# Atlas (Chenxiao) Guo

✉ atlas.guo@wisc.edu    🔗 atlasguo    ✖ @cartoguophy
🌐 CartoGuophy.com    Ⓦ geography.wisc.edu/staff/atlas-guo

## 🎓 EDUCATION

### University of Wisconsin-Madison (UW-Madison)
(Madison, WI, USA; Ongoing)

- Ph.D. in Geography (Cartography/GIS), Department of Geography
  - Core Courses: Graphic Design in Cartography, Interactive Cartography & Geovisualization; Advanced Quantitative Analysis, Advanced Geocomputing and Big Data Analytics, Geospatial Database, GIS Applications; Seminars in GIScience (VGI; Deep Learning; Storytelling); Natural Hazards and Disasters (audit)
- Doctoral Minor in Computer Science, Department of Computer Science
  - Core Courses: Data Structure, Algorithms, Artificial Intelligence, Computer Graphics, Human-Computer Interaction, Machine Learning (audit)
- Research Direction: Social Media Data Mining, Cartographic Visualization, Natural Disaster Management Spatiotemporal Analytics, GeoAI (bridging geospatial data science, cartography, and social good)
- GPA: 3.7/4.0

### University of Georgia (UGA)
(Athens, GA, USA; 2017)

- M.S. in Geography (GIS), Department of Geography
  - Core Courses: Statistical Method in Geography, Geospatial Analysis, Community GIS, Programming for GIS, Seminars in GIScience, Geographic Research Method, Satellite Meteorology and Climatology, Seminar in Climatology, Urban Geography (audit), Psychology (audit)
- Research Direction: Location-based Social Media, Sentiment Analysis, Urban Spatiality, Electoral Geography
- GPA: 3.7/4.0

### Sun Yat-Sen University 中山大学 (SYSU)
(Guangzhou, China; 2015)

- B.S. in Geographic Information Systems (Remote Sensing and GIS), Department of Remote Sensing and GIS Engineering 遥感与地理信息工程系, School of Geography and Planning 地理科学与规划学院
  - Core Courses: Physical Geography, Geology and Geomorphology, Mathematical Geography; Human Geography, Urban Geography, History of Geographical Thoughts; Surveying, Digital Survey and Mapping, Map Projection and Cartographic Design, GNSS Positioning; Physics of RS, RS Image Processing, RS Image Interpretation (Field), Quantitative RS, Photogrammetry; Spatial Analysis Principles and Applications, Web GIS, GIS Software Engineering, GIS English; Advanced Mathematics, Linear Algebra, Probability and Statistics, General Physics; Computer Fundamentals, Data Structures, VB, Advanced Programming, Object Oriented Programming
- Research Direction: Public Opinion Geovisualization, Urban Ecology and Regional Planning, Historical GIS
- GPA: 3.8/4.0

### Chinese Culture University 中國文化大學 (PCCU)
(Taipei, China; 2013)

- Summer Exchange Program
- Main Courses: Lecture Series of Chinese Culture 中國文化通識系列講座, Preservation of Cultural Relics in National Palace Museum 國立故宮博物院文物保護

## 🖳 TEACHING EXPERIENCE

**UW-Madison GIS Professional Program (Project Assistant)** (Curriculum)
- Geog 572: Graphic Design in Cartography (using ArcGIS Pro, Illustrator, Photoshop) (Summer 2020)
  (including curriculum upgrade from ArcGIS Desktop to Pro)
- Geog 370: Intro Cartography (using ArcGIS Pro, Illustrator) (Winter 2021)
  (including curriculum upgrade from ArcGIS Desktop to Pro)

**UW-Madison Geography Department (Lecturer)** (Curriculum)
- Geog 370: Intro Cartography (using ArcGIS Pro, Illustrator) (Summer 2024; Summer 2022; Summer 2021)
  (Organized a semi-public guest lecture series including 4 talks from excellent cartographers / scholars)

**UW-Madison Geography Department (Teaching Assistant)** (Curriculum)
- Geog 572: Graphic Design in Cartography (using HTML/JS/CSS, Mapbox, ArcGIS StoryMaps) (Fall 2024)
- Geog 575: Interactive Cartography and Geovisualization (using HTML/JS/CSS, Leaflet, D3) (Spring 2024)
- Geog 370: Intro Cartography (using ArcGIS Desktop/Pro, Illustrator; including curriculum upgrade from ArcGIS Desktop to Pro in Fall 2020) (Fall 2023; Spring 2021; Fall 2020; Spring 2020; Fall 2019)
- Geog 170: Our Digital Globe: An Overview of GIScience and Its Technology (using Google Earth, ArcGIS Online; including curriculum upgrade in homework assignments, quizzes, and final exam)
  (Spring 2023; Fall 2022; Spring 2022; Fall 2021)
- Geog 578: GIS Applications (using QGIS, ArcGIS) (Spring 2019; Spring 2018)
- Geog 378: Intro Geo-computing (using Python) (Fall 2018)
- Geog 377: Intro Geographic Information Systems (using ArcGIS) (Fall 2017)

