013. Influences on household and community-level mitigation efforts and adaptations to coastal hazards in Louisiana. LSU Coastal Sustainability Studio. \$35,000. 08/01/13-07/31/14.
8. Pace K, **Lam NSN**, Reams M. 2010. Decision making in post-catastrophe uncertainty: An examination of impacts of the Gulf of Mexico oil spill on local businesses in coastal Louisiana. Louisiana State University (Office of Research and Economic Development). \$149,999. 09/01/10-08/31/11.
7. **Lam NSN**. 2005. Understanding and measuring regional economic development using and integrated spatial data mining approach. Economic development assistantship to support a PhD student for four years. Funded by LSU Office of Research and Graduate Studies. Total: \$100,000. 2005-09.
6. **Lam NSN**. 2004. Associations between population characteristics, environment, and disease: A spatial data mining approach. Faculty Research Grant, Louisiana State University. \$10,000. 2004-05
5. **Lam NSN**, Leitner M, Curtis A, Braud D, Lewis A. 2002. A proposal to enhance research and instruction in geographic information science at LSU. Funded by LSU-CAPITAL, \$100,000. 2002-04.
4. Curtis A, **Lam NSN**, Leitner M, Anderson J. 2002. Funded by LSU Tech. Fee, primarily to upgrade facilities in the Computer Mapping Sciences Laboratory and the Map Library. \$47,342. 2002-04.
3. **Lam NSN**. 1986. Population estimation using Thematic Mapper data--A pilot study. Faculty Summer Research Grant, Louisiana State University. \$4,000.
2. **Lam NSN**. 1980. An evaluation of areal interpolation models. Graduate School Research Grant, The Ohio State University. \$4,840.
1. **Lam NSN**, Moellering H, Rayner JN. 1980. Implementation of the PLUSX mapping package. The Learning and Resources Grants, The Ohio State University. \$2,000.

Other Participation (As an Investigator):

10. Leitner M, and others. 2022. Teaching technology for the Humanities, Social-, Natural-, Environmental-, and Engineering Sciences in the digital age and era of big data. LSU Student Technology Fee (STF) Program. \$118,939. (Lam was one of the investigators: \$10,887 to RSGIS Lab)
9. Zhang WG, Chen ZY, Guo LC, Zhang GA (Chinese Side) & **Lam NSN**, Liu KB, Xu YJ (USA side) 2018. Comparative study on mega-delta erosion hazard and adaptation measures in China and USA. China's Ministry of Science and Technology (MOST). RMB 3,760,000 (US\$560,000). 01/2018-12/2021.
8. Leitner M., and others 2017. Geospatial data collection technology for the social-, natural-, environmental-, and engineering sciences. LSU Student Technology Fee (STF) Program. \$69,077.
7. Voyiadjis G., and others. 2016. Acquisition of gravimetric instrumentation in support of a new quasigeoid model for accurate elevations in Louisiana. Louisiana Board of Regents. \$153,000.
6. Reynolds A, Zeynep A, Brown P. 2013. Environmental communication for coastal Louisiana. LSU Coastal Sustainability Studio. \$11,220. 08/01-13-07/31/14.
5. McKillop, H., et al. 1994. Mapping the past: archaeological field equipment to record spatial and temporal information. Louisiana Board of Regents. Approx: \$14,000. I am one of the investigators.
4. Hugh-Jones M, Haynes J, **Lam NSN**, Malone, J. 1991. Remote sensing and geographic information systems at the Louisiana State University School of Veterinary Medicine. Louisiana Board of Regents. \$76,000.
3. Hugh-Jones M, **Lam NSN**. 1990. Travel Grant for Professor Shupeng Chen, LSU Office of Research (BRSB Grant). \$2,263.
2. Louisiana Coastal GIS Network, 1989-1994. (PI: Louisiana Geological Survey), supported by U.S. Geological Survey, (Year 1: \$199,851, Year 2: \$250,000, renewable for a total of 5 years.) I was involved in the proposal development and submission process and I participated in developing the framework for the Network and served on the Technical Committee for the first two years.
1. National Resource Center Grant from the U.S. Department of Education. 1981. \$140,000 est. for the first year. My role was to develop a new course on Geography of China.

