

## Bo Zhao

*Last Update: April 2020*

Title: Assistant Professor  
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HGIS Lab: <https://hgis.uw.edu>

### Degrees

2012 - 2015 Ph.D. in Geography The Ohio State University  
2006 - 2008 M.S. in Cartography and GIScience Nanjing University, China  
2002 - 2006 B.S. Honors in GIScience Nanjing University, China

### Academic Positions

2020.2 - Faculty Member, China Studies Program, University of Washington (UW)  
2019.9 - Affiliate Member, Center for Studies in Demography & Ecology, UW  
2019.9 - Assistant Professor, Department of Geography, UW  
2019.9 - Affiliate Professor, College of Earth, Ocean, and Atmospheric Sciences (CEOAS), Oregon State University (OSU)  
2016 - 2019 Assistant Professor, CEOAS, OSU  
2016 - 2017 Non-residential Fellow, J.F. Kennedy School of Government, Harvard University  
2015 - 2016 Rajawali Postdoctoral Fellow, J.F. Kennedy School of Government, Harvard University

### Fields of Specialization

- Geospatial Big Data, Location-based Social Media, and Location Spoofing
- Cartography, Geovisualization, Geo-Narrative, and Web Mapping
- Humanistic GIS and Neural Sensing

### Awards and Fellowships

2017. Sea Level Rise Induced Migration Project, <https://hgis.uw.edu/slr>, Grand Prize of Ecological Visualization Contest. National Science Foundation (NSF-DBI-1062566), Faculty Advisor.  
2017. Water Infrastructure of Oregon, <http://oregonwater.info/atlas.html>, Third Prize of Student Environment Challenge, Oregon Chapter | PNWIS (Oregon Chapter of Air & Waste Management Association), Faculty Advisor.  
2015-16. Rajawali Fellowship. J.F. Kennedy School of Government, Harvard University. \$50,000.

### Grants – Awarded & Pending

2020 (Pending). Washington State Labor Research Grant: Monitoring Washington Labor Force in the COVID-19 Pandemic. \$13,073. **Bo Zhao (PI, UW)**.

- 2020 (Pending). NIH National Heart, Lung, and Blood Institute (NLHBI) observational study of hospitalized patients with COVID-19. Terri Hough (PI, UW), **Bo Zhao (Co-PI, UW)**.
2020. UW's Data Science Minor Grant: Redeveloping Geography 458: Advanced Digital Geographies. \$20,000. **Bo Zhao (PI, UW)**.
- 2020-24. NSF Human-Environment and Geographical Sciences (HEGS): Examining Shifting Geographies of Historically Underrepresented Groups (Award ID: 1951072). \$395,839. Lawrence Knopp (PI, UW), Michael Brown (Co-PI, UW), and **Bo Zhao (Co-PI, UW)**.
- 2019-21. NSF Coastlines and People (CoPe) EAGER: Coastal Hazard Planning in Time (Award ID: 1940024). \$297,288. Daniel Abramson (PI, UW), Ann Bostrom (Co-PI, UW), Harold Tobin (Co-PI, UW), Jeffrey Berman (Co-PI, UW), and **Bo Zhao (Co-PI, UW)**.
- 2018-20. Turfgrass Water Conservation Association, Geovisual analytic platform for TWCA. \$15,000. **Bo Zhao (PI, OSU)**.
- 2018-19. Clean Water Service: Interaction of Geovisualization and Wikipedia to demonstrate the Fanno Creek Watershed. \$50,000. **Bo Zhao (PI, OSU)**.
- 2018-19. National Geographic. The Global Refugee Atlas (Award ID: NGS-51699S-18). \$68,383. **Bo Zhao (PI, OSU)**, Jamon Van De Hoek (Co-PI, OSU), and Jennifer Alix-Garcia (Co-PI, OSU).
- 2017-18. Clean Water Service. Map based Storytelling of the Shifting Mindset About Reuse Water. \$50,000. **Bo Zhao (PI, OSU)**.
2017. NSF Research Experience for Undergraduates (REU) Grant (NSF-DEB-1440409): Building Wireless Network of Bots for Monitoring Ecosystem of Forest at Andrew Long Term. \$8,000. **Bo Zhao (PI, OSU)**.
2017. American Alpine Club Research Grant. An Open-Source Automated Weather Station for Wireless Sensor Networks in High Altitude/Latitude Environments. \$1,000. Christopher Cosgrove (PI, OSU), **Bo Zhao (Faculty Advisor, OSU)**, Ann Nolin (Faculty Advisor, OSU).
- 2016-18. Google Education Grant: Google Cloud Platform for Web Mapping and Geovisualization. Cloud resources for instructor and students. \$1,100 per quarter for three quarters (\$100 for the instructor, \$100 for each teaching assistant, and \$50 for each student in class. 18 students on average for each course). **Bo Zhao (PI, OSU)**.
- 2016-17. Learning Innovation Grant: Human-Geospatial Data Interaction: Leveraging Virtual Reality to Extend Teaching and Learning in Geovisualization. \$9,857. **Bo Zhao (PI, OSU)**.

