

Curriculum Vitae

Yaqian He

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ACADEMIC APPOINTMENTS

08/2020- **Assistant Professor** in the Department of Geography, University of Central Arkansas, Conway, AR
09/2018- 07/2020 **Postdoc Research Fellow** in the Department of Geography, Dartmouth College, Hanover, NH

EDUCATION

2013-2018 **Ph.D.** in Geography in the Department of Geology and Geography, West Virginia University, Morgantown, WV.
2010-2013 **M.S.** in Cartography and GIS in the Department of Geography, Beijing Normal University, China.
2006-2010 **B.E.** in Surveying Engineering in the Dept. of Environment Science and Spatial Informatics, China Univ. of Mining and Tech., China.

RESEARCH INTERESTS

Remote Sensing and GIS
Big Data Analytics
High-Performance Computing
Land Cover and Land Use Change
Climate Change, Extremes, and Modeling
Land-Atmosphere Interactions

REFEREED PUBLICATIONS (underscore denotes advised students)

Submitted/Under review

4. W. Tay and **Y. He**, 2022: Estimating biomass carbon emission induced by land cover and land use change from 2001 to 2019 in Arkansas, US. *submitted*
3. F. Fang, A. Greenlee, **Y. He**, E. Eutsler, 2022: Evaluating the Quantity and Quality of Street Trees in Washington, D.C.: Implications for Environmental Justice. *submitted*
2. **Y. He**, P. Siminara, X. Huang, D. Yang, F. Fang, and C. Song, 2022d: Geospatial associations of health, socioeconomic, demographic, and environmental factors with COVID-19 considering temporal disparities in Arkansas, US. *submitted*
1. **Y. He**, M. H. Connolly, R. Xu, X. Huang, Z. Wang, M. Filares-Arreguin, and C. Rhodes, 2022c: Irrigation-climate interactions impact on irrigated soybean yields in the Arkansas Delta. *resubmitted*

Published

2022

29. **He, Y.**, J. Chipman, N. Siegert, J. S. Mankin, 2022a. Rapid land cover and land use change in the Indo-Malaysian region over the last 34 years based on AVHRR NDVI data. *Annals of the American Association of Geographers*.
28. He, Q., Q. Meng, W. Flatley, **Y. He**, 2022b. Examining the Effects of Agricultural Aid on Forests in Sub-Saharan Africa: A Causal Analysis Based on Remotely Sensed Data of Sierra Leone. *Land*, 11, 668.
27. Yadav, S., E. Lee.,**Y. He**, 2022. Positive effects of vegetation on temperature over the Alpine Grasslands in the Western Tibetan Plateau. *Earth Interactions*.
26. **He, Y.**+, J.Oh+, E. Lee, J. Kim, 2022. Land cover and land use mapping of the East Asian Summer Monsoon region from 1982 to 2015. *Land*, 11, 391. (+contribute equally)

2021

25. Yang, A., Yang, J., Yang, D., Xu, R., **He, Y.**, Aragon, A. and Qiu, H., 2021. Human Mobility to Parks under the COVID-19 Pandemic and Wildfire Seasons in the Western and Central United States. *GeoHealth*, p.e2021GH000494.
24. **He, Y**+, Xu, R+, Prior, S.A., Yang, D., Yang, A. and Chen, J., 2021. Satellite-detected ammonia changes in the United States: natural or anthropogenic impacts. *Science of The Total Environment*, p.147899. (+contribute equally)
23. Liu, J., Shen, W. and **He, Y***, 2021. Effects of Cropland Expansion on Temperature Extremes in Western India from 1982 to 2015. *Land*, 10 (5), p.489. (*corresponding author)
22. You, G., Liu, B., Zou, C., Li, H., McKenzie, S., **He, Y.**, Gao, J., Jia, X., Arain, M.A., Wang, S. and Wang, Z., 2021. Sensitivity of vegetation dynamics to climate variability in a forest-steppe transition ecozone, north-eastern Inner Mongolia, China. *Ecological Indicators*, 120, p.106833.