1.3.8 Theses/Dissertations Directed (Numbers only)

Post-doctoral Research Associate directed: 9

Ph.D. directed and completed as major professor: 20

MS Theses directed and completed as major professor: 26

Master of Engineering Science Research Papers directed and completed as co-chair: 3

Master of Natural Sciences: 2

I am presently serving as a major professor for four PhD and one MS students and am mentoring one postdoctoral research associate. Since 1980, I have served as a co-advisor, minor professor, and/or committee member for over 350 Masters and Ph.D. students in both the Ohio State University and Louisiana State University.

1.3.9 Major Areas of Research Interests

Geographic information science, remote sensing, spatial modeling, disease to disaster

1.4 Service

1.4.1 Student Organizations Advised

1983-85 Advisor, Hong Kong Student Association, the Ohio State University

1.4.2 Recruitment of Students and Faculty

2017 Chair, Search Committee for a spatial coastal/environmental scientist, a joint position for Department of Environmental Sciences and Oceanography and Coastal Sciences.

2007-10 While I was chair of the Department of Environmental Sciences, I was responsible to recruit three faculty members, establish the new curriculums for MS Thesis and MS, apply for the new PhD degree program, revamp the assessment matrix, develop flyers for Professional student recruitment, and revamp the departmental website.

1.4.3 University Service

University:

2020-21 Investigation Committee, Office of the President/ORED

2018 Preproposal Review Committee, Office of Research and Economic Development (ORED)

2016 Preproposal Review Committee, ORED

2012-13 Search Committee, Associate Vice Chancellor for Research and Economic Development

2013 Centers Review Committee, ORED

2010-14 Advisory Council, Communication across the Curriculum

2010-14 Council Member, Research Council, Office of Research and Graduate Studies

2008-09 Search Committee, Dean of the School of the Coast and Environment, Academic Affairs

2006-2004 Chancellor Distinguished Lecturer Committee, Off. Of Research and Graduate Studies

2004 College of Arts and Sciences Dean's search committee, Academic Affairs

2003 Program Review Committee for Dept. of Computer Science, Academic Affairs

2003-06 Elected to Grievance Committee, LSU Faculty Senate

2003 Mentor Committee for an assistant professor from Dept. Geology and Geophysics

2001 Internal IT Review Committee for LSU-CAPITAL

1999 Ad hoc Committee on academic program enhancement, Office of the Provost

1998-99 Research Foundation Committee, Office of Research and Graduate Studies

1997 LEEP (Louisiana Energy Enhancement Program) review panel, Office of Research and Graduate Studies

1995-96 Chair, ad hoc student appeal panel, appointed by Graduate School

1995-98 Elected to Senator, LSU Faculty Senate

1994-95 Member, two ad hoc committees (professional ethics and infrastructure) appointed by the Office of Research and Economic Development

1994-95 Admission, Standards, and Honors Committee, LSU Faculty Senate

1994-pres. LSU Representative, University Consortium for Geographic Information and Analysis

1993-99 Council on Research, Office of Research and Graduate Studies (2 terms)

1993-99 Chair, Social Sciences Research Development Group, Office of Research and Graduate Studies

1989- Council on Remote Sensing and GIS, Office of Research and Graduate Studies

1985-89 Co-Director, CADGIS Research Lab, jointly operated by the Department of Geography and Anthropology and the College of Design

School of Coast and Environment:

2013- Diversity Committee

2012- Awards Committee

- 2009- Prestigious Awards Committee
- 2008- Budget and Facilities Committee
- 2008- Shell Endowed Chair search committee
- 2006- Development of Computer Teaching Lab
- 2007 Shell Endowed Professor Job Advertisement Committee
- 2007 Grants and Contracts Manager Recruitment Committee

College of Arts and Sciences:

- 2003-05 Tenure and Promotion Committee
- 2004 Ad hoc Review Committee for a professorship
- 2003 Ad hoc Tenure Review Committee (for a special case)
- 1998-00 Tenure and Promotion Committee
- 1994 College of Arts and Sciences Policy Statement Committee
- 1987-88 College of Arts and Sciences Computing Committee
- 1985-87 Representative from the College of Arts and Sciences to a Working Group on Remote Sensing.

