

🔦 SUMMARY

Open-To-Work: (Internship / Part-Time) Cartographer / GIS Engineer / Geospatial Analyst

Research Area: Cartographic Visualization, Spatiotemporal Analytics, Social Media Data Mining,
Natural Disaster Management (bridging geospatial data science, cartography, and social good)

🎓 EDUCATION

University of Wisconsin-Madison (UW-Madison) (Madison, WI, USA; 2021 Expected)

- Ph.D. in [Geography](#) (Sub-area of Cartography/GIS); Minor in [Computer Science](#); GPA: 3.7/4.0

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

- M.S. in [Geography](#) (Sub-area of GIS); GPA: 3.7/4.0

Sun Yat-Sen University (SYSU) (Guangzhou, China; 2015)

- B.S. in [Geographic Information Systems](#); GPA: 3.8/4.0

🏢 EXPERIENCE

Teaching Assistant

- [UW-Madison Geog 370](#) Cartography, 377 GIS, 378 Geocomputing, 578 GIS Applications (Fall 2017 – Present)
- [UGA Geog 6/4380](#) Transportation Modeling and GIS (Fall 2015)

Project Assistant

- [UW-Madison GIS Professional Program](#) Geog 572 Graphic Design in Cartography
(Upgrade course materials to ArcGIS Pro) (Summer 2020)

Research Assistant

- App Dev Group, [IT Division](#), [UGA Carl Vinson Institute of Government](#) (Spring 2016 – Summer 2017)

Graduate Student Member

- [UW Spatial Computing and Data Mining Lab](#); [UW Cartography Lab](#); [UGA Community Mapping Lab](#)

Undergrad Research Assistant

- Center of Integrated Geographic Information Analysis, SYSU (Fall 2014 – Spring 2015);
Center for Historical Geography, SYSU (Spring 2015); Big Data Communication Lab, SYSU (Spring 2015)

⚙️ SKILLS

Geospatial: ArcGIS (Desktop, Pro, Server, Engine, Online) | QGIS | TransCAD | GeoDa | Envi | ERDAS | PCI

Design: Illustrator | Photoshop | CorelDraw | Inkscape | AutoCAD | Flash | After Effect | Dreamweaver

Development: JavaScript | HTML | CSS | ASP.NET MVC | Android | PostgreSQL | SQL Server | MongoDB | AWS

Analysis: Python | Java | C# | R | MATLAB | SPSS | Gephi | Visual Basic | C++ | Pascal

🔗 GIS DEVELOPMENT

[Web/Mobile] Madison Area COVID-19 Dashboard ([Link](#)) (May 2020 – Present)

Built [Esri Dashboard](#) with [ArcGIS Online](#) pandemic maps in web/mobile interfaces with bilingual versions.

50,000 total views; 500 daily views; Included by [UW Data Science](#), [WLIA](#), [Esri Covid-19 Map Gallery](#);

Oct 10, 2020: News Reported by Channel3000 ([Article](#), [YouTube](#)), reprint by [News Break](#), [Ground News](#);

Oct 27, 2020: News Reported by Channel3000 ([Article](#), [YouTube](#)), reprint by [FOX47](#), [Badger Herald](#);

Nov 9, 2020: News Reported by Badger Herald ([Article](#)), reprint by [News Break](#)

[Web] U.S. Historical Hurricanes Geovisualization ([Link](#)) (Mar 2019 – May 2019)

Built the query-able interactive map and charts ([Leaflet](#) framework and [jQuery](#), [D3](#), [jQueryUI](#), [turf](#) libraries)

[Web] 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 frontend query with [Ajax](#) and [Dojo](#)

[Web] 24-hr Hackathon Project: Smart Traveling (Economic Fueling Solution for Long-Trip Drive) (Oct 2016)

Conducted GIS analysis and visualization using [ArcGIS JavaScript API](#) and built webpage UI using [jQuery](#)

[Desktop] Automatic Typhoon Recognition and Integrated 2D/3D Visualization System (Mar 2015 – Jun 2015)

Visualized typhoon speed, direction and centers in 2D/3D synchronously using [ArcGIS Engine](#) in [C# .NET](#)

[Mobile] Sun Yat-Sen University Campus Navigation ([Wandoujia App Store](#)) (May 2014 – Sep 2014)

Built user-friendly [Android](#) app with GIS modules (map, positioning, navigation) using [ArcGIS Android SDKs](#)

PUBLICATION

- (In-Process) C. Guo, Q. Huang. (2020). Flight or Driving? Mining and Exploring Evacuation Behaviors During 2017 Hurricane Harvey. *Cartography and Geographic Information Science*.
- (In-Process) C. Guo, Q. Huang. (2020). Examining Spatiotemporal and Sentiment Patterns of Evacuation Behavior During 2017 Hurricane Harvey. *Empowering Human Dynamics Research with Social Media and Geospatial Data Analytics*.
- R. Liu, X. Yao, C. Guo, X. Wei. (2020). [Can We Forecast Presidential Election Using Twitter Data? An Integrative Modelling Approach](#). *Annals of GIS*.
- R. Roth, et al. (2020). [Madison and Vicinity: A Tangible Map Quilt](#). *Cartographic Perspectives*.
- Q. Huang, C. Guo. (2017). [Public Sentiment and Movement Patterns during Natural Hazards](#). AGUFGM.
- C. Guo. (2017). [Associating Socioeconomic Characteristics with Sentiments: A Case Study of 2016 U.S Presidential Election](#). University of Georgia Theses and Dissertations.
- 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.

CONFERENCE

- (Scheduled) CaGIS 23rd Intl Research Symposium ([AutoCarto 2020](#)), Paper Presentation (Virtual, Nov 2020)
- IEEE VIS 2020 "[MoVIS](#)" Workshop, [Work-In-Progress Presentation](#) (Virtual, Oct 2020)
- NACIS 2020 Annual Meeting, [Paper Presentation](#), [Member Map Gallery](#) (Virtual, Oct 2020)
- IEEE International Geoscience and Remote Sensing Symposium ([IGARSS](#)), Reviewer (Virtual, Sep 2020)
- 2020 