### **Publications - Working drafts (Asterisk labels Advisee)**

- Zhao, B.**, Y. Sun, V. Katz\*. S. Zhang, and X. Chang. Neural Sensing: A new approach to understanding subjective sentiments of the immersed place. For submission to *International Journal of Geographical Information Science* by 2020 Fall.
- Zhao, B.** Humanistic GIS: A post-phenomenological reflection on geospatial technologies. For submission to *Geoforum* by 2020 Winter.
- Yu, Y., **B. Zhao**. An emerging care space? A case study of older Tiktok celebrities in China. For submission to *GeoJournal* by May, 2020

### Publications – Submitted / In Review

- Zhang, S., **B. Zhao** (Corresponding author), Y. Tian\*, and S. Chen. (Minor Revision to be submit by May, 2020) Stand with #StandingRock: Envisioning an epistemological shift in understanding geospatial big data in the “post-truth” era. *Annals of the American Association of Geographers*.
- Zhao, B.**, X. Chen, and X. Yang. (Major revision to be submitted by June, 2020) Small calorie in big city: Learning the nutritional foodscape through recognizing crowd sourced food images. *Annals of the American Association of Geographers*.
- Zhao, B.**, S. Zhang, C. Xu\*, Y. Sun, and C. Deng Deep fake in geography? When geospatial data encounter artificial intelligence. (Revision & resubmit. Revision to be submitted April 2020) *International Journal of Geographical Information Science*.
- Zhao, B.**, and X. Huang. (Submitted February 2020) Encrypted monument: The birth of crypto place on the blockchain. *Geoforum*.
- Jiang, B., X. Ye., and **B. Zhao** (Revise & resubmit. Revision to be submitted April 2020) Understand space-time accessibility using a visual metaphor: A case study of the Hong Kong-Zhuhai-Macao Belt. *International Journal of Geo-Information*