**UGA Geography Department (Teaching Assistant)** (Curriculum)
- Geog 4380 / 6380: Transportation Modeling and GIS (using TransCAD, ArcGIS) (Fall 2015)

## 📊 RESEARCH EXPERIENCE

**University of Wisconsin–Madison**

- Graduate Student Member, Spatial Computing and Data Mining Lab (Website)
  - Multimodal Social Media Data Mining and Visualization For Disaster Management (Mar 2022 – Present)
    - Compared performance of multiple machine learning methods based on Twitter texts and images, including Contrastive Language–Image Pre-training (CLIP) model, and applied the multimodal approach to extract disaster relevant information from an extinct dataset.
    - Presented in AAG Annual Conference 2023 (Conference) and CaGIS + UCGIS Symposium 2024 (Conference)
  - Investigating Human Mobility During Pandemic: An Integrated Social Media Approach (Nov 2020 – May 2022)
    - Investigated associations among socioeconomic characteristics with the mobility pattern from Twitter-based movement trajectories and Facebook-based county-level connectivity.
    - Presented in AAG Annual Conference 2021 (Conference)
  - Framing Twitter Trajectory Visualization: A Comparison Between 2017 Hurricane Evacuation and 2020 Coronavirus Pandemic Lockdown (Jul 2020 – Oct 2020)
    - Summarized general forms of trajectory geo-visualization with focused discussion on Twitter dataset; compare two typical disaster scenarios (hurricane evacuation and pandemic lockdown)
    - Presented in IEEE VIS 2020 "MoVis" Workshop (Conference, YouTube)
  - Flight or Driving? Mining Transportation Mode in Hurricane Harvey Evacuation (May 2019 – Nov 2020)
    - Built machine learning models considering spatiotemporal characteristics, semantics, and transportation features to estimate transportation mode at segment level and visualize the spatiotemporal pattern
    - Presented in AAG Annual Conference 2019, AutoCarto 2020 (Online Proceedings), NACIS 2021 (Map Gallery), BTAA GIS Conference 2023 (Map Gallery)
  - Examining Spatiotemporal Pattern in Evacuation Behavior during 2017 Atlantic Hurricane Season (Oct 2017 – Apr 2019)
    - Visualized and examined spatiotemporal and semantic patterns of Tweet-generated moving trajectories with influence of hurricanes
- Graduate Student Member, UW Cartography Laboratory (Website)
  - Adaptive Cartography in Natural Disaster Management: A Domain Gap Analysis (Mar 2020 – Oct 2020)
    - Conducted a gap analysis on recent interactive mapping practices under the context of natural disaster management, including a framework of 3 dimensions, 16 perspectives, and 191 individual items
    - Presented in NACIS 2020 Conference (Conference, YouTube)
  - Madison and Vicinity: A Tangible Map Quilt (Sep 2018 – Dec 2018)
    - Contributed a map block using dot density and choropleth displaying the population density of individual ethnicity groups
    - Published on Cartographic Perspectives (DOI: 10.14714/CP95.1615), Presented in NACIS 2019 (NACIS 2019 Map Gallery), AAG 2023 (Paper Presentation)
- Collaboration with UGA Urban Geospatial Analytics (UrGA) Lab (Website)
  - Male or Female? Evaluating the Gender Representativeness of Twitter – A Case Study of Clarke County, Georgia (Jan 2020 – May 2020)
    - Calculated gender representativeness of Twitter dataset using profile-based gender inference algorithm, and visualize the local spatial pattern
    - Presented in UCGIS Symposium 2020 (Poster Gallery)
  - Can We Forecast Presidential Election Using Twitter Data? An Integrative Modelling Approach (Dec 2018 – Jul 2020)
    - Participated in building multiple machine learning models to predict county level election voting results and generating maps and charts.
    - Published on Annuals of GIS (DOI: 10.1080/19475683.2020.1829704)

**University of Georgia**

- Graduate Student Member, GIS Research Lab (now Urban Geospatial Analytics Lab) (Website)
  - o Associating Socioeconomics with Sentiments on 2016 U.S. Presidential Election in Georgia
    (Sep 2016 – Aug 2017)
    - Designed a multi-scenario analytical framework using Twitter dataset; predicted voting results with socioeconomics and Tweet-based sentiment
    - Master Thesis available at UGA Theses and Dissertations
    - Presented in AAG Annual Conference 2017
  - o Location-Based Social Media and Emotional Geographies: A Case Study of Twitter in Atlanta
    (Mar 2016 – Aug 2016)
    - Analyzed the associations among demographic characteristics and Tweet-based emotional indicators based on Twitter data in Atlanta
- Graduate Student Member, Community Mapping Lab (Website)
  - o Athens Wellbeing Project (with Community Mapping Lab and Community GIS course) (Jan – May 2016)
    - Investigated and collected qualitative and quantitative data in domain of life-long learning, with spatial analysis and visualization
- Graduate Research Assistant, Application Development Group, IT Outreach Services, Carl Vinson Institute of Government (Website) (Spring 2016, Fall 2017, Spring 2017, Summer 2017)