Department of Environmental Sciences:

- 2020- Chair, Mentoring Committee of Dr. Thomas Douthat
- 2020- Member, Mentoring Committee of Dr. Rebeca de Jesus
- 2017 Chair, Search Committee for a spatial coastal/environmental scientist
- 2014-pres Chair, Assessment Committee
- 2014-pres Member, Awards Committee
- 2014-pres Member, Curriculum Committee
- 2014-15 Member, Search Committee (WISE position on energy analytics)
- 2014 Member, Dr. Crystal Johnson's tenure and promotion committee
- 2013 Faculty meeting minutes taker
- 2012 Chair, Dr. Margaret Reams' promotion to full professor Committee
- 2007-10 Department Chair
- 2007 PhD in Environmental Science Exploration Committee
- 2006 Development of Remote Sensing and GIS Research Lab

Department of Geography & Anthropology:

- 2005 Chair, Economic geographer specialty in China hiring committee
- 2003-05 Executive Committee; Graduate Committee; T&P Committee
- 2004 Established and Director, the Spatial Laboratory and the Global Laboratory
- 2003-06 Elected to Faculty Evaluation Committee
- 2003 Chair, 3-Year Review Committee for two faculty members
- 2002 Elected to the Faculty Advisory Committee
- 2002-06 IT Committee
- 1998- Tenure and Promotion Committee
- 1997- Established and directed Computer Mapping Science Annex (Rm. 253)
- 1996- Chair, Faculty Advisory Committee
- 1995-96 Chair, Research and Scholarship Committee
- 1995-96 Tenure and Promotion Committee
- 1994-95 Departmental Council
- 1994 Faculty 4th-year review committee
- 1993- Geosciences Publication committee

1.4.4 Professional Service

1.4.4.1 Advisory Boards, Commissions, or Agencies

Editorship of Journals or Other Learned Publications:

- 2023- Guest Editor, Special Issue on “Integrating Remote Sensing and GIS in Environmental Health Assessment,” *Remote Sensing*
- 2023- Associate Editor, *Frontiers in Environmental Science*
- 2022- Editorial Board, *Urban Informatics*
- 2020 Guest Editor for a manuscript, *Proceedings of the National Academy of Sciences (PNAS)*
- 2020-22 Guest Editor, Special Issue on “Human-Environmental Interactions Research Using Remote Sensing,” *Remote Sensing*
- 2017-pres Editorial Board, *Remote Sensing*
- 2014-pres Editorial Board, *Applied Ecology and Environmental Research*
- 1996-pres Editorial Board, *Cartography and Geographic Information Science*
- 2017-20 Special Issue Co-editor, *Water*
- 2015-16 Special Issue Co-editor, *Water*
- 2015-19 Editorial Board, *Southeastern Geographer*
- 2011-12 Special Issue Editor, *International Journal of Geographic Information Science*
- 2005-09 Editorial Board, *The Professional Geographer*
- 2000-09 Editorial Board, *Annals of the American Association of Geographers* (reappointed)
- 1996-10 Associate Editor, *Geographic Information Sciences*
- 1992-20 Editorial Board, *Geographical Analysis*
- 1995-02 Editorial Board, *Geographical and Environmental Modeling*
- 1996-00 Editorial Board, *Applied Geography Studies*
- 1994-96 Editorial Board, *Geographic Information Sciences*
- 1984 Editor, *Newsletter of the Mathematical Models and Quantitative Methods Specialty Group, Association of American Geographers.*

Office Held/Advisory Panels in Federal Organizations:

- 2023- Member, NOAA Science Advisory Board – Environmental Information System Working Group (NOAA-SAB-EISWG)
- 2023 NSF-HEGS (Human Environment and Geographical Sciences) review panel, March 8-10.
- 2021 NSF DISES (Dynamics of Integrated Social-Environmental Systems) review panel, 03/2021
- 2020 NAS-NSF Human Networks and Data Science (HNDS) Expert meeting, 07/28/20-07/29/20