### Publications - Journal Articles with Peer Review

2019. Huang, X., **B. Zhao**, Y. Liu and D. Xue. Belonging to a Place: An Analysis of the Perceptions of Rural-to-Urban Migrants in China. *Geographical Review*. 1-19 doi: 10.1111/gere.12366
2019. Chen, Z., D. Chen, N. Cheng, Y. Zhuang, M.P. Kwan, B. Chen, **B. Zhao**, et al. Evaluating the recent 2+26 regional strategy for air quality improvement during two orange air pollution alerts in Beijing: variations of PM<sub>2.5</sub> concentrations, source apportionment, and the relative contribution of local emission and regional transport. *Atmospheric Chemistry and Physics*. 19 (10): 6879-6891. doi: 10.5194/acp-2018-1085
2018. **Zhao, B.**, X. Huang, and D.Z. Sui. Place spoofing: A case study of the xenophilic copycat community in Beijing, China. *Professional Geographer*. 71(2): 265-277. doi: 10.1080/00330124.2018.1501711
2018. **Zhao, B.** and S. Zhang. Rethinking spatial data quality: Pokémon Go as a case study of location spoofing. *Professional Geographer* 70(4): 1-13. doi: 10.1080/00330124.2018.1479973
2018. Fan, Y., S. Chen, **B. Zhao**, S. Yu, H. Ji, and C. Jiang. Monitoring tidal flat dynamics affected by human activities along an eroded coast in the Yellow River Delta, China. *Environmental Monitoring and Assessment* 190(7): 396-413. doi: 10.1007/s10661-018-6747-7
2018. Fan, Y., S. Chen, **B. Zhao**, S. Pan, C. Jiang and H Ji. Shoreline dynamics of the active Yellow River delta since the implementation of Water-sediment regulation scheme: A remote-sensing and statistics-based approach. *Estuarine, Coastal and Shelf Science*. 200 (2018): 406-419. doi: 10.1016/j.ecss.2017.11.035
2017. **Zhao, B.** and D. Z. Sui. True lies in geospatial big data: detecting location spoofing in social media. *Annals of GIS* 23(1): 1-14. doi: 10.1080/19475683.2017.1280536
2016. **Zhao, B.**, D.Z. Sui and Z. Li. Visualizing the gay community in Beijing with location-based social media. *Environment and Planning A* 49(5): 977-979 doi:10.1177/0308518X16685885.

2016. Liu, J.C., and **B. Zhao**. Who speaks for climate change in China? Evidence from Weibo. *Climatic Change* 140 (3-4): 413-422. doi:10.1007/s10584-016-1883-y
2016. Li, Y., J. Qiu and **B. Zhao**. Quantifying urban ecological governance: A suite of indices characterizes the ecological planning implications of rapid coastal urbanization. *Ecological Indicators*. 72 (2017): 225-233.
2015. Chen, X., **B. Zhao**, and E. Blackard. Unveiling Perceptions of Food Safety Scandals in China: An Exploratory Study with Search Engine. *Global Media Journal*.
2015. Kay, S.J., **B. Zhao**, and D.Z. Sui. Can Social Media Clear the Air? A Case Study of the Air Pollution Problem. *Professional Geographer*, 67(3):351-363.
2013. 张丽娟, **赵博**, 蒋党辉. 从 CAD 到 GIS 的数据转换研究. *测绘技术装备* 15(1): 14-17. (Zhang, L.J., **B. Zhao** and D.H. Jiang. 2013. Research on the Conversion from CAD to GIS Data. *Geomatics Technology and Equipment*. 15(1): 14-17.)
2009. 陈子悦, 李满春, **赵博**. GeoInterface—现实世界与网络世界的接口. *测绘科学* 34(4): 77-79 (Chen, Z.Y., M.C. Li and **B. Zhao**. 2009. Geo-Interface - Connecting the Real World with Cyberspace. *Science of Surveying and Mapping* 34(4): 77-79.)
2006. **赵博**. GIS 利刃 MapServer. *软件世界* 10: 48-50. (**Zhao, B.** 2006. An Introduction to UMN MapServer. *Software World* 20:48-50.)
2005. **赵博**, 谈俊忠. 对 MapInfo 系统中现状要素平滑的研究. *测绘通报* 2005(6): 25-27. (**Zhao, B.** and J.Z. TAN. 2005. A Research on Linear Elements Smoothing in the MapInfo. *Bulletin of Surveying and Mapping* 2005(6): 25-27.)
2005. **赵博**, 马劲松. 基于 XML 的地理数据模型设计. *测绘技术装备* 7(001): 9-12. (**Zhao, B.** and J.S. MA. 2005. Design of XML based Geo Data Model. *Geomatics Technology and Equipment* 1:9-12.)