**Sun Yat-Sen University**

- Undergraduate Research Assistant, Center of Integrated Geographic Information Analysis
  综合地理信息研究中心 (Fall 2014, Spring 2015)
  - o Planning Research on Harmonious Development of Villages and Towns in Shaoguan City
    (Dec 2013 – Jul 2014)
    - Built a Transportation Dominance Index model in planning and conducted geospatial analysis
    - Published in official project atlas (collaborated with Bureau of Urban and Rural Planning Shaoguan City)
  - o Research on Ecological Value and Compensation Mechanism in the Southwestern Shunde District
    (Aug 2014 – Nov 2014)
    - Evaluated the economic development rights and built a model of Transportation Dominance Index, assisted in making compensation scheme and policy
    - Collaborated with Bureau of Planning and Statistics in Shunde District of Foshan City
  - o Evaluating Administrative Adjustment Based on Urban Hinterland and Central Place Theory in Jieyang City
    (Apr 2014 – May 2014)
    - Designed an Urban Hinterland Model based on gravity model; quantified the evaluation of administrative change
- Undergraduate Research Assistant, Big Data Communication Lab 大数据传播实验室 (Spring 2015)
  - o Spatiotemporal Analysis of Emotional Space in Guangzhou Based on Geo-tagged Microblog (Feb 2015 – May 2015)
    - Generated emotional-spatiotemporal zones by spatiotemporally clustering text-based emotions from microblogs check-in data in Guangzhou
  - o Spatiotemporal Analysis of Social Hot Spots Based on Geo-tagged Microblog Data (Sep 2014 – Jan 2015)
    - Visualized the spatiotemporal pattern and mobility of spatial centroid (weighted mean center) of social events on microblog
- Undergraduate Research Assistant, Center for Historical Geography 历史地理研究中心 (Spring 2015)
  - o Settlement Geography under Garrison and Military Cultivation System in 14 to 19 Century's South China (Mar 2015 – May 2015)
    - Created historical GIS database; conducted spatiotemporal analysis with population, race, clan, military, and immigration (see follow-up research)

## 🖥️ GIS DEVELOPMENT

**United Nations Development Programme (UNDP)**
- [Web GIS] Small Island Developing States (SIDS) Geospatial Dashboard (Jul 2021 – Dec 2021)
  - Collaborated in GIS dashboard development based on Mapbox JS packages
  - Achieved front-end features such as histogram legend and bivariate choropleth, and UI improvement
  - Prepared vectorized layers from multi-source datasets, created automatic data processing pipeline, and provided relevant technical support for UNVs (United Nation Volunteers).

**University of Wisconsin-Madison**
- [Web/Mobile GIS] Madison Area and Wisconsin COVID-19 Pandemic Dashboard (May 2020 – May 2023)
  - Utilize Esri dashboard embedding ArcGIS Online interactive map to visualize daily pandemic and relevant infographics in Dane County, WI; Include desktop and mobile versions for Chinese and English interface, plus a statewide interactive map with similar visualization.
  - Total 80K Views; about 500 daily views during pandemic days (for all platforms).
  - Included by UW Data Science, WLIA, Esri Covid-19 Map Gallery
  - Reported by Channel 3000 News on Oct 10, 2020: 'Improve their awareness of danger': UW-Madison Ph.D. student creates COVID-19 data dashboard (News Article, YouTube; Reprint by News Break, Ground News)
  - Reported by Channel 3000 News on Oct 27, 2020: A geographic shift: Majority of Dane County COVID-19 cases now outside Madison (News Article, YouTube; Reprint by FOX47, Badger Herald)
  - Reported by Badger Herald News on Nov 9, 2020: PHMDC moves to crisis model of contact tracing, illustrates need to prevent COVID-19 spread (News Article; Reprint by News Break)
- [Web GIS] U.S. Historical Hurricanes Geovisualization (Link) (Mar 2019 – May 2019)
  - Built query-able interactive map and charts (Leaflet framework and jQuery, D3, jQueryUI, turf libraries)