2020

21. **He, Y.**, Lee, E. and Mankin, J. S., 2020. Seasonal tropospheric cooling in Northeast China associated with cropland expansion. *Environmental Research Letters*, 15, 034032.
20. Li, Y., Chen, Y., Wang, F., **He, Y.** and Li, Z., 2020. Evaluation and projection of snowfall changes in High Mountain Asia based on NASA's NEX-GDDP high-resolution daily downscaled dataset. *Environmental Research Letters*, 15(10), p.104040.
19. You, G., Arain, M.A., Wang, S., McKenzie, S., Xu, B., **He, Y.**, Wu, D., Lin, N., Gao, J. and Jia, X., 2020. Inter-annual Climate Variability and Vegetation Dynamic in the Upper Amur (Heilongjiang) River Basin in Northeast Asia. *Environmental Research Communications*, 2 (6), p.061003.

2019

18. Ji, X., Li, X., **He, Y***. and Liu, X., 2019. A simple method to improve estimate of county-level economic in China by using nighttime light data and GDP growth rate. *ISPRS International Journal of Geo-Information*, 8(9), pp. 419. (*corresponding author)
17. Song, C+, **He, Y**+, Bo, Y., Wang, J., Ren, Z., Guo, J. and Yang, H., 2019. Disease relative risk downscaling model to localize various epidemiologic indicators for mapping hand, foot, and mouth disease over China. *Stochastic Environmental Research and Risk Assessment*, pp. 1-19. (+contribute equally)
16. Gaertner, B.A., Zegre, N., Warner, T., Fernandez, R., **He, Y.** and Merriam, E.R., 2019. Climate, forest growing season, and evapotranspiration changes in the central Appalachian Mountains, USA. *Science of The Total Environment*, 650, pp.1371-1381.

2018

15. **He, Y.**, Warner, T., McNeil, B. and Lee, E., 2018. Reducing uncertainties in applying remotely sensed land use and land cover maps in land-atmosphere interaction: identifying change in space and time. *Remote Sensing*, 10(4), pp.506.
14. Lee, E. and **He, Y.**, 2018. Could the enhanced forests reduce summer warming in the southern China?. *Journal of Climate Research*, 13(4), pp.345-359.
13. Lee, E., **He, Y.** and Park, Y-L., 2018. Effects of climate change on the phenology of *Osmia cornifrons*: implications for population management. *Climatic Change*, 150(3-4), pp.305-317.
12. Song, C., **He, Y.**, Bo, Y., Wang, J., Ren, Z. and Yang, H., 2018. Risk assessment and mapping of hand, foot, and mouth disease at the county level in mainland China using spatiotemporal zero-inflated Bayesian hierarchical models. *International Journal of Environmental Research and Public Health*, 15(7), pp.1476.

2017

11. **He, Y.**, Lee, E. and Warner, T.A., 2017. A time series of annual land use and land cover maps of China from 1982 to 2013 generated using AVHRR GIMMS NDVI3g data. *Remote Sensing of Environment*, 199, pp.201-217.
10. Lee, E., **He, Y.** and Shanmugasundaram, J., 2017. Geography of Monsoons. In Oxford Bibliographies in Geography. Ed. Barney Warf. *New York: Oxford University Press*.

2016

9. **He, Y.** and Lee, E., 2016. Empirical relationships of sea surface temperature and vegetation activity with summer rainfall variability over the Sahel. *Earth Interactions*, 20(6), pp.1-18.
8. **He, Y.**, Bo, Y., Chai, L., Liu, X. and Li, A., 2016. Linking in situ LAI and fine resolution remote sensing data to map reference LAI over cropland and grassland using geostatistical regression method. *International Journal of Applied Earth Observation and Geoinformation*, 50, pp.26-38.
7. Ahn, J.J., Son, Y., **He, Y.**, Lee, E. and Park, Y.L., 2016. Effects of temperature on development and voltinism of *Chaetodactylus krombeini* (Acari: Chaetodactylidae): implications for climate change impacts. *PloS One*, 11(8), pp.e0161319.