### Publications - Refereed Conference Proceedings

2019. Zhang, S., **B. Zhao**, and J. Ventrella. Towards an archaeological-ethnographic approach to big data: Rethinking Data Veracity. *The 2018 Ethnographic Praxis in Industry Conference Proceedings*. doi: 10.1111/1559-8918.2018.01197
2019. Chen X., L. Zou, and **B. Zhao**. Detecting climate change deniers on Twitter using a deep neural network. *International Conference on Machine Learning and Computing (ICMLC 2019) proceeding*. Zhuhai, China, Feb 22-24, 2019.
2018. Xu, C.\*, **B. Zhao**. Satellite Image Spoofing: Creating Remote Sensing Dataset with Generative Adversarial Networks. In *LIPICs-Leibniz International Proceedings in Informatics (Vol. 114)*. Schloss Dagstuhl-Leibniz-Zentrum fuer Informatik. doi: 10.4230/LIPICs.GISCIENCE.2018.67
2016. **Zhao, B.** Study on the Effects of Human Intention on Spatial Data Quality. *International Conference on GIScience Short Paper Proceedings* 1(1). doi: 10.21433/B31180p357ks.
2007. **Zhao, B.**, M.C. Li and Z.X. Jiang. Using GeoRSS to Syndicate the Spatiotemporal Information. Geospatial Information Technology and Applications, *Proceedings of Society of Photo-Optical Instrumentation Engineers (SPIE)* 6754: 675428. doi: 10.1117/12.764955.
2006. Huang, X., and **B. Zhao**. SVG based Remote Sensing Visualization. Remotely Sensed Data and Information, *Proceedings of Society of Photo-Optical Instrumentation Engineers (SPIE)*. 6419: 64191N. doi: 10.1117/12.713261.

2006. **Zhao, B.**, X.M. Huang and G.P. Wu. OGC Web Services Based on Ajax Engine. Geospatial Information Technology, *Proceedings of Society of Photo-Optical Instrumentation Engineers (SPIE)*. 6421: 64210R. doi: 10.1117/12.712902.

### Publications - Book Chapters with Peer Review

2020. Ye, X., **B. Zhao**, T.H. Nguyen, S. Wang. Social media and Social Awareness. In *Manual of Digital Earth* eds. H. Guo, M.F. Goodchild, and A. Annoni. Springer, Singapore. 425-440. doi:10.1007/978-981-32-9915-3\_12.
- 2019 (In press). **Zhao, B.**, S. Zhang, C. Xu\*. and X. Liu. Fake Geography: Can we trust Artificial Intelligence to manage geospatial data? In *Advances in Spatial Social Science and Humanities*, eds. X. Ye and H. Lin. Springer. Berlin.
2017. **Zhao, B.** and Q. Chen. Location Spoofing in a Location-Based Game: A Case Study of Pokémon Go. In *Lecture Notes Geoinformation, Cartography, Advances in Cartography and GIScience*, ed M. P. Peterson. 21-32. doi: 10.1007/978-3-319-57336-6\_2
2017. **Zhao, B.** Web Scraping. *Encyclopedia of Big Data*. L. A. Schintler and C. L. McNeely (Eds.): Springer International Publishing: 1-3. doi: 10.1007/978-3-319-32001-4\_483-1
2015. Sui, D.Z., and **B. Zhao**. GIS as Media through the GeoWeb. In *Mediated Geographies and Geographies of Media*, eds. S.P. Mains, J. Cupples, and C. Lukinbeal. Springer. Berlin. 191-208.
2014. **Zhao, B.** and D.Z. Sui. True Lies in Big Data: Detecting Location Spoofing based on Geographic Knowledge. In *Workshops on Big Data and Urban Informatics*, ed. P. Thakuriah. Chicago, IL. 253-275.
2013. Sui, D.Z., Z.W. Xu and **B. Zhao**. Networks in Geography. In R. Alhajj and J. Rokne, *Encyclopedia of Social Network Analysis and Mining (ESNAM)* Berlin, Springer. 1122-1127