**University of Georgia**
- [Web GIS] Georgia Governmental Project: GNAHRGIS-Ecology Website (Link) (Jan 2016 – Jul 2017)
  - Achieved advanced spatial queries and UI interactions (ArcGIS Server API and jQuery) in ASP.NET MVC; Improved database structure (10+ tables) in SQL Server and implemented with Ajax and Dojo
- [Web GIS] 24-hr Hackathon: Smart Traveling (Economic Fueling Solution for Long-Trip Drive) (Oct 2016)
  - Conducted GIS analysis and visualization using ArcGIS JavaScript API and built webpage UI and interactions using jQuery

**Sun Yat-Sen University**
- [Desktop GIS] Automatic Typhoon Recognition and Integrated 2D/3D Visualization System 自动台风识别与二/三维一体可视化系统 (Mar 2015 – Jun 2015)
  - Visualized the speed, direction and centers of typhoon in 2D/3D interfaces synchronously using ArcGIS Engine in C# .NET framework
- [Mobile GIS] Android App: iSYSU Map (Sun Yat-Sen University Campus Navigation System) 安卓应用：中山大学南校区校园导航系统 (May 2014 – Sep 2014)
  - Built user-friendly app with GIS modules (map, positioning, navigation) using ArcGIS Android SDKs (Wandoujia App Store)
- [Desktop GIS] Cellular-Automata Urban Sprawl Simulation System with Suitability Evaluation in Guangzhou 元胞自动机城市扩张模拟系统与适用性评价——以广州市为例 (Oct 2012 – Jan 2013)
  - Collaborated in model design and implementation in Visual Basic
  - Published on Collection of SYSU Excellent Undergraduate Paper

## 🏆 AWARD & ACHIEVEMENTS

**Static Map**

- Map Selected to be featured on Cover Page of Cartographic Perspectives (2025)
- Winner, Maps Group ($25), Mapping Masterminds Competition, Iowa State University GIS Day (2024)
- Map Selected for Publication, Esri Map Book, Volume 40 (2024)
- Map Selected for Publication, Esri Map Book, Volume 40 (2024)
- 2 Maps Selected for Map Expo Exhibit, Highlands County (Florida) Board of County Commissioners (2024)
- 1st Place / Winner in Research Map ($500), NACIS 2024 Student Map and Poster Competition (2024)
- 2nd Place / Highly Commended, Collins Bartholomew Award for Thematic Mapping & Infographics, British Cartographic Society (2024)
- 4th Place (tie) / Commended, Garsdale Design Award for 3D Mapping, British Cartographic Society (2024)
- 1st Place / Winner of Student Project (College) ($25), AGIC Symposium Maps and Apps Contest (2024)
- 1st Place in Most Innovative Map; Best Cartography, Esri UC (2024)
- Cartography Special Interest Group Excellence Award, Esri UC (2024)
- 1st Place in Student Maps (University and Postgraduate Students), Esri UC (2024)
- Map Included in "cARTography" Map Art Wall, Esri User Conference (2024)
- 2 Maps Selected for Image Inclusion, Jack Dangermond's Plenary Session in Esri User Conference (2024)
- 1st Place / Winner, Student Artistic Section, GISCO Mapping Contest (2024)
- Map Selected for Publication, Atlas of Design, Volume VII (2024)
- 2nd Place / Honorable Mention (tie), UW-Madison 15th Annual Digital Salon (2024)
- Map Admitted, UW-Madison 15th Annual Digital Salon (2024)
- 2nd Place / Runner-Up in Thematic Map, Wisconsin Land Information Association (WLIA) Map Contest (2024)
- Keynotes Choice for Static Map, Wisconsin Land Information Association (WLIA) Map Contest (2024)
- 1st Place in Black & White Map, Wisconsin Land Information Association (WLIA) Map Contest (2024)
- 1st Place in Most Unique Map, Wisconsin Land Information Association (WLIA) Map Contest (2024)
- Best Student Map, Wisconsin Land Information Association (WLIA) Map Contest (2024)
- President's Choice, Wisconsin Land Information Association (WLIA) Map Contest (2024)
- People's Choice (Adult), Wisconsin Land Information Association (WLIA) Map Contest (2024)
- Map Selected for Publication, Esri Map Book, Volume 39 (2024)
- 1st Place / Winner in Cartographic Design (tie) ($500), NACIS 2023 Student Map and Poster Competition (2023)
- Cartography Special Interest Group Excellence Award, Esri User Conference (2023)
- 1st Place / Most Innovative Map, Esri User Conference Map Gallery (2023)·
- Map Selected for Image Inclusion, Jack Dangermond's Plenary Session in Esri User Conference (2023)
- 1st Place / Winner, Arthur Robinson Static Print Map Award ($500), 50th CaGIS Map Design Competition (2023)
- 3rd Place in Student Category, GIS Certification Institute (GISCI) Map Contest (2023)
- Map on Exhibition, International Cartographic Exhibition of International Cartographic Conference (2023)
- 2nd Place / Honorable Mention, UW-Madison 14th Annual Digital Salon (2023)
- Map Admitted, UW-Madison 14th Annual Digital Salon (2023)
- Map Admitted, UW-Madison 12th Annual Digital Salon (2021)
- Map Ranked Top 2% of 600+ submissions, Esri User Conference Map Gallery (2020)

