# Yingjie Li





Center for Systems Integration and Sustainability Department of Fisheries and Wildlife Michigan State University

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#### **EDUCATION**

- 2017-2022 *Ph.D. Candidate*, Fisheries and Wildlife, Environmental Science and Policy (doctoral dual major), Center for Systems Integration and Sustainability, Department of Fisheries and Wildlife, Michigan State University. Advisor: Jianguo (Jack) Liu; Committee: Emilio F. Moran, Anthony Kendall, Scott Swinton
- 2014-2017 M.S., Geography (Ecosystem Services and Global Environment Change); Department of Geography, Shaanxi Normal University. Advisors: Junping Yan, Liwei Zhang
- 2010-2014 B.M., Land Resource Management; College of Resources and Environmental Science, Hunan Normal University. Advisors: Weisheng Xia, Dehua Mao

# **RESEARCH INTERESTS**

Metacoupling • Ecosystem Services Flow • Global Seafood and Agrifood Trade • Sustainability Science SDGs • Land-Food-Energy-Water Nexus • Remote Sensing • Climate and Land-Use Change

# **PUBLICATIONS**

28 published/accepted (*Google Scholar*); 22 under reviews/in preparation

# First-authored Publications

- 1. Xu, Z.<sup>†</sup>, Li, Yingjie<sup>†</sup>, Chau, S.N., Dietz, T., Li, C., Wan, L., Zhang, J., Zhang, L., Li, Yunkai, Chung, M.G., Liu, J. 2020. Impacts of International Trade on Global Sustainable Development. Nature *Sustainability*. 1-8 († Share first authorship)
- 2. Li, Y., Zhang, L, Qiu, J., Yan, J., Wan, L., Wang, P., Hu, N., Cheng, W., Fu, B. 2017. Spatially Explicit Quantification of the Interactions among Ecosystem Services. *Landscape Ecology*, 32(6):1181-1199.
- 3. Li, Y., Zhang, L., Wang, P., Hu, N., Yan, J., Cheng, W., Fu, B. 2017. Mapping the Hotspots and Coldspots of Ecosystem Services in Conservation Priority Setting. Journal of Geographical **Sciences**, 27(6): 681-696.
- 4. Li, Y., Yan, J., Liu, Y. 2016. Research on the Relationship between Dryness/Wetness and Precipitation Heterogeneity in North and South of the Qinling Mountains. Arid Zone Research, 33(3):619-627.
- 5. Li, Y., Yan, J., Wang, P. 2016. Temporal and Spatial Change and Causes Analysis of the Reference Crop Evapotranspiration in Farming-Pastoral Ecotone of Northern China. Chinese Journal of *Agrometeorology*, 37(2):177-184.
- 6. Li, Y., Yan, J., Tang, B., Wang, W. 2016. Tendency Judgement of Mw ≥ 6.8 Earthquake in San Andreas Fault. *Chinese Journal of Geological Hazard and Control*, 27(4): 56-63.
- 7. Li, Y., Xia, W., Liu, X., Zhang, Y., Li, H., Han, Y. 2015. Design and Implementation of Agricultural Land Circulation Platform Based on J2EE. *Journal of Agriculture*, 5(4):85-94.

# Co-authored Publications

- 8. Xu, Z., Chen, X., Liu, J., Zhang Y., Chau, S., Bhattarai N., Wang, Y., Li, Yingjie., Connor, T., Li, Yunkai. 2020. Impacts of irrigated agriculture on food-energy-water-CO2 nexus across metacoupled systems. *Nature Communications* 11, 5837.
- 9. Xu, Z., Chau, S.N., Chen, X., Zhang, J., Li, Yingjie., Dietz, T., Wang, J., Winkler, J.A., Fan, F., Huang, B., Li, S., Wu, S., Herzberger, A., Tang, Y., Hong, D., Li, Yunkai, Liu, J., 2020. Assessing progress towards sustainable development over space and time. *Nature* 577, 74–78 (*Cover Feature*)
- 10. Wang, Z., Zhang, L., Li, X., Li, Y., Frans, V., Yan, J. 2020. A network perspective for mapping freshwater service flows at the watershed scale. *Ecosystem Services* 45, 101129.