### Research reports

2017. Sui, D.Z., **B. Zhao**, and H. Kong. The Development of Copycat Towns in China: An Initial Analysis of Their Economic, Social, and Environmental Implications. *Lincoln Institute of Land Policy*. [https://lincolninst.edu/sites/default/files/pubfiles/sui\\_wp17ds1.pdf](https://lincolninst.edu/sites/default/files/pubfiles/sui_wp17ds1.pdf)

### Invited Talks & Presentations

2020. Deep fake in geography? when geospatial data encounters artificial intelligence. Invited by the Center for Studies in Demography and Ecology (CSDE). Seattle, WA. Apr. 3.
2020. Deep fake in geography? when geospatial data encounters artificial intelligence. Invited by the iSchool. Seattle, WA. Feb. 2.
2019. Introduction to geonarratology. Invited by the M9-Natural Hazard research team at UW. Seattle, WA. Oct. 31.
2019. Introduction to geonarratology. Invited by the Computational Demography Working Group at UW. Seattle, WA. Oct. 31.
2019. Humanistic GIS: an individual's pursuit of poetic dwelling on the digital earth. Invited by the Department of Geography at UW. Seattle, WA. Feb. 28.

2019. Humanistic GIS: an individual's pursuit of poetic dwelling on the digital earth. Invited by the Department of Geography and Geoinformation Science at George Mason University. Fairfax, VA. Feb. 18.
2018. Humanistic GIS: Towards a research agenda. Invited by the Geography Department at University of Oregon. Eugene, OR. Oct. 18.
2018. Teaching geovisualization of remote sensing imagery with Google cloud platform. Invited by Google Cloud Platform Faculty Institute. San Jose, CA. Jun. 15.
2018. Rethinking geospatial science via a whole new mind. Invited by Spatial Data Management Group (SDMG) at OSU. Corvallis, OR. Jan. 19.
2017. Geospatial data management using the open source infrastructure. Invited by Robert Kennedy for the course GEOG 361, Corvallis, OR. Nov. 16.
2015. Trojan horse, geo-piracy, and cyber-espionage: detect location spoofing in geo-spatial big data. Invited by Center for Geographic Analysis at Harvard University. Cambridge, MA. Dec. 3.
2015. Location spoofing: an emerging issue in geospatial big data. Invited by School of Geographic and Oceanographic Science, Nanjing University. Nanjing. China. Aug. 22.
2015. Location spoofing in social media: concept, motivation and social impacts. MapTalk Series. Invited by Institute of Geographic Sciences and Natural Resource Research, Chinese Academy of Sciences. Beijing. China. Aug. 19.
2013. Geocoding in public health research. IPR Workshop: Getting Started with Geo-Health Research. Invited by Institute for Population Research, Columbus, OH. Mar. 28.
2010. GIS applications in archeological studies. Invited by Department of Archeology, Northwest University, Xi'an, China. Mar. 30.
2009. Using GeoDjango to enrich the user participation functions of Web GIS. Invited by GIS ABC Series Seminar. Design School, Harvard University, Boston, MA. Jul. 15.

### **Conferences – sessions organized**

2019. Chair and co-organizer of two paper sessions on “GIScience in the Post-truth Era” at Association of American Geographers Annual Conference. Washington D.C. Apr. 3-7. 2019.
2018. Co-Chair of special session on Geovisual Analytics session at Association of American Geographers Annual Conference. New Orleans. LA. Apr. 21-25.
2015. Co-Chair of Special Session on Data-Driven Geography at Association of American Geographers Annual Conference. Chicago. IL. Apr. 21 to 25, 2015.

### **Conferences – presentations**

2019. Fake Geography: Can we trust Artificial Intelligence to manage geospatial data? at Association of American Geographers Annual Conference. Washington D.C. Apr. 3-7. 2019. With Shaozeng Zhang, Chunxue Xu, and Xiaobai Liu.
2018. Deep learning and fake geography: creating satellite datasets with Generative Adversarial Networks at Association of American Geographers Annual Conference. New Orleans. LA. Apr. 21-25. With Chunxue Xu.