**Interactive Map**

- Dashboard Endorsed by UW Data Science, WLIA, Esri Covid Map Gallery; Reported by News 3 Times (2022)
- Honorable Mention, David Woodward Digital Map Award in 48th CaGIS Map Design Competition (2021)
- 1st Place / Best Student Map, Wisconsin Land Information Association (WLIA) Map Contest (2021)
- 1st Prize in Web/Mobile Group, Esri Chinese College Student GIS Software Development Contest (Contest News, Campus News) (2014)

**Academic**

- Scholarship for CaGIS & UCGIS Symposium ($150), International Cartographic Association (2024)
- 1st Place of 2022 Most Downloaded Paper Award, Annals of GIS (3rd author) (2022)
- 3rd Place of 2022 Best Paper Award, Annals of GIS (3rd author) (2022)
- Excellent Graduate Award, SYSU (2015)
- Excellent Student Scholarship, SYSU (2012, 2013, 2014)
- 3rd Prize in the 6th Geographical Cultural Presentation Preliminary Contest in Southern China (2012)

**Conference/Travel Grant**

- Conference Travel Award ($500), Department of Geography, UW-Madison (2024)
- NACIS 2024 Conference Travel Grant ($500) (2024)
- Trewartha-Odebolt Conference Travel Award ($500), Department of Geography, UW-Madison (2024)
- NACIS 2023 Conference Travel Grant ($500) (2023)
- Trewartha-Odebolt Conference Travel Award ($500), Department of Geography, UW-Madison (2022)
- NACIS 2021 Conference Travel Grant ($500) (2021)
- Trewartha-Odebolt Conference Travel Award ($500), Department of Geography, UW-Madison (2021)
- AAG Spatial Analysis and Modeling (SAM) Specialty Group Student Travel Awards ($250) (2021)
- Holtz Center for STS ($28), Grant for Virtual Conference (AutoCarto), UW-Madison (2020)
- Holtz Center for STS ($20), Grant for Virtual Conference (NACIS), UW-Madison (2020)
- Student Research Conference Travel Award ($600), UW-Madison (2019)
- Trewartha-Odebolt Conference Travel Award ($500), Department of Geography, UW-Madison (2019)

**Art**

- Editors' Pick, 2016 Southeastern Geographer Photo Contest (2017)
- Logo Bid Winner, Center of Integrated Geographic Information Analysis, SYSU (2013)
- 3rd Place of Hard Brush Chinese Calligraphy, "Yixian Cup" Lingnan Painting & Calligraphy Competition 逸仙杯岭南书画大赛 (2012)

## 📖 PUBLICATION

- Book Review on *Atlas of Iowa*. University of Iowa Press. (In Progress)
- C. Guo. (2025). *LEGO Topographic Map of Wisconsin*. ESRI Map Book, Volume 40. Esri Press. (In Process)
- C. Guo. (2025). *Visualizing Historical Hurricanes in Contiguous U.S. (1851–2021)*. ESRI Map Book, Volume 40. Esri Press. (In Process)
- C. Guo. (2024). *Zibo Map of Culture and Tourism*. Atlas of Design, Volume VII. North American Cartographic Information Society.
- C. Guo. (2024). *Revealing Hurricane Harvey: Through the Lens of Twitter-Based Trajectories*. ESRI Map Book, Volume 39. Esri Press.
- C. Guo, Q. Huang. *Multimodal Social Media Data Learning and Visualization for Hurricanes*, International Journal of Disaster Risk Reduction. (In Process)
- C. Guo, Q. Huang. *Flight or Driving? Mining and Exploring Evacuation Behaviors During 2017 Hurricane Harvey*. Cartography and Geographic Information Science. (In Process)
- X. Li, H. Xu, X. Huang, C. Guo, Y. Kang, X. Ye. (2021). *Emerging Geo-Data Sources to Reveal Human Mobility Dynamics During COVID-19 Pandemic: Opportunities and Challenges, Computational Urban Science*, 1(1), 1–9. https://link.springer.com/article/10.1007/s43762-021-00022-x
- C. Guo, Q. Huang. (2021). *Examining Spatiotemporal and Sentiment Patterns of Evacuation Behavior During 2017 Hurricane Harvey*. In Empowering Human Dynamics Research with Social Media and Geospatial Data Analytics (pp. 139-165). Springer, Cham. https://link.springer.com/chapter/10.1007/978-3-030-83010-6_8
- R. Liu, X. Yao, C. Guo, X. Wei. (2020). *Can We Forecast Presidential Election Using Twitter Data? An Integrative Modelling Approach*. Annals of GIS, 1-14. https://www.tandfonline.com/doi/full/10.1080/19475683.2020.1829704
- R. Roth, et al. (2020). *Madison and Vicinity: A Tangible Map Quilt*. Cartographic Perspectives. http://doi.org/10.14714/CP95.1615
- Q. Huang, C. Guo. (2017). *Public Sentiment and Movement Patterns during Natural Hazards.* AGU Fall Meeting. https://ui.adsabs.harvard.edu/abs/2017AGUFMIN31F..05H/abstract
- C. Guo. (2017). *Associating Socioeconomic Characteristics with Sentiments: A Case Study of 2016 U.S Presidential Election*. University of Georgia Theses and Dissertations. https://esploro.libs.uga.edu/esploro/outputs/9949334586002959
- C. Guo. (2015). *Exploring Emotional Space in Guangzhou Based on Microblog Check-in Data*. Sun Yat-Sen University Theses.
- C. Guo. (2014). Illustrated Article "*Become A GISer with Good Mapping Skills*". How to Be a GISer (E-Book, 1st edition).
- H. Cui, G. Chen, L. Yuan, C. Guo. (2013). *Urban Cellular Automata Model and Suitability Evaluation: A Case of Guangzhou*. Collection of SYSU Excellent Undergraduate Paper.