- 11. Wang, Z., Zhang, L., Li, X., Li, Y., Wang, P., Yan, J. 2020. Spatio-temporal pattern of supply-demand risk of ecosystem services at regional scale: a case study of water yield service in Shaanxi province. *Acta Ecologica Sinica* 40 (6): 1887-1900.
- 12. Zheng, H., Zhang, L., Wang, P., Li, Y. 2019. The Net Primary Productivity-Based Composite Indicator for Assessing the Variations of Water Provision Services at the National Scale. *Water*. 11(8), 1628.
- 13. Li, X., Zhang, L., O'Connor, P.J., Yan, J., Wang, B., Liu, D.L., Wang, P., Wang, Z., Wan, L. and Li, Y., 2020. Ecosystem Services under a Climate-Change-Impacted Water Infrastructure in a Highly Forested Basin. *Water*, 12(10), p.2825.
- Xu, Z., <u>Li, Y.</u>, Herzberger, A., Gong, M., Kapsar, K., Hovis, C, Whyte, J., Tang, Y., Li, Y., Liu, J. 2019. Interactive National Virtual Water-Energy Nexus Networks. *Science of The Total Environment*. 673 (2019): 128-135.
- 15. Kapsar, K., Hovis, C., Buchholtz, E., Carlson, A., Dou, Y., Du, Y., Furumo, P., <u>Li, Y.</u>, Torres, A., Wan, H., Silva, R., Yang, D., Zaehringer, J., Liu, J. 2019. Telecoupling Research: The First Five Years. *Sustainability*, 11(4), 1033
- Xu, Z., Chau, S., Ruzzenenti, F., Connor, T., Li, Y., Tang, Y., Li, D., Gong, M. Liu, J., 2018. Evolution of Multiple Global Virtual Material Flows. *Science of The Total Environment*, 658,659–668
- 17. Carlson, A, Zaehringer, J, Garrett, R, Felipe, Bicudo Silva R., Furumo. P., Raya, Rey A., Torres, A., Chung, G.M., Li, Y, Liu, J. 2018. Toward Rigorous Telecoupling Causal Attribution: A Systematic Review and Typology. *Sustainability*, 10(12), 4426.
- 18. Wang, Z., Zhang, L., Li, X., Wang, P., Li, Y., Lu, Y., Yan, J. 2019. The Spatial-Temporal Pattern of Hot Spots and Cold Spots of Ecosystem Services at the Watershed Scale. *Acta Ecologica Sinica*, 39(3):823-834.
- 19. Wang, P., Zhang, L., <u>Li, Y.</u>, Jiao, L., Wang, H., Yan J, Lü Y, Fu B. 2018. Spatio-temporal Variations of the Flood Mitigation Service of Ecosystem under Different Climate Scenarios in the Upper Reaches of Hanjiang River Basin, China. *Journal of Geographical Sciences*, 28(10), 1385-1398.
- 20. Wang, P., Zhang, L., Li, Y., Jiao, L., Wang, H., Yan, J., Lü, Y., Fu, B. 2017. Spatio-temporal characteristics of the Trade-off and Synergy Relationships among Multiple Ecosystem Services in the Upper Reaches of Hanjiang River Basin. *Acta Geographica Sinica*, 72 (11): 2064- 2078.
- Zhang, L., Fu, B., Lü, Y., Dong, Z., <u>Li, Y.</u>, Zeng, Y., Wu, B. 2016. The Using of Composite Indicators to Assess the Conservation Effectiveness of Ecosystem Services in China. *Acta Geographica Sinica*, 05(71):768-780.
- 22. Liu, Y., Yan, J., Cen, M., Fang, Q., Liu, Z., Li, Y. 2016. A Graded Index for Evaluating Precipitation Heterogeneity in China. *Journal of Geographical Sciences*, 26(6), 673-693.
- 23. Wan, L., Zhang, Z., Li, Y., Zhang, J., Ye, C. 2017. Temporal and Spatial Analysis of Extreme Temperature and Precipitation Events in the Hanjiang River Basin during the Past 50 Years. *Journal of China Agricultural University*, 22(9): 133-144.
- 24. Wang, W., Yan, J., Liu, Y., Li, Y. 2016. Characteristics of Droughts in the Haihe Basin Based on Meteorological Drought Composite Index. *Arid Land Geography*, 39(02): 336-344.
- 25. Wang, H., Yan, J., Tang, B.,  $\underline{\text{Li}}$ , Y. Space-time symmetry and tendency judgment of Mw  $\geq$  6.9 earthquake in Peru. *Journal of Zhejiang University (Science Edition)*, 2018, 45(1): 001-009.
- 26. Yan, J., Li, Y., Li, S., Tang, B., Wang, W. 2017. Review on the Spatiotemporal Symmetry Methodology of Natural Disaster. *Journal of Catastrophology*. 32(1): 149-154, 182.
- 27. Tang, B., Yan, J., Li, Y. 2015. Changes in the Accumulated Temperature above 10 °C in East China. *Chinese Journal of Agrometeorology*, 36(6):674-682. (in Chinese with English abstract)

### Under Review/Submitted

28. <u>Li, Y.</u>, Chen R., Vollbracht, M., Maltese, R., Xia, ., Zhang, Y., Schatz, R., Liu, J. Global Business Giants' Commitment to Sustainable Development Goals (*Nature Sustainability, under review*)

- 29. <u>Li, Y.</u>, Zhang, Y., Tiffany, L., Chen, R., Cai, M., Liu, J. Socio-Environmental Sensing to Monitor the Impacts of Large-Scale Infrastructure Development. (*Environmental Science and Policy*, *under review*.)
- 30. Xia, Z., <u>Li, Y.</u><sup>†\*</sup>, Chen, R\*., et al. Mapping the rapid development of photovoltaic power stations in northwestern China using remote sensing († Share first authorship, *Applied Energy*, *under review*)
- 31. Li, G., Fang C., Li, Y., Wang, Z., Sun, S., He, S., Qi, W., Bao, C., Ma, H., Fan, Y., Liu, H., Liu, X. Global impacts of future urban expansion on biodiversity (*Nature Communications*, *under review*)
- 32. Wu, X., Liu, J., Wang, S., Fu, B., <u>Li, Y.</u> Sustainability bundles for tracking progress toward sustainable development. (*Nature Sustainability, submitted*)
- 33. Li, C., Liu, X., ..., Li, Y., et al. Deployment of Artificial Fault Points in Electric Power Systems for Promoting the Integration of Clean Energy (*Nature Energy*, *submitted*)
- 34. Chen, R.<sup>†</sup>, <u>Li, Y.</u><sup>†</sup>, Zhang, Y., Wu, X., Liu, J. Epidemics in the hyperconnected world need flow-based governance (<sup>†</sup> Share first authorship, *Nature Medicine*, *submitted*)
- 35. Lei, M., <u>Li, Y.</u>, et al. Understand the Impact of Telecoupled Rural-Urban Labor Migration on Arable Land Use Intensity in China. (*Land Use Policy, submitted*)
- 36. Yang, H., Dietz, T., Li, Y., Dou, Y., Liu, J. Unraveling complex interrelationships among sustainable development goals. (*World Development*, *under review*)
- 37. Wang, Z., Zhang, L., Li, X., Li, Y., Fu, B. Spatiotemporal evolution characteristics of supply and demand risks of ecosystem services. (*Landscape Ecology*, *under review*)
- 38. Chung M., <u>Li, Y.</u>, Liu J. Global red and processed meat trade and non-communicable diseases (*Annals of Global Health*, *under review*)

# In Preparation

- 39. <u>Li, Y.</u>, Nguyen L., Wan H.Y., Seeley M., Li, Y., Liu J. Mapping Spatiotemporal Dynamics of Coastal Dead Zones Using Remote Sensing (*In prep.*)
- 40. <u>Li, Y.</u>, Li M., Chen, R., Malik A., Lenzen M., Xu Z., Liu J. Impacts of metacouplings on achieving global SDGs (*In prep.*)
- 41. Li, Y., Liu, J. Exporting Agricultural Food Damages Domestic Seafood Security (*In prep.*)
- 42. <u>Li, Y.</u>, Liu, J. Ecosystem Services Dynamics and Interactions in Globalized Agricultural Landscapes (*In prep.*)
- 43. <u>Li, Y.</u>, Yan, M., Xie, Y, Hu., Y., Liu, J. Food Insecurity in Cities: Evidence from Mobile Phone Geolocations Big Data (*In prep.*)
- 44. <u>Li, Y.</u>, Dahlin, K., Liu, J. Impacts of Dam Construction on Landscape and Ecosystem Services Change (*In prep.*)
- 45. Li, Y., Qi, J., Irrigation Dynamics in Northern China Derived from Landsat (*In prep.*)
- 46. <u>Li, Y.,</u> Zhang L. Urban ecosystem services dynamic in changing land use (*In prep.*)
- 47. Dou, Y., Li, Y., Herzberger, A., Hovias, C., Wu, W., Liu, J. International Trade Reduces the FEW Nexus Efficiency in Importing Countries: Evidence of Soybean Trade. (*In prep.*, Target journal: *Nature Sustainability*)
- 48. L, C., Li, Y. et al. Energy Storage Configuration for achieving Carbon-Free Electric Systems.
- 49. Yang, H., Li, Y., Liu, J. Conservation Policies in Rural Areas Mitigate Flooding Risk to Urban Centers (*In prep.*)

#### Non Peer-reviewed Publications

50. Chikowore, N., Collier, J., Djenontin, I., <u>Li, Y.</u>, Ward K. 2019. Addressing PFAS in the State of Michigan. *ESPPulse*, 4, 12-31. (Alphabetical order)

#### PROFESSIONAL PRESENTATIONS

#### **Oral presentations**

- 1. **Li, Y.** Remote Sensing of Coastal Dead Zones. *Environmental Science & Policy Program Fall Research Symposium*. East Lansing, USA, November 11, 2020. (Oral)
- 2. Li, Y. Impacts of International Trade on Global Sustainable Development. GeoInsider Webinar,

- August 13, 2020. (Oral, invited)
- 3. **Li, Y.** Observing Marine Dead Zones From Space. *Google Booth Talks, AGU Fall Meeting.* San Francisco, CA, USA, December 11, 2019. (Oral, invited)
- 4. **Li, Y.,** Nguyen L., Wan H.Y., Seeley M., Li, Y., Liu J. Complex Spatiotemporal Dynamics of Global Coastal Dead Zones. *AGU Fall Meeting*. San Francisco, CA, USA, December 12, 2019. (Oral)
- 5. **Li, Y.,** Liu J. Ecosystem Services Dynamics and Interactions in Globalized Agricultural Landscapes. *KBS LTER All Scientist Meeting*. Hickory Corners, MI, USA, Sep 19-20, 2019. (Oral)
- 6. **Li, Y.,** Liu J. Exporting Agricultural Food Damages Domestic Seafood Security and Coastal Ecosystems. *The 2019 IALE Annual Meeting*, Fort Collins, CO, USA, April 7-11, 2019. (Oral)
- 7. **Li, Y.** Food-Water Nexus in and beyond Watershed Systems. *Environmental Science & Policy Program Fall Research Symposium: Balancing Act: Food, Water, Energy, Climate.* East Lansing, USA, November 1, 2018. (Oral)
- 8. **Li, Y.,** Xu Z., Liu J. Impacts of International Trade on Global Sustainable Development. *The 2018 IALE Annual Meeting*, Chicago, USA, April 9-13, 2018. (Oral)
- 9. **Li, Y.,** Zhang L. Quantifying Spatial Heterogeneity in Ecosystem Services Interactions. *Shaanxi Normal University Graduate Academic Forum*, Xi'an, China, 2017. (Oral)
- 10. **Li, Y,** Zhang L., Wang P., Yan J., Cheng W., Fu B. Spatial-explicitly Quantifying the Ecosystem Services Interactions for Land-Use Management. *Pre IGU 2016 Conference Workshop Land Use and Rural Sustainability*, Xi'an, China, 2016. (Oral)
- 11. **Li, Y.,** Yan J., Liu Y. 2016. Research on the Relationship between Dryness/Wetness and Precipitation Heterogeneity in north and south of the Qinling Mountains. *Annual Meeting of the Geographical Society of Shaanxi Province*, Xi'an, China. (Oral)
- 12. **Li, Y.,** Zhang L., Yan J. 2016. Mapping the hotspots and coldspots of soil conservation service in Shaanxi Province. *Shaanxi Normal University Graduate Academic Forum*, Xi'an, China. (Oral)
- 13. **Li, Y.,** Yan J., Wang P. 2016. Temporal and Spatial Change and Sensitivity analysis of the Reference Crop Evapotranspiration in Farming-Pastoral Ecotone of Northern China. *Annual Meeting of the Geographical Society of Northwestern China*, Ghulja, China. (Oral)
- 14. Li, Y., Xia W.. 2014. Design and Implementation of Agricultural Land Circulation Platform Based on J2EE. *Graduate Academic Forum of Tourism and Environment College*, Xi'an, China. (Oral)

# Poster presentations

- 15. **Li, Y.,** Zhang L., Wang P., Yan J. Mapping the Hotspots and Coldspots of Ecosystem Services in Conservation Priority Setting. *The 33rd International Geographical Congress Shaping Our Harmonious World*, Beijing, China, August 22, 2016. (Poster)
- 16. Li, Y. 2014. Spatiotemporal characteristics of drought in Serbia, *Simulated International Academic Conferences of Shaanxi Normal University*, Xi'an, China. (Poster)

#### RESEARCH EXPERIENCE

- 2019 2020 *Research Assistant* at Michigan State University
  - CNH2-L: Uncovering Metacoupled Socio-Environmental Systems (#1924111, Supported by the National Science Foundation. PI/co-PI(s): Jianguo 'Jack' Liu, Emilio Moran, Thomas Hertel, Andres Vina, Sue Nichols)
  - LTER: KBS Mechanisms of Resilience in Agricultural Landscapes (#1832042, PI/co-PI(s): G. Philip Robertson, Nicholas Haddad, Stephen Hamilton, Jennifer Lau, Sarah Evans)
- 2017 2019 *Research Assistant* at Michigan State University
  - Complex Dynamics of Telecoupled Human and Natural Systems (Supported by the National Science Foundation, PI: Jianguo 'Jack' Liu)
- 2014 2016 *Research Assistant* at Shaanxi Normal University
  - Simulation of the Ecosystem Services Spatial Flows in Yanhe River Watershed (Supported by the National Natural Science Foundation of China, PI: Liwei Zhang)
  - Ecosystem Services Tradeoffs and Synergies in the Upstream of Hanjiang River (Supported by China Postdoctoral Science Foundation, PI: Liwei Zhang)

- Spatiotemporal Symmetry of Major Natural Disasters: Structure, Mechanism and Adapting Strategies (Supported by National Natural/ Social Science Foundation of China, PI: Junping Yan)
- 2014 April August, *Research Assistant* at South China Institute of Environment Sciences, Ministry of Environmental Protection of the People's Republic of China
  - Helped compile three ecological project applications and achieved success in two
  - Assisted to complete two projects: the Planning of Eco-Civilization Construction in Pujiang County, Ecological Protection Planning of High Quality Water Sources

# 2010 – 2014 Undergraduate Project Lead Investigator

 Causes and Solutions to Agricultural Land Abandonment in Rural China (Supported by Undergraduate Student Innovation Research Project Funds in Central Universities)

# GRANTS, AWARDS, and SCHOLARSHIPS

- 2020 MSU Cloud Computing Fellowship
- 2020 MSU Graduate School Writing Fellowship (\$2,000; 2020-2021)
- 2020 ESPP Research Grant, for Socio-Environmental Sensing Research, MSU (\$2,400)
- 2020 ESPP Summer Research Fellowship, for Global Dead Zones Mapping Research, MSU (\$7,000)
- 2020 Summer Critical Needs Fellowship, College of Agriculture and Natural Resource, MSU (\$3,500)
- 2019 Travel Funding, the Graduate School at MSU (\$350)
- 2019 Travel Funding, the College of Agriculture and Natural Resource's Office of Academic and Student Affairs at MSU (\$400)
- 2019 Travel Funding, the Department of Fisheries and Wildlife at MSU (\$200)
- 2019 Second Place Winners for the SSDA Data Visualization Challenge, SSDA at MSU
- 2019 George H. Lauff Scholarship, for Enhancing Linkages between Math and Ecology (ELME) Program Tuition Award (full tuition and full room & board scholarships), KBS at MSU (~\$1,000)
- 2019 Travel Grants for Social and Ecological Network Analysis Course at SESYNC (~\$2,500)
- 2019 KBS LTER Summer Research Fellowship (\$6,500)
- 2019 US-IALE 2019 Student Volunteer Award (\$200)
- 2019 ESPP Interdisciplinary Conference Travel Grants (\$500)
- 2018 State Scholarship Fund (\$91, 000; 2018-2022)
- 2018 Graduate Student Workshop on Socio-Environmental Synthesis, National Socio-Environmental Synthesis Center (SESYNC, Fully funded for selected attendees, ~\$2,000)
- 2017 ESPP Doctoral Recruiting Fellowships, MSU (\$25, 000)
- 2017 Outstanding Graduates, Shaanxi Normal University (SNNU)
- 2017 Outstanding Speakers in the Graduate Academic Forum, SNNU
- 2017 Graduate Innovation Scholarship, SNNU (1%, \$880)
- 2017 Special Fund to Foreign Language Excellence, SNNU (\$150)
- 2017 The First-Prize Scholarship, SNNU (\$1,700)
- 2016 The First-Prize Scholarship, SNNU (2 awards totaling \$2,000)
- 2016 Outstanding Speakers in the Graduate Academic Forum, SNNU
- 2016 Outstanding Graduate Student, SNNU
- 2014 The Second-Prize Scholarship, SNNU (2 awards totaling \$1,500)
- 2014 The Outstanding Undergraduate Thesis, Hunan Normal University (HNU)
- 2014 Travel Grant, State Key Lab of Information Engineering in Surveying, Mapping and Remote Sensing (LIESMARS), Wuhan University (~\$700)
- 2013 Travel Grant, Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences (\$500)
- 2013 National Endeavor Fellowship
- 2012 National Endeavor Fellowship
- 2011 National Endeavor Fellowship
- 2011 The Second-Prize Scholarship

### PROFESSIONAL SERVICES

#### Reviewer

- Global Ecology and Conservation (2: 2019/12, 2020/10)
- Science of the Total Environment (1: 2018/12)
- One Ecosystem (4: 2018/11, 2019/02, 2020/02, 2020/03)
- PeerJ Life & Environment (2: 2020/02, 2020/06)
- Irrigation Science (2: 2018/06, 2019/04)

# Organizing committee

- Spotlight Magazine (2018, 2019)
- Graduate Student Organization Symposium (2018)

# Mentoring

- Zilong Xia, M.S. student, School of Geographic Sciences, East China Normal University
- Nan Jia, Ph.D. student, Department of Fisheries and Wildlife, Michigan State University

#### Other services

- Leading Organizer, Metacoupling Seminars (2020-)
- Leading Organizer, CSIS Meetings (2020)
- SSDA Associate (2019 ), MSU Social Science Data Analytics Student Engagement Program
- Leading Organizer, Weekly Lab Meetings (2019)

# TEACHING, MENTORING, and LEADERSHIP EXPERIENCE

# Teaching/Workshops lead

- FW 893-731 Metacoupling Science: Interdisciplinary Frontiers and Global Applications (TA, Spring 2021)
- Telecoupling GeoApp: An Integrated Cloud-based Platform for Understanding Complex Socio-Ecological Systems. *International Summer School on Governance of Socio-Ecological Systems in Coastal Cities*. Shanghai, China. July 9, 2019 (invited, remote presentation)
- Data Visualization in R (workshop lead). *SSDA Special Workshop Series*. MSU Social Science Data Analytics. Lansing, USA. June 25, 2019.

### TECHNICAL SKILLS

# Computer skills and competencies

- **Specialized software**: Proficient in *ArcGIS* (spatial analysis), *ENVI* (remote sensing image processing), *QGIS*, *Fragstats*, *InVEST*, *Dyna-CLUE* (Land use change scenarios modeling), *SWAT*, *Photoshop*, *CorelDRAW*, *Adobe Illustrator*.
- **Programming**: *R* (Statistical analyses, Spatial analysis), *Python* (Geospatial analysis, Agent-based modeling), *Google Earth Engine* (*JavaScript*), *NetLogo* (Agent-based modeling)

### Licenses & certifications

• NLP: Twitter Sentiment Analysis; Coursera; Issued November 2020.

#### Language ability

• English and Chinese (Mandarin)

# PROFESSIONAL TRAINING

- 2019 Social and Ecological Network Analysis Course. National Socio-Environmental Synthesis Center (SESYNC), June 10-14, Annapolis, MD, USA.
- 2019 Community Engaged Scholarship Training for the Great Lakes Center for Fresh Waters and Human Health. Michigan Sea Grant, MSU Extension, and MSU Outreach and Engagement, May

- 20-23, 2019, Oregon, OH, USA
- 2019 LandSCaPeN: an Expansive Toolbox to Measure, Model, and Map Landscapes in Google Earth Engine. US-IALE 2019 Annual Meeting Workshop. April 11, Fort Collins, Colorado
- 2019 FUTURES Land-change Modeling for Evaluating Innovative Conservation Scenarios. US-IALE 2019 Annual Meeting Workshop. April 9, Fort Collins, Colorado
- 2018 Graduate Student Workshop on Socio-Environmental Synthesis, National Socio-Environmental Synthesis Center (SESYNC)
- 2016 Computational Social Science Workshop. Center for Social Survey, Sun Yat-sen University, Aug 2-11, Guangzhou, China. <a href="http://isg.sysu.edu.cn/node/217">http://isg.sysu.edu.cn/node/217</a>
- Spatial Statistics and Big Data Analysis. GeoInformatics Summer School organized by the State Key Lab of Information Engineering in Surveying, Mapping and Remote Sensing, Wuhan University, June 4-14, Wuhan, China. <a href="http://www.lmars.whu.edu.cn/geosummerschool/index.jsp">http://www.lmars.whu.edu.cn/geosummerschool/index.jsp</a>
- 2014 Remote Sensing Application Technology using ENVI/IDL, ESRI China, Xi'an, China

#### **EXTRACURRICULAR & SOCIAL ACTIVITIES**

#### 2019 - 2020

- Member, Telecoupling Research Towards Sustainable Transformation of Land Systems Working Group
- Member, American Geophysical Union (AGU)

#### 2018 - 2019

- Member, U.S. International Association for Landscape Ecology (US-IALE)
- Member, Young Ecosystem Services Specialists (YESS)
- Member, Graduate Employees Union, Michigan State University

#### 2014 - 2015

- Member, China Geographical Graduate Union
- Vice-President of the Graduate Union in Tourism and Environment College at SNNU

#### 2011 - 2014

- Founding President of the Runners Association at Hunan Normal University
- Excellent Student Cadre at Hunan Normal University

### REFERENCES

#### Ph.D. Major Advisor

Dr. Jianguo (Jack) Liu

Rachel Carson Chair in Sustainability

University Distinguished Professor of fisheries and wildlife

Director of the Center for Systems Integration and Sustainability

Michigan State University

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#### Ph.D. Guidance Committee

Dr. Emilio F. Moran

John A. Hannah Distinguished Professor

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#### Ph.D. Guidance Committee

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University Distinguished Professor

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# Ph.D. Guidance Committee

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# Mentor and close collaborator

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School of Geographical Sciences, Institute of Eco-Chongming
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