2018. Stand with #StandingRock: Towards an epistemological shift in understanding geospatial big data during the “post-truth” era: at Association of American Geographers Annual Conference. New Orleans. LA. Apr. 21-25. With Yuanyuan Tian
2017. Coming out of big data: Mapping the gay community in Beijing using social media feeds at Association of American Geographers Annual Conference. Boston, MA. Apr. 6-10. With Daniel Z. Sui, and Zhaohui Li.
2016. Detecting location spoofing in social media: A bayesian time geography approach. Invited by NSF-IBSS workshop, San Diego, CA. Aug. 3, 2016. With Daniel Z. Sui.
2014. True lies in big data: Detecting location spoofing based on geographic knowledge (NSF supported). Workshops on Big Data and Urban Informatics. Chicago, IL. Aug. 11-12. With Daniel Z. Sui.
2014. Using Weibo to understand the spatial-temporal dynamics of public reactions to the case of Bo Xilai (NSF supported). IWGIS2014. Beijing, China. Jun. 21-22. With Daniel Z. Sui.
2013. Spatial community over social media. AAG Annual Conference. Los Angeles, CA. Apr. 9-13. With Daniel Z. Sui.
2013. Open source GIS. Center for Urban and Regional Analysis (CURA) Public Seminar. Columbus, OH. Oct. 24.
2013. Designing a real-time monitor for social media data (NSF supported). Center for Geographical Analysis (CGA) Annual Conference. Harvard University. Cambridge, MA. May 2-3.

### **Conferences – panel & discussant participation**

2020. Panelist of a national geospatial conversation on Digital Contact Tracing. Organized by the school of Geographical Sciences and Urban Planning, Arizona State University, Tempe, Arizona. Apr. 24.
2020. Panelist of virtual panel on Creative, critical, digital? Doing Digital GeoHumanities at Association of American Geographers Annual Conference. Denver. CO. Apr. 6-10.
2018. Panelist of special panel on Toward a Peer-Reviewed Story Maps Academic Journal at Association of American Geographers Annual Conference. New Orleans. LA. Apr. 21-25.

### **Public Scholarship: Software Development & Programming**

2020. Novel coronavirus infection map <https://hgis.uw.edu/virus> . With Fengyu Xu (UW), Lola Kang (UW), Joshua Ji (UW), Jou Ho (UW) and Steven Bao (UW).
2018. A geovisual analytical platform for exploring Google Earth Engine Data. <https://hgis.uw.edu/geeviz> . Supported by Google Cloud Platform. With Hannah Friedrich (OSU).
2017. Vulnerability of shellfish stakeholders to ocean acidification in the Pacific Northwest. <http://hgis.uw.edu/pnw> . Funded by NOAA (NA17OAR0170165), Faculty Advisor. With Brian Katz (OSU), and David Wrathall (OSU).
2017. AIS visualization platform, Faculty Advisor. With Likun Chen.

- 2017. Oregon water atlas. <http://oregonwater.info> . Funded by USGS and Institute for Water & Watersheds at OSU, Faculty Advisor. With Gareth Baldrice-Franklin (OSU).
- 2016. Storymap.js - A Javascript library for telling a story using web maps. <https://github.com/jakobzhao/storymap> .
- 2012. Xi'an historical geographic information system. Access the demo at <https://jakobzhao.github.io/cv/assets/xian.mp4> . With Li Chen.
- 2011. Web map for helping Chinese child street beggars to return to their hometown. <http://jakobzhao.github.io/cv/child-street-beggars> .
- 2010. The GIS for ancient nomadic people in the Inner Asia. With Zhe Su.
- 2010. Boston research map. <https://worldmap.harvard.edu/boston> . Center for Geographic Analysis (CGA), Harvard University. With Ben Lewis.
- 2010. Africa map. <https://worldmap.harvard.edu/africamap> . Center for Geographic Analysis (CGA), Harvard University. Programmer. With Ben Lewis.
- 2009. Swine Flu (H1N1) influenza map. Reported by Microsoft Virtual Earth.
- 2009. HeatMap Plugin for uMapper and ArcGIS Flex API.
- 2009. Global political infrastructure map. With Howard Philips (UW).
- 2009. A web-based transit trip planner for the city of Milwaukee. With Zun Wang and Jian Sun.
- 2008. Real estate evaluating system for Nanjing city. Software design and programmer. With Gang Chen.