## 🔗 ASSOCIATION

- NACIS: North American Cartographic Information Society (2020, 2021, 2022, 2023, 2024)
- CaGIS: Cartography and Geographic Information Society (2020, 2022, 2023, 2024)
- IEEE GRSS: Geoscience and Remote Sensing Society (Reviewer) (2020, 2021, 2023, 2024)
- WLIA: Wisconsin Land Information Association (2024)
- WMS: Washington Map Society (2024)
- CMS: Chicago Map Society (2024)
- WisLUG: Wisconsin Lego Users Group (2024)
- Earth Sciences, Science Publishing Group (Reviewer) (2020, 2021)
- AAG: American Association of Geographers (2017, 2019, 2020, 2021, 2022, 2023)
- SEDAAG: Southeast Division of American Association of Geographers (2016)

## 👥 CONFERENCE   (*not attend in person)

- American Association of Geographers (AAG) 2025 Annual Meeting, Paper Presentation (Detroit, MI, Mar 2025) (Planned)
- North American Cartographic Information Society (NACIS) 2024 Annual Meeting, Lightning Talk for Practice Cartography Day (PCD) and Map Gallery (Tacoma, WA, Oct 2024)
- *British Cartographic Society Annual Conference, Map Gallery (London, UK, Sep 2024)
- *Map Industry Summit: Toronto, Map Gallery (Toronto, Canada, Aug 2024)
- *GeoCart'2024 – New Zealand National Cartographic Conference, Map Gallery (Wellington, New Zealand, Aug 2024)
- *Arizona Geographic Information Council (AGIC) Education & Training Symposium, Maps & Apps Gallery (Prescott, AZ, Aug 2024)
- *2024 Esri User Conference, Map Gallery (San Diego, CA, July 2024)
- CaGIS + UCGIS Symposium 2024, Poster Presentation (Columbus, OH, Jun 2024)
- *2024 Elevations Geospatial Summit, Map Contest (Saratoga, WY, May 2024)
- *Wisconsin Land Information Association (WLIA) 2024 Annual Conference, Map Gallery (Green Bay, WI, Feb 2024)
- *Big Ten Academic Alliance (BTAA) GIS Conference, Map Gallery (Virtual, Nov 2023)
- North American Cartographic Information Society (NACIS) 2023 Annual Meeting, Map Gallery (Pittsburgh, PA, Oct 2023)
- *International Cartographic Conference (ICC 2023), International Cartographic Exhibition (not attend in person) (Cape Town, South Africa, Aug 2023)
- *2023 Esri User Conference, Map Gallery (San Diego, CA, July 2023)
- American Association of Geographers (AAG) 2023 Annual Meeting, Paper Presentation (Denver, CO, Apr 2023)
- UW-Madison Annual Research Bazaar, Panel Presentation (Madison, WI, Feb 2023)
- North American Cartographic Information Society (NACIS) 2022 Annual Meeting, Map Gallery (Minneapolis, MN, Oct 2022)
- North American Cartographic Information Society (NACIS) 2021 Annual Meeting, Map Gallery (Oklahoma City, OK, Oct 2021)
- *American Association of Geographers (AAG) 2021 Annual Meeting, Paper Presentation (Virtual, Apr 2021)
- *23rd International Research Symposium on Cartography and GIScience (AutoCarto 2020), Paper Presentation (Virtual, Nov 2020)
- *IEEE VIS 2020 Workshop on Information Visualization of Geospatial Networks, Flows and Movement (MoVIS), Paper Presentation (Virtual, Oct 2020)
- *North American Cartographic Information Society (NACIS) 2020 Annual Meeting, Paper Presentation and Map Gallery (Virtual, Oct 2020)
- *2020 Esri User Conference, Map Gallery (Virtual, July 2020)
- *UCGIS Symposium 2020, Poster Gallery (Virtual, Jun 2020)
- *American Association of Geographers (AAG) 2020 Annual Meeting, (Virtual, Apr 2020)
- American Association of Geographers (AAG) 2019 Annual Meeting, Paper Presentation (Washington, DC, Apr 2019)
- American Association of Geographers (AAG) 2017 Annual Meeting, Paper Presentation (Boston, MA, Apr 2017)
- Southeast Division of American Association of Geographers (SEDAAG) 2016 Annual Meeting (Columbia, SC, Nov 2016)
- Georgia Informatics Symposium (Athens, GA, Oct 2016)
- Georgia Geospatial Conference (Athens, GA, Oct 2016)
- 2014 Annual Academic Meeting of the Geographical Society of China (GSC) (Chengdu, China, Oct 2014)
- International Conference on Geo-simulation and Crime Geography (Guangzhou, China, Jul 2014)