2015

6. **He, Y.**, Bo, Y., de Jong, R., Li, A., Zhu, Y. and Cheng, J., 2015. Comparison of vegetation phenological metrics extracted from GIMMS NDVIg and MERIS MTCI data sets over China. *International Journal of Remote Sensing*, 36(1), pp.300-317.
5. Lee, E., **He, Y.**, Zhou, M. and Liang, J., 2015. Potential feedback of recent vegetation changes on summer rainfall in the Sahel. *Physical Geography*, 36(6), pp.449-470.
4. Zhu, Y., Kang, E.L., Bo, Y., Tang, Q., Cheng, J. and **He, Y.**, 2015. A robust fixed rank kriging method for improving the spatial completeness and accuracy of satellite SST products. *IEEE Transactions on Geoscience and Remote Sensing*, 53(9), pp.5021-5035.
3. Liu, X., Bo, Y., Zhang, J. and **He, Y.**, 2015. Classification of C3 and C4 vegetation types using MODIS and ETM+ blended high spatio-temporal resolution data. *Remote Sensing*, 7(11), pp.15244-15268.
2. Zheng, L., Bo, Y. and **He, Y.**, 2015. Comparison of natural vegetation phenology developed from MODIS and CYCLOPES and GLASS LAI data product based on dynamical threshold method: a case study in three provinces of Northeast China. *Remote Sensing Technology and Application*, 30 (6), 1103-1112. (Chinese with English abstract)

2013

1. Li, A., Bo, Y., Zhu, Y., Guo, P., Bi, J. and **He, Y.**, 2013. Blending multi-resolution satellite sea surface temperature (SST) products using Bayesian maximum entropy method. *Remote Sensing of Environment*, 135, pp.52-63.

TEACHING EXPERIENCE

2020-current	Instructor of <i>Geographic Information Analysis: Python Programming</i> , Department of Geography, University of Central Arkansas.
2020-current	Instructor of <i>Introduction to GIS</i> , Department of Geography, University of Central Arkansas.
2020-current	Instructor of <i>Geographic Field Technique</i> , Department of Geography, University of Central Arkansas.
2020-2021	Instructor of <i>Cartography</i> , Department of Geography, University of Central Arkansas.
2020	Guest Lecture “Spatial statistics: from data to information”, Department of Geology, University of Dayton.
2019	Guest Lecture ‘The monsoon climate’ in <i>future faculty teaching series</i> , Dartmouth Center for the Advancement of Learning.
2018	Guest Lecture ‘A magic line- division of climate and land use/cover in China’ in <i>World Regional Geography course</i> , Department of Geology and Geography, West Virginia University.
2016	Summer Instructor of <i>World Regional Geography</i> at Department of Geology and Geography, West Virginia University. (3 hours/day, 12 undergraduate students)
2016	Guest Lecture ‘Remote sensing of vegetation: Normalized Difference Vegetation Index (NDVI)’ in <i>Climate and watersheds course</i> , Division of Forest and Natural Resources, West Virginia University.
2011	Lab Instructor of <i>Introduction to Remote Sensing</i> at Department of Geography, Beijing Normal University, China. Instructor: Dr. Yanchen Bo. (Spring Semester, 60 undergraduate students)

GRANT

Pending/To be submitted

2022	PI: <i>Quantifying impacts of LCLUC-climate interactions on ecosystem productivity in the ABoVE region</i> , to be submitted to NASA EPSCoR Rapid Response (R3) by 12/15/2022, with Di Yang (Co-PI)
2022	PI: <i>Quantifying the effects of climate extreme-irrigation interactions on crop yields in the Mississippi Alluvial Plain</i> , to be submitted to NSF HEGS by 1/17/2023
2022	PI: <i>Characterizing Spatiotemporal Patterns of Soybean Phenology in the Northern Arkansas Delta Region Using Multi-Source Remotely Sensed Data from 2001 to 2020</i> , NASA Arkansas Space Grant Consortium Student Intensive Training Grant (2022-2023), with Brooks Pearson (Co-PI) (\$15,000). Pending.