## Service

### Service to Department, College and University

#### University of Washington

- 2020. Faculty judge for Department of Geography Undergraduate Research Symposium, June 5, 2020.
- 2020. Collegial evaluation of teaching for Dr. Gunwha Oh, GEOG 360 lecturer in Dept of Geography.
- 2020. Ad hoc committee on future of GIS, Mapping & Society track in Geography major.
- 2020. Reviewer for UW Royalty Research Fund.
- 2020. Key note speaker for UW GIS Symposium 2020.

#### Oregon State University

- 2018-19. Member. Search committee for two tenure-tracked assistant professors in remote sensing of water for the geography program at College of Earth, Ocean, and Atmospheric Sciences (CEOAS)
- 2018-19. Member. Search committee for one lecturer in human geography for the geography program at CEOAS.
- 2018-19. Chair. Geography graduate student admissions committee.
- 2018-19. Co-Chair, Marston lecture committee for the geography program at CEOAS. with David Wrathall.



- 2018. Member, Evaluation committee on hiring Maureen Walczak as assistant professor (senior research).
- 2018. Co-organizer, GIS Day Activity.
- 2017-18. Member. Geography Graduate Student Admissions Committee.
- 2017. Co-organizer, GIS Day Activity.
- 2016. Co-organizer, GIS Day Activity.
- 2016-17. Member. Geography Graduate Student Admissions Committee.

**Service to Profession**

- 2018. Member, Geovisualization committee, GIScience 2018, Melbourne, Australia. Aug. 28-31. 2018
- 2018. Member, Academic committee, The 9th International Forum of Spatially Integrated Humanities and Social Sciences. Shanghai, China. Jun. 23-26, 2018
- 2017. Member, Best paper award committee. The 2017 CPGIS Annual Conference, Buffalo, NY. Aug. 2-4. 2017
- 2017. Member, Academic committee. The 8th International Forum of Spatially Integrated Humanities and Social Sciences. Nanjing, China. Jun. 23-25, 2017

**Reviewer for peer-reviewed Journal Manuscripts**

- Digital Geography and Society (2020)
- Annals of the American Association of Geographers (2019)
- Professional Geographers (2019)
- Journal of Spatial Information Science (2019)
- Symmetry (2019)
- Heliyon (2019)
- International Journal of Digital Earth (2018)
- Journal of Environmental Planning and Management (2018)
- Computer Environment and Urban Systems (2017, 2018)
- Annals of GIS (2017, 2018)
- Geographical Review (2018)
- BMC Public Health (2018)
- Transactions in GIS (2017, 2018, 2019)
- Applied Spatial Analysis and Policy (2017)
- PLOS ONE (2017)
- Environment and Planning B (2016, 2018)
- International Journal of Geographical Information Science (2016, 2017, 2019)
- GeoJournal (2013, 2016)

**Book Reviewer for Commercial Publishers**

- Cambridge University Press (1)
- Springer (3)

Chapman & Hall/CRC Press (2)

### **Public Service to Local Community**

2018. Organizing a meeting on drinking water quality issues between the City of Salem and the OSU on Jun. 29, 2018.

2016. Geovisual analytical tools for exploring Benton county thriving communities 2040 questionnaire, <http://jakobzhao.github.io/benton> . Spring, 2016.