## 🖥 SOCIAL IMPACT

**Guest Talk**
- *LEGO Topographic Mapping*, Geo-Ruckus (Monthly Virtual Speakers Series), GIS Colorado, https://www.youtube.com/watch?v=M_xL1eX7yqc (Nov 7, 2024)
- *A Cartographic Journey with Atlas Guo*, Map Chat, GIS Professional Program, University of Wisconsin–Madison, https://www.youtube.com/watch?v=yBcVeyCzLTY (Dec 4, 2024)
- *A Journey of Geovisualization*, UCCS GES Geoviz Guest Lecture, Department of Geography and Environmental Studies, University of Colorado - Colorado Springs (Dec 4, 2024)

**News Report**
- *Cartography Lab Students Win Awards, Share Insights, and Collaborate at Annual NACIS Meeting*, MadGeogNews (official news of UW-Madison Department of Geography), https://geography.wisc.edu/madgeognews/2024/11/27/cartography-lab-students-win-awards-share-insights-and-collaborate-at-annual-nacis-meeting/ (Nov 27, 2024)
- *Chinese Ph.D Student in the U.S. Created 'Zibo Map of Culture and Tourism'*, Zibo Daily Newspaper, reprinted by Tencent News, https://app.zbnews.net/shares/tuwen.html?newsType=1&newsId=77161027420553216, https://news.qq.com/rain/a/20240430A01EV300 (Apr 30, 2024)
- *Historical and Cultural Heritage Goes Global! A Map Brings More Brilliance to Zibo*, Zibo Luzhong Morning Post (Dazhong News Group), https://news.lzcb.com/shares/tuwen.html?newsType=1&newsId=77158228910407680 (Apr 29, 2024)
- *LEGO Map of Wisconsin sweeps recent map contest awards*, MadGeogNews (official news of UW-Madison Department of Geography), https://geography.wisc.edu/madgeognews/2024/03/12/lego-map-of-wisconsin-sweeps-recent-map-contest-awards/ (Mar 12, 2024)
- *PHMDC moves to crisis model of contact tracing, illustrates need to prevent COVID-19 spread*, The Badger Herald, reprinted by News Break, https://badgerherald.com/news/2020/11/09/phmdc-moves-to-crisis-model-of-contact-tracing-illustrates-need-to-prevent-covid-19-spread/ (Nov 9, 2020)
- *A geographic shift: Majority of Dane County COVID-19 cases now outside Madison*, Channel 3000, reprinted by FOX47 and Badger Herald, https://www.channel3000.com/news/coronavirus/a-geographic-shift-majority-of-dane-county-covid-19-cases-now-outside-madison/article_18e77913-8c50-55d8-a140-64bdaa55e4e0.html (Oct 27, 2020)
- *'Improve their awareness of danger': UW-Madison Ph.D. student creates COVID-19 data dashboard*, Channel 3000, reprinted by News Break and Ground News, https://www.channel3000.com/news/coronavirus/improve-their-awareness-of-danger-uw-madison-ph-d-student-creates-covid-19-data-dashboard/article_b4f365c8-ab06-5646-812a-42b0808d3131.html (Oct 10, 2020)

**News Video**
- *'Improve their awareness of danger': UW-Madison Ph.D. student creates COVID-19 data dashboard*, Channel 3000 (CBS television station affiliated with WISC-TV / Channel 3), https://www.youtube.com/watch?v=l2VAqPdUnoY (Oct 10, 2020)
- *A geographic shift: Majority of Dane County COVID-19 cases now outside Madison*, Channel 3000 (CBS television station affiliated with WISC-TV / Channel 3), https://www.youtube.com/watch?v=-TbqZpS0wII (Oct 27, 2020)