Funded (External)

2022	Sole-PI: <i>Identifying the effects of climatic and socioeconomic variables on the spread of COVID-19 in Arkansas using geospatial techniques</i> , Arkansas INBRE – Summer Manuscript Support Grant (\$7,976)
2021	Co-PI: <i>Using historical and model data to guide landscape-scale restoration of fire-</i>

- adapted shortleaf pine forests in the Ouachita Mountains*, NASA Arkansas Space Grant Consortium New Researcher Grant (2022-2023), with William Flatley (PI) (\$10,000).
- 2021 **Co-PI:** *Using historical and model data to guide landscape-scale restoration of fire-adapted vegetation communities in the Ouachita Mountains*, NASA Arkansas Space Grant Consortium Student Intensive Training Grant (2022-2023), with William Flatley (PI) (\$10,000).
- 2021 **Co-PI:** *Using historical and model data to guide landscape-scale restoration of fire-adapted vegetation communities in the Ouachita Mountains*, NASA Arkansas Space Grant Consortium Student Intensive Training Grant (2021-2022), with William Flatley (PI) (\$10,000).
- 2021 **PI:** *Quantifying irrigation impacts and its consequence climate variability on crop yield in Northern Arkansas Delta*, NASA EPSCoR RID (02/15/2021-02/14/2022); with Matthew Conolly (Co-PI) and Xiao Huang (Co-PI) (\$40,000)
- 2020 **Co-PI:** *Assessing net ecosystem carbon exchange for the conterminous United States with MODIS Data and machine/deep learning models*, Microsoft Azure credit grant (01/2021-01/2022); with (Rongting Xu (PI), Jian Chen (Co-PI), and Di Yang (Co-PI)) (\$15,000).

Funded (Internal)

- 2021 **Sole-Mentor:** *Identifying the effects of climatic variables on the spread of COVID-19 in Arkansas*, Advancement of Undergraduate Research in the Sciences, University of Central Arkansas (\$5,000).
- 2021 **Sole-Mentor:** *Estimating carbon emission induced by land cover and land use change in Arkansas*, Southwestern Energy Research Fellow, University of Central Arkansas (\$1,500).
- 2020 **Sole-PI:** *Statewide land cover and land use change mapping to constrain uncertainty in the carbon budget in Arkansas*, University Research Council, University of Central Arkansas (05/2021-12/2022) (\$5,178).
- 2020 **Recipient** of Faculty Development Grant, University of Central Arkansas (\$750).
- 2020 **Co-PI:** *Assessing adaptation feedbacks to present and future climate extremes*, Neukom Institute CompX, Dartmouth College (01/2020- 01/2021); with Justin S. Mankin (PI) and Ethan Coffel (Co-PI) (\$39,800).
- 2019 Postdoctoral Scholar Professional Development Award, Dartmouth College (\$750).
- 2018 Open Access Author Fund, West Virginia University (\$1700.43).

Not-Funded

- 2021 **Co-PI:** *Onboard computing systems for remote sensing spatio-temporal environmental data streams*, NASA EPSCoR White Paper (07/2022-06/2025) with Miaoqing Huang (PI) and Xiao Liu (Co-PI).
- 2021 **PI:** *Quantifying the effects of climate extreme-irrigation interactions on crop yields in the Amu Darya and Syr Darya river basins*, NASA Land Cover and Land Use Change Program (01/2022-01/2025), with Justin S. Mankin (Co-PI). **Step -1 Approved.** Step-2 declined.
- 2020 **PI:** *Quantifying agricultural aid impacts on deforestation in Ethiopia using remote sensing data*, Early Career Grant, National Geographic Society (09/01/2021-08/32/2020), with Qingqian He (Co-PI), Beza Nisrane (Project member), and Rongting Xu (Project

member).