### **Teaching and Course Development**

#### **University of Washington, 2019 - present**

GEOG 458: Advanced Digital Geographies (2020 Spring) Web archives at <https://github.com/jakobzhao/geog458>

GEOG 595 A: Digital GeoHumanities (2020 Winter). Web archives at <https://github.com/jakobzhao/geog595>

GEOG 360: GIS and Mapping (2019 Fall)

#### **Oregon State University, 2016 - 19**

GEOG 370: Cartography (2018 Winter)

GEOG 371: Web Mapping (2017 Fall, Winter). Web archives at <https://github.com/jakobzhao/geog371>

GEOG 571: Advanced Web Mapping (2017 Winter)

GEOG 4/572: Geovisual Analytics (2017 Spring). Web archives at <https://github.com/jakobzhao/geog4572>

GEOG e371: Web Mapping (2018 Fall)

#### **The Ohio State University, 2014 - 15**

GEOG 5220: Fundamentals of GIS (2015 Summer)

### **Advising & Mentoring**

#### **Graduate Committees – as chair**

Sun, Yifang. (Ph.D. UW. Geography. In progress – admitted for Fall 2020)

Feng, Jiaxin. (Ph.D. UW. Geography. In progress – admitted for Fall 2020)

Giovanni Svevo. (M.S. OSU. Geography. 2019. Thesis: Mapping refugee experiences)

Likun Chen (M.S. OSU. Geography. 2017. Thesis: A high-performance web graphics library-based automatic identification system data visualization)

Yuanyuan Tian (M.S. East China Normal University, GIS, 2018. Co-advising with Shenliang Chen. Thesis: Tourist market quality assessment and management platform design for Hainan Island, China)

#### **Graduate Committees – as member**

Shuang Wu (Ph.C. UW, Urban Planning. In progress)  
Christopher Cosgrove (Ph.C. OSU, Geography. In progress)  
Shangjia Dong (Ph.D. OSU. Civil Engineering. 2018. Dissertation: Percolation modeling of transportation network robustness towards a resilience infrastructure system: from a single network to interdependent networks)  
Hongyan Yi (M.S. OSU, Computer Science. 2017. Thesis: Global AIS data visualization on a 3D Earth)  
Dilruba Showkat (M.S. OSU, Computer Science. 2017. Thesis: HRI gender differences: information need, information processing style, self-efficacy, and tinkering)

### **Undergraduate honors theses and other advising**

Gareth Baldrice-Franklin (B.S. Honors, OSU, Geography, 2017, Thesis: Oregon water atlas: A digital collection and visualization of Oregon's water)

### **Media Appearances**

**UW News.** Bo Zhao Produces Dynamic Coronavirus Map. Accessed from <https://www.uw.edu/news/2020/02/07/interactive-map-shows-worldwide-spread-of-coronavirus/>. Feb. 7, 2020

**Anadolu Agency.** Coronavirus Infection Map. Accessed from <https://www.aa.com.tr/en/p/coronavirus-infection-map>. March 20, 2020

**BBC.** Coronavírus: os sites em tempo real que mostram dados de mortes, curvas de contágio e mutações. Access from <https://www.bbc.com/portuguese/internacional-51987873>. Mar. 24, 2020

**National Geographic.** Los mapas y gráficos de infección del coronavirus en todo el mundo. Accessed from [https://www.nationalgeographic.com/es/ciencia/mapas-y-graficos-infeccion-coronavirus-todo-mundo\\_15356](https://www.nationalgeographic.com/es/ciencia/mapas-y-graficos-infeccion-coronavirus-todo-mundo_15356). Mar. 24, 2020

**Foreign Policy.** The featured article - The convenient disappearance of climate change denial in China. Accessed from <https://foreignpolicy.com/2017/05/31/the-convenient-disappearance-of-climate-change-denial-in-china>. May 31, 2017.

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### **Professional Membership**

**AAG** (American Association of Geographers), Member

**NACIS** (North American Cartographic Information Society), Member

**UCGIS** (University Consortium for Geographic Information Science), First alternate delegate of  
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