- 2018 NSF Coupled Natural-Human Dynamics review panel
- 2019 NSF Committee of Visitors (COV) to review the programs within the Social, Behavioral, and Economics Sciences Directorate/Division of Behavioral and Cognitive Sciences (SBE/BCS)
- 2017 NIEHS/NSF joint panel on Oceans and Human Health, Baltimore, Sept 20-22, 2017.
- 2017 NAS meeting on “Tracking community resilience: Gulf Research Program opportunity analysis”, Feb 15-16, 2017.
- 2014-18 Member of User Working Group, NASA Socioeconomic Data and Application Center (SEDAC) at Columbia University
- 2014 NSF Coupled Natural-Human Dynamics review panel
- 2013 Open Research Area Plus (joint program by UK, France, Germany, Netherlands, and NSF, USA) review panel, Berlin, October 2013
- 2013 NSF Coupled Natural-Human Dynamics review panel
- 2012 EPA STAR (Science to Achieve Results) Graduate Fellowship review panel
- 2009-11 NRC Committee on National Statistics’ Panel on Redesigning the Commercial Building and the Residential Energy Consumption Surveys

- 2009 NSF IGERT (Integrative Graduate Education and Research Traineeship) pre-proposal review Panel
- 2008 NSF IGERT pre-proposal review Panel
- 2007 NSF REU (Research Experiences for Undergraduates) Site Review Panel
- 2006 NSF Review Panel, Hydrologic Observatories
- 2006-08 National Research Council (NRC) - Mapping Science Committee
- 2005-06 NRC committee on Contributions of Remote Sensing for Decisions about Human Welfare
- 2004 Invited Participant, Land Remote Sensing Workshop, organized by USGS and AAG
- 2004 NSF Review Panel, Human Social Dynamics (Infrastructure)
- 2003 Strategic Planning meeting, NSF Geography and Regional Science Program
- 2003 NSF Review Panel, Pre-proposal for Science and Technology Centers
- 2002 NSF Review Panel, Integrated Graduate Education and Research Training (IGERT), Dec.
- 2002 NSF Review Panel, Major Research Instrumentation, May 2002
- 2002-03 Committee on Review of Geographic Information Systems Research and Applications at HUD: Current Programs and Future Prospects, National Research Council
- 2001 Member of an NIH Review Panel, Geographic-based Research in Cancer Control and Epidemiology
- 2001 NASA Review Panel, Land Cover Land Use Change Program, NASA Office of Earth Science, Feb. 28, 2001
- 2001 Chaired an NIH Review Panel, Geographic Research in Cancer Control and Epidemiology, March 8, 2001.
- 1998-00 Mapping Science Committee, National Research Council (Resigned in Aug. 1999)
- 1996 NSF Review Panel, Instrumentation and Laboratory Improvement Program
- 1994 NSF Review Panel, Instrumentation and Laboratory Improvement Program
- 1993 NSF Review Panel, Special Program on Collaborative Research in Geosciences, Geography, and Mathematical Sciences, Division of Mathematical Sciences
- 1993 NSF Review Panel, Instrumentation and Laboratory Improvement program.
- 1991 NSF Review Panel for Dissertation Improvement Grants, Geography and Regional Science Program.

Offices Held in Professional Societies:

- 2023 Program Committee, GIScience 2023
- 2020 Program Committee, AutoCarto 2020
- 2019-20 Program Committee, GIScience 2020
- 2017-18 Awards Committee, Remote Sensing Specialty Group, AAG
- 2017-18 Program Committee, GIScience 2018
- 2018 UCGIS Carolyn Merry Mentoring Award Committee
- 2018 UCGIS Nomination Committee
- 2017 Chair, UCGIS Carolyn Merry Mentoring Award Committee
- 2016-18 UCGIS Fellow Selection Committee
- 2017-18 UCGIS Nomination Committee
- 2016 CyberGIS 2016 Program Committee
- 2015-16 Program Committee, GIScience 2016
- 2015-16 Program Committee, International Conference on Geographies of Health and Living in Cities (H-Cities), Hong Kong University
- 2015 Member, UCGIS Nominating Committee
- 2014 CyberGIS 2014 Program Committee
- 2013-14 Chair, UCGIS Nomination Committee
- 2013 GIScience 2014 Program Committee
- 2012 GIScience 2012 Program Committee