2016 **Co-PI:** *Land use and land cover change influences on summer rainfall in Mainland China*, NASA Earth and Science Fellowship (NESSF) program (07/01/2016-06/30/2017); with Eungul Lee (PI).

AWARDS

Awards

2021	Award of External Funding for Creative Activities, Scholarship, and Research, University of Central Arkansas.
2018	Chinese Government Award for Outstanding Self-financed Student Abroad.
2017	Outstanding Merit Fellowship, West Virginia University.
2010-2013	Tuition Waiver Scholarship, Beijing Normal University, China.
2009	Chinese National Scholarship.
2007-2008	First Place Scholarship, China University of Mining and Technology, China.
2014-2018	Graduate Student Travel Funds, West Virginia University.
2016	Travel Funds to CESM Tutorial, Mesa Lab, National center for atmospheric research (NCAR), Boulder, CO.
2016	IGARSS Student Travel Funds, IEEE Geoscience and Remote Sensing Society, Beijing, China.
2015	Travel Funds to NCL Workshop, Corporate Technical Training Center (CTTC), NCAR, Boulder, CO.
2014	Graduate Student Travel Funds, William E. Vehse Endowment, West Virginia University.

Competition Awards

2018	Finalist in Remote Sensing Specialty Group Student Honors Paper Competition, AAG, New Orleans.
2016	First Place in the Student Oral Competition, WV GIS Conference, Morgantown, West Virginia.

PRESENTATIONS (underscore denotes advised students)

Oral

1. **He, Y.**, Chipman, J., and Mankin, J. S. **2020**. Rapid Indo-Malaysian land cover and land use change over the last 35 years, *Annual Meeting of Southwest Division of American Association of Geographers*, Fayetteville, AR, Oct 26-27.
2. **Y. He**, M. H. Connolly, C. Rhodes, R. Xu, M. Filares-Arreguin, X. Huang, and Z. Wang. **2022**. Impacts of irrigation-climate interactions on cotton and soybean yields in Arkansas Delta, *Annual Meeting of American Association of Geographers*, Feb 25-March 1.
3. S.K.Yadav, E. Lee, **Y. He**. **2022**. Positive associations of vegetation with temperature over the alpine grasslands in the western Tibetan Plateau during May, *Annual Meeting of American Association of Geographers*, Feb 25-March 1.

4. J. Oh, **Y. He**, E. Lee, Y. Kim. **2022**. Mapping annual land cover/land use maps of the East Asian Summer Monsoon region from 1982 to 2015, *Annual Meeting of American Association of Geographers*, Feb 25-March 1.
5. E. Lee, **Y. He**, Y. Kim, A. Im, J. Oh, M. Kim. **2022**. Land cover and land use changes and monsoon variability in East Asia, *International Geographic Union Conference*, July 18-22, Paris.
6. Paul Seminara. **2021**. Identifying the effects of climatic and socioeconomic variables on the spread of COVID-19 in Arkansas, *Annual Meeting of Southwest Division of American Association of Geographers*, Oct 14-16, **2021**. (**First Prize in the undergraduate paper competition**)
7. **Y. He**, M. H. Connolly, C. Rhodes, R. Xu, M. Filares-Arreguin, X. Huang, and Z. Wang. **2021**. Impacts of irrigation-climate interactions on crop yields in Arkansas Delta, *Annual Meeting of Southwest Division of American Association of Geographers*, Oct 14-16.
8. M. Filares-Arreguin, M. H. Connolly, C. Rhodes, **Y. He**. **2021**. visual identification of soybean irrigation status with RGB drone imagery and the VARI index, *Annual Meeting of Southwest Division of American Association of Geographers*, Oct 14-16.
9. He, Q., Meng, Q., Flatley, W., Buenemann, M., **He, Y.** **2020**. Agricultural Aid and Deforestation in sub-Saharan Africa: A Sub-national Causal Analysis Based on Remotely Sensed Data of Sierra Leone, *Southwestern American Association of Geographers*, Virtual Meeting, Nov 17-19.
10. **He, Y.** **2020**. Land use and land cover change impacts on regional climate. *Department of Geology, University of Dayton*, Feb 4. (**Invited**)
11. He, Q. and **He, Y.**, **2019**. Water conflict: an empirical test for neo-malthusian view with remote sensing data. *American Political Science Association*, Washington DC, Aug. 29-Sep. 01.
12. **He, Y.**, Mankin, J. S. and Lee, E., **2019**. Agricultural expansion in Northeast China and its impacts on regional climate. *American Association of Geographers*, Washington DC, Apr. 3-7.
13. Lee, E., **He, Y.** and Park, Y-L., **2019**. Could the future climate change pose a risk or benefit to bee development. *American Association of Geographers*, Washington DC, Apr. 3-7.
14. Yadav, S., Lee, E. and **He, Y.**, **2019**. Spatio-temporal evaluations of reanalysis surface temperatures in the Tibetan Plateau. *American Association of Geographers*, Washington DC, Apr. 3-7.
15. Shull, N., Lee, E. and **He, Y.**, **2019**. April vegetation greenness and its impact on near-surface climate conditions in South-Central Appalachia. *American Association of Geographers*, Washington DC, Apr. 3-7.
16. **He, Y.**, McNeil, B., Warner, T.A. and Lee, E., **2018**. Reducing uncertainties in applying remotely sensed land use and land cover maps in land-atmosphere interaction: identifying change in space and time. *American Association of Geographers*, New Orleans, LA, Apr. 10- Apr. 14.
17. Yadav, S., Lee, E. and **He, Y.**, **2018**. The impact of temperature change in Tibetan Plateau on summer rainfall on western Nepal. *American Association of Geographers*, New Orleans, LA, Apr. 10- Apr. 14.
18. He, Q., Pang, X. and **He, Y.**, **2018**. Link Remote Sensing and Political Science: An Application of Foreign Development Aid. *Asian Political Methodology Meetings*, Seoul, Korea, Jan. 11-12.
19. He, Q. and **He, Y.**, **2017**. Evaluating Agriculture Aid- A New Approach based on Remotely Sensed Data. *American Political Science Association*, San Francisco, CA, Aug. 31-Sep. 03.
20. Gaertner, B., Nicolas, Z., Fernandez, R. and **He, Y.**, **2016**. Climate warming impacts on phenological patterns and hydrology in Central Appalachia, United States. *American Geophysical Union Fall Meeting*, San Francisco, California, Dec. 12- 16.

21. **He, Y.**, Lee, E., and Warner, T. A., **2016**. Continuous annual land use and land cover mapping using AVHRR GIMMS NDVI3g and MODIS MCD12Q1 in China from 1982 to 2012. *IEEE International Geoscience and Remote Sensing Symposium*, Beijing, China, July10-15.
22. **He, Y.**, Lee, E. and Warner, T. A., **2016**. Detect geographic and temporal patterns of land use and land cover change in China. *West Virginia GIS Conference*, Morgantown, WV, May 3- 6.
23. **He, Y.** and Lee, E., **2015**. Empirical relationships of oceanic heat sources and vegetation activity with summer rainfall over the Sahel. *American Association of Geographers*, Chicago, Illinois, April 21-25.
24. Bo, Y., and **He, Y.**, **2014**. Linking in situ LAI and fine resolution remote sensing data to estimate the reference LAI for the coarse resolution satellite LAI products validation based on the geostatistical regression. *SPIE: Remote sensing for Agriculture, Ecosystem, and Hydrology*, Amsterdam, Netherlands, Sep. 22-25.
25. **He, Y.** and Bo, Y., **2011**. A consistency analysis of MODIS MCD12Q1 and MERIS Globcover land cover datasets over China. *19th International Conference on Geoinformatics*, Shanghai, China, June 24-26.

Poster

1. M. Filares-Arreguin, **Y. He**, M. H. Connolly, and X. Huang. **2022**. Irrigated and rainfed soybean classification using Landsat and drone imagery. *UCA CNSM Poster Symposium*, April 22.
2. **He, Y.**, Chipman, J., and Mankin, J. S. **2020**. Rapid Indo-Malaysian land cover and land use change over the last 35 years, *American Geophysical Union*, Virtual Meeting, Dec. 1-17 (**with 3-minute talk**).
3. **He, Y.** and Mankin, J. S., **2019**. Disentangling warming- from land use- induced precipitation changes over China. *American Geophysical Union*, San Francisco, Dec 09-13.
4. **He, Y.**, Lee, E. and Mankin, J. S., **2018**. The influence of Northeastern China cropland expansion on regional climate. *American Geophysical Union*, Washington DC, Dec 10-14.
5. **He, Y.**, Lee, E. and Warner, T. A., **2016**. Land use and land cover change detection based on AVHRR GIMMS NDVI3g and MODIS MCD12Q1 in Northeast China from 1982 to 2012. *American Association of Geographers*, San Francisco, CA, Mar. 29- Apr. 2.
6. Lee, E., **He, Y.**, Zhou, M. and Liang, J., **2016**. Potential feedback of recent vegetation changes on summer rainfall in the Sahel. *American Association of Geographers*, San Francisco, CA, Mar. 29- Apr. 2.
7. Lee, E., **He, Y.**, Ahn, J.J. and Park, Y-L. **2015**. Effects of future climate change on interactions between pollinator bees and bee parasites. *American Association of Geographers*, Chicago, Illinois, April 21-25.
8. Meng, L., Lee, E. and **He, Y.**, **2015**. Spatial and temporal variations of agriculture irrigated in China. *American Association of Geographers*, Chicago, Illinois, April 21-25.
9. **He, Y.** and Lee, E., **2014**. Comparisons of AVHRR GIMMS NDVI and MODIS NDVI datasets based on three temporal resampling methods over the Sahel in Africa. *American Association of Geographers*, Tampa, Florida, April 8-12.
10. **He, Y.**, Bo, Y., Zhu, Y. and Li, A., **2013**. Estimating spatial means of elementary sampling unit using MSN theory for field Leaf Area Index collection. *35th International Symposium on Remote Sensing of Environment*, Beijing, China, April 22-26.
11. **He, Y.**, Bo, Y. and Li, A., **2012**. Validation and inter-comparison of GLASS, MODIS and CYCLOPES global leaf area index products over the BigFoot and VALERI sites. *First International Symposium on Land Remote Sensing: Algorithms and Products*, Chengdu, China.

12. Ji, X., Bo, Y., Cheng, J., **He, Y.** and Liu, X., **2012**. The method of assessing shape similarity of object-based classification result of remote sensing imagery. *Second International Workshop on Earth Observation and Remote Sensing Applications*, Shanghai, China, June 8-11.

STUDENT MENTORING

University of Central Arkansas

Graduate

- 2021-current Faith Vire (Committee Chair)
 2021-current Willow Hoper (Committee Member)

Undergraduate

- 2021-current Noah Walker (Minor Advisor)
 2021-2022 Caden Rhodes (Research Mentor)
 2021-2022 Marisol Filares Arreguin (Research Mentor)
 2021-2022 Paul Seminara (Research Mentor)
 2021-2022 Wei Tay (Research Mentor)

West Virginia University

- 2018 Nathan Shull (undergraduate) (Research Mentor)

Beijing Normal University, China

- 2010 Zheng Li (undergraduate) (Research Mentor)

PROFESSIONAL ACTIVATES

Service to Profession

- 2015-present **Peer-Reviewer:** *Global Biology Change* (1), *Environmental Research Letters* (5), *Geophysical Research Letters* (2), *ISPRS Journal of Photogrammetry and Remote Sensing* (2); *Frontiers of Earth Science* (4), *Atmosphere* (4), *International Journal of Remote Sensing* (5), *Journal of Arid Environments* (2), *Remote Sensing Letters* (1), *Sensors* (4), *Applied Geography* (1), *Remote Sensing* (13), *Sustainability* (7), *Climate* (1), *Environmental Research Communications* (1), *Journal of Asia-Pacific Entomology* (1), *Journal of Mountain Science* (1), *Forest Ecosystems* (1), *Journal of Geographical Science* (1), *Agronomy* (2), *Scientific Report* (2)
- 2020-present **Topic Board** of *Atmosphere*
- 2020-present **Reviewer Board** of *Remote Sensing*
- 2020-present **Reviewer Board** of *Sustainability*
- 2022-2023 **Guest editor** of special issue: Advances in Mapping Land Use and Land Cover Based on Remotely Sensed Data, in *Remote Sensing*.
- 2021 **Guest editor** of special issue: Land-Atmosphere Interactions under Climate Change in *Atmosphere*
- 2020-2021 **Guest editor** of jointed special issue: Land and Monsoon Interactions: Physical and Societal Aspects of Asian Monsoons in *Land and Climate*.
- 2022 **Jude** of Graduate and Undergraduate Paper Competition, SWAAG.
- 2020 **Judge** of Outstanding Student Presentation Awards, AGU.

- 2019 **Co-organizer:** Integrating remotely-sensed data into climate models, *American Association of Geographers*, Washington, DC.
- 2018 **Co-organizer:** Monsoon geography: physical and societal aspects of monsoon, *American Association of Geographers*, New Orleans, Louisiana.
- 2016 **Co-organizer and Chair:** Land cover dynamics session, *IEEE International Geoscience and Remote Sensing Symposium*, Beijing, China.
- 2014 **Volunteer**, American Association of Geographers, Tampa, Florida.

Service to Department

- 2022 Graduate Council Member, University of Central Arkansas
- 2021 GIS Curriculum Development Committee, Department of Geography, University of Central Arkansas
- 2016-2017 Geography Graduate Colloquium Committee, Department of Geology and Geography, West Virginia University.

Faculty Development

- 2022 Global Learning Institute, UCA Center for Global Learning and Engagement
- 2021 Teaching Excellence Institute, UCA Center for Excellence in Teaching and Academic Leadership
- 2019 Future Faculty Teaching Series, Dartmouth Center for the Advancement of Learning.
- 2019 Creating Inclusive Course Materials, Dartmouth Center for the Advancement of Learning.
- 2017 Grant Writers' Seminar & Workshop, West Virginia University.

WORKSHOPS

- 2016 Community Earth System Model (CESM) Tutorial, Mesa Lab, National center for atmospheric research (NCAR), Boulder, CO.
- 2015 NCAR common language (NCL) workshop, Corporate Technical Training Center (CTTC), NCAR, Boulder, CO.

INTERN EXPERIENCE

- 2014-2015 **Summer Intern** at WV GIS Technical Center, West Virginia.
- 2010-2011 **Assistant Officer** of Graduate Affairs, Beijing Normal University, China.
- 2010 **Summer Intern**, Xuzhou Institute of Survey and Mapping, Jiangsu province, China.

PROFESSIONAL MEMBERSHIPS

- 2018-present American Geophysical Union
- 2013-present American Association of Geographers
- 2016-present IEEE Geoscience and Remote Sensing Society