**Online Article**
- *Identifying Places with Power Outages after Hurricane Helene*, "Visualising Data" Newsletter – Issue #10 November 2024, https://visualisingdata.kit.com/posts/the-visualising-data-newsletter-issue-10-november-2024 (Nov 17, 2024)
- *The United States of Natural Disasters*, Maps.com, and its Newsletter (Volume 1, Issue 4), https://www.maps.com/the-united-states-of-natural-disasters/, https://go.maps.com/webmail/1013562/456911926/5c12af2be4c76735349f74fa4e5b2775cb317e84afb4a2b8a9ade48f080469a1 (Jul 29, 2024)
- *Helene power outages mapped*, Flowingdata, https://flowingdata.com/2024/10/03/helene-power-outages-mapped/ (Oct 3, 2024)
- *Madison Area and Wisconsin Covid-19 Pandemic Dashboard* was featured on UW Data Science, WLIA, Esri Covid-19 Map Gallery

## ⚙ SKILL

- **Geospatial · Cartography**
  ArcGIS (Desktop, Pro, Online, Dashboards, Server, Engine, StoryMaps)
  QGIS | TransCAD | GeoDa | Envi | ERDAS | PCI Geomatics | Google Earth Engine
  Mapbox | Leaflet | D3 | OpenStreetMap | Blender | Kepler.gl
- **Graphic Design · Media**
  Illustrator | Photoshop | LEGO Studio | Blender | After Effect
  Flash | CorelDraw | AutoCAD | Dreamweaver | Authorware
- **Development · Database**
  JavaScript | HTML | CSS | ASP.NET MVC | Android Development
  SQL | PostgreSQL (PostGIS) | SQL Server | MongoDB | AWS
- **Programming · Analysis**
  Python | Java | C# | R | MATLAB | SPSS | Gephi | Visual Basic | C++ | Pascal
- **Miscellaneous**
  Art: Seal Carving 篆刻 | Chinese Calligraphy | English Calligraphy | Photography | Watercolor Painting
  Music: Irish Whistle (Tin, Low) | Guqin 古琴 | Bawu 巴乌 | Chinese Flute
  Language: English | Mandarin | Cantonese


## ⚛ EXTRACURRICULAR

- Volunteer in Dataset Cleaning, Natural Earth (Nov 2023 – Present)
- GIS Development Intern at United Nations Development Programme, Global Centre for Technology, Innovation and Sustainable Development (Sep 2021 – Dec 2021)
- GIS and Data Visualization Intern at Community Broadband Networks Initiative, Institute for Local Self-Reliance (Feb 2021 – May 2021)
- News Cartographer, Covid Pandemic Cartographer (Jun 2020 – Present), MADNEWS 麦迪讯, the largest Chinese media platform in Madison, WI (WeChat: Madison_news, Facebook Page)
- Designer of Logo for UW-Madison Spatial Computing and Data Mining Lab (Mar 2020)
- Guqin and Tin/Low Whistle Player, Ensemble of Asian Musical Instrument Community (AMIC) 琴识明月, participating in 7 public performances in Madison and Milwaukee, WI (Sep 2017 – Apr 2019)
- Tin/Low Whistle Player, Irish music session groups in Athens, GA and Madison, WI (2019, 2023 – Present)
- Volunteer Editor, Facebook Group "Human & Physical Geography" (Feb 2016 – Aug 2017)
- Co-founder, UGA Traditional Chinese Clothing Club (Aug 2016 – Aug 2017)
- Volunteer and Assistant, UGA Chinese Student Fellowship (Apr 2016 – Aug 2017)
- Chair of Logistic Committee, first campus-wide UGA GIS Day (Facebook Page) (Jul 2016 – Nov 2016)
- Assistant in Advertising / Academics / Mental Health, SYSU Class of 2015 (GIS Major) (Sep 2012 – Jun 2015)
- Student Librarian, Library of Geography and Planning School, SYSU (Oct 2013 – May 2015)
- Communicating Volunteer and Assistant, "Blue Letter Project" Left-Behind Childcare Organization "蓝信封行动"留守儿童关爱组织 (Website)  (Oct 2012 – May 2015)
- Deputy Director (Sep 2012 – Jun 2013), Assistant (Sep 2011 – Sep 2012) in Advertising, Student Union of Geography and Planning School, SYSU
- Assistant in Advertising, Lingnan Association of Calligraphy and Painting 岭南书画协会, SYSU (Oct 2011 – Sep 2012)
- Invention Patent: Bottle Cap for Water Bottle (Google Patent) (2011)
- Utility Model Patent: Water Bottle Cap (Google Patent) (2011)
- Utility Model Patent: Elastic Pen-Cap Clip (Google Patent) (2010)