- 2010-13 UCGIS Awards Committee, Nomination Committee
- 2004-06 President-Elect, President, and Past President, University Consortium on Geographic Information Sciences (UCGIS)
- 2004-06 Awards Committee, AAG Remote Sensing Specialty Group
- 2004 GIScience 2004 Program Committee (to review and select manuscripts and abstracts)
- 2003-04 Chair, Research Projects Committee, UCGIS
- 2002 AAG Program Committee for the 2003 annual meeting at New Orleans
- 2002 Nominating Committee, University Consortium on Geographic Information Sciences
- 2002 GIScience 2002 Program Committee
- 2000-03 Elected to the Honors Committee, Association of American Geographers
- 1997-00 Elected to Board of Directors, University Consortium on Geographic Information Sciences (Resigned in Aug. 1999)
- 1998-99 Research Committee, University Consortium on Geographic Information Sciences
- 1998 Nominating Committee, University Consortium on Geographic Information Sciences
- 1996-98 Elected to Board of Directors, the Cartography and Geographic Information Society, American Congress on Surveying and Mapping
- 1995 Appointed to the 1997 Association of American Geographers Program Committee
- 1992-93 ACSM Program Committee, 1993 ACSM/ASPRS Annual Convention, New Orleans.
- 1990-93 Status of Women in Geography Committee, Association of American Geographers.
- 1990 Nominated as a candidate for the Nominating Committee, Association of American Geographers. (I was not elected.)
- 1990-91 Baltimore ACSM/ASPRS Auto-Carto 10 Conference Program Committee, American Congress on Surveying and Mapping and American Society for Photogrammetry and Remote Sensing. The Committee served as referees for the papers submitted to the Conference.
- 1989-90 Andrew McNally Award Committee for two consecutive years, American Congress on Surveying and Mapping. The Committee ranks all the articles published in *The American Cartographer* in a year and recommends the best one for the award that year.
- 1989-90 Conference Organizing Committee, International Conference on Remote Sensing Applications to Epidemiology and Parasitology, June 6-7, 1990, LSU.
- 1984-86 Chair, Mathematical Models and Quantitative Methods Specialty Group, Association of American Geographers.
- 1982-84 Chair, Ad Hoc Committee on Women in Mathematical Models and Quantitative Methods Specialty Group, Association of American Geographers.

Other Services for Professional Societies, Agencies, Other Universities:

Services/Office Held in Governmental Agencies Overseas:

- 2019-pres Standing Review Board, Research Grants Council, Hong Kong Government, China
- 2008-14 Panel member, Research Grants Council, Hong Kong Government, China
- 2009 Proposal reviewer, Netherlands Organization for Scientific Research

State & Local Agencies:

- 2018 Social Science Advisory Group of the Mid-Barataria Sediment Diversion Project, Southeast Fisheries Science Center, NOAA/NMFS
- 2018 Technical Advisory Committee for Resilience Metrics Project, The Water Institute of the Gulf
- 2016 Contributing Experts for the RESTORE Act Center of Excellence Research Strategy, the Water Institute of the Gulf

Program Review:

- 2023 External reviewer, Dept. of Geography, Pennsylvania State University

- 2012-16 External reviewer, IGERT-GEEmap (Geoinformatics for Energy and Environment Modeling and Prediction) program, U of Iowa
- 2008 External program reviewer, Dept. of Geography, U Georgia
- 2006 External program reviewer, Dept. of Geography, U. of Minnesota
- 2005 External program reviewer, Dept. of Geography, U. of Buffalo
- 2003 External program reviewer, Dept. of Geography, U. of Connecticut
- 2002-05 External examiner, Master and Postgraduate Diploma in GIS, U. of Hong Kong
- 1996 Chaired a four-person extramural team reviewing the graduate programs in Geological Sciences and Geography at University of California, Riverside.

Personnel:

- 2022 External referee, promotion to Professor, U Buffalo
- 2021 External referee, recruitment, Chinese University of Hong Kong-Shenzhen
- 2020 External referee, promotion to Professor, U Texas-Dallas
- 2020 External referee, promotion to Professor, U South Florida
- 2019 External referee, promotion to Professor, U Buffalo
- 2019 External referee, tenure and promotion to Associate Professor, U Minnesota
- 2019 External referee, recruitment, Chinese University of Hong Kong
- 2019 External referee, tenure and promotion to Associate Professor, U Wisconsin-Madison
- 2019 External referee, professorship, U Wisconsin-Madison
- 2019 External referee, professorship, U Wisconsin-Milwaukee
- 2019 External referee, professorship, U Georgia
- 2018 External referee, promotion to Professor, U Georgia
- 2018 External referee, promotion to Professor, Pennsylvania State U
- 2018 External referee, tenure and promotion to Associate Professor, U Wisconsin-Madison
- 2016 External referee, promotion to Professor, U Kansas
- 2016 External referee, promotion to Professor, U Georgia
- 2016 External referee, tenure and promotion to Associate Professor, U Iowa
- 2015 External referee, promotion to Professor, U Georgia
- 2015 External referee, promotion to Professor, U Connecticut
- 2015 External referee, promotion to Professor, U North Texas
- 2014 External referee, promotion to Professor, U Minnesota
- 2014 External referee, tenure and promotion to Associate Professor, Georgia State U
- 2013 External referee, promotion to Professor, George Mason U
- 2013 External referee, promotion to Professor, Temple U
- 2013 External referee, promotion to Professor, U of Texas – Dallas
- 2012 External referee, promotion to Professor, Brigham Young U
- 2012 External referee, tenure and promotion to Associate Professor, U Buffalo
- 2011 External referee, promotion to Professor, Arizona State University
- 2011 External referee, promotion to Professor, U Miami
- 2009 External referee, promotion to Professor, U Iowa
- 2009 External referee, tenure and promotion to Associate Professor, U Iowa
- 2009 External referee, tenure and promotion to Associate Professor, U North Texas
- 2009 External referee, tenure and promotion to Associate Professor, Brigham Young U
- 2009 External referee, tenure and promotion to Associate Professor, U Georgia
- 2009 External referee, appointment to Assistant Professor, Chinese U of Hong Kong
- 2008 External referee, tenure as Associate Professor, U Sains Malaysia, Malaysia
- 2007 External referee, promotion to Professor, U Buffalo
- 2007 External referee, tenure and promotion to Associate Professor, U Georgia
- 2007 External referee, tenure as Associate Professor, East Carolina U
- 2007 External referee, tenure as Associate Professor, Hunter College

- 2006 External referee, appointment to professor and GIS program development, Harvard University (aborted due to conflict of interest)
- 2006 External referee, promotion to Professor, U Cincinnati
- 2006 External referee, tenure and promotion to Associate Professor, U Southern California
- 2006 External referee, promotion to associate professor, Hunter College
- 2006 External referee, tenure/promotion to associate professor, Florida State University
- 2005 External referee, tenure/promotion to associate professor, UT Dallas
- 2005 External referee, promotion to full professor, University of Western Ontario, Canada
- 2005 External referee, tenure and promotion to Associate Professor, West Virginia U
- 2005 External referee, appointment to Professor 2, Chinese University of Hong Kong
- 2004 External referee, promotion to full professor, Ohio State University
- 2004 External referee, promotion to full professor, U Oklahoma
- 2004 External referee, promotion to full professor, U Buffalo
- 2004 External referee, tenure/promotion to associate professor, Indiana U
- 2004 External referee, tenure/promotion to associate professor, Indiana State U
- 2003 External referee, promotion to full professor, U Georgia
- 2003 External referee, promotion to full professor, Kent State University
- 2003 External referee, tenure/promotion to associate professor, Arizona State University
- 2003 External referee, promotion to Professor I, Chinese University of Hong Kong (two cases)
- 2002 External referee, tenure/promotion to associate professor, U Cincinnati
- 2002 External referee, tenure/promotion to associate professor, U Iowa
- 2001 External referee, tenure/promotion to associate professor, Northern Illinois University
- 2001 External referee, tenure/promotion to associate professor, East Carolina University
- 2001 External referee, tenure/promotion to associate professor, University of Cincinnati
- 2000 External referee, tenure/promotion to associate professor, University of Cincinnati
- 2000 External referee, promotion to full professor, University of Tennessee
- 2000 External referee, promotion to full professor, University of Colorado-Boulder
- 1999 External referee, tenure/promotion to associate professor, University of Oklahoma
- 1999 External referee, tenure/promotion to associate professor, Ohio State University
- 1999 External referee, tenure/promotion to associate professor, Macalester College,
- 1999 External referee, promotion to full professor, University of Kansas
- 1999 External referee, tenure/promotion to associate professor, University at Buffalo
- 1999 External examiner, for a doctoral dissertation, Nanyang University, Singapore.
- 1998 External referee, promotion to full professor, University of Connecticut
- 1997 External referee, tenure and promotion to associate professor, U. of Massachusetts - Boston
- 1997 External referee for a grant application for the City University of New York.
- 1996 External referee for a tenure and full professor appointment for University of Southern California
- 1996 External referee for a tenure and promotion case for U. C. Berkeley
- 1994 External referee for a grant application for the Kansas NSF EPSCoR program.
- 1993 External referee for a grant application for the Idaho State Board of Education.
- 1993 External referee for a tenure and promotion case for Florida Atlantic University.
- 1992 External referee for a tenure and promotion case for U. C. Riverside.

Journals edited, Manuscripts, Books, and Proposals reviewed:

Since 1983, I have served as anonymous reviewer regularly for over 500 manuscripts and proposals (on average 10-12/year) for the following journals, granting agencies, and publishing companies. Note the number does not include the grant proposals while serving on the NSF, NIH, NASA, Hong Kong review panels and manuscripts while serving on other regular committees.

Journals:

PNAS

International Journal of Disaster Risk Reduction

Applied Geography

International Journal of Disaster Risk Science

Environment and Planning B

Journal of Infrastructure Systems

Health and Place

Environmental Science and Policy

Nature Climate Change

Ecological Modeling

Natural Hazards

Sustainability

Remote Sensing

PLoS One

The American Cartographer (now called *Cartography and GIS*)

Annals of the Association of American Geographers

Canadian Geographer

Geographical Analysis

International Journal of Geographical Information Science

International Journal of Remote Sensing

The Ohio Journal of Science

Photogrammetric Engineering and Remote Sensing

The Professional Geographer

Social Science and Medicine

Tijdschrift Voor Economische En Sociale Geografie (*Journal of Economic and Social Geography*)

Geosciences and Man

Ecological Applications

Geographical and Environmental Modeling

Physics Review Letters

Environment and Planning D

International Journal of Health Geographics

Remote Sensing of Environment

Geocarto International

Clinical Infectious Diseases

Environmental Monitoring and Assessment

Science

Computers, Environment, and Urban Systems

Transactions in GIS

Transactions, Institute of the British Geographers

Discrete Dynamics for Nature and Society

Risk Analysis

Publishers:

Guilford Press

Oxford University Press

Prentice Hall

Wm. C. Brown Publishers

Merrill Publishing Co.

Lewis Publishers

Granting Agencies and others:

Hong Kong Health and Medical Research Fund

NIH, NIEHS

NASA

EPA

NSF -Geography & Regional Science; Computer Science; Archaeology; Instrumentation and Laboratory Improvement; Small Business Innovative Program, Information Technology, Biocomplexity, HSD, IGERT, International, Hydrological Sciences, CNH, DISES, and others

U.S. Department of Agriculture

University of Toledo (Graduate School Research Grant)

Nanyang University, Singapore

A proposal for CUNY-Albany

A proposal for Kansas State University (2007)

Oklahoma State University Seed Grants (2022)

1.4.5 Other External Services

- 2021 An advisor, LSU A/AAPI Faculty and Staff Caucus
- 2019 Participated in the filming of the documentary on Financial Realities of Climate, Manon Carrie, Associate Producer, PF Pictures, Brooklyn, New York
- 2006- Interviewed by media and students on several projects
- 2010-12 Coastal Best Practices Advisory Committee, Center for Planning Excellence (CPEX)
- 2009 Organized tour and presentation to the Department of Environmental Sciences for high-school students participating in the Louisiana Junior Science and Humanities Symposium, January 16.
- 2003 Presentation to a summer high-school honor class about GIS and remote sensing and gave a tour on our lab facilities.
- 1995-97 Geography Bee judge
- 1989 Geography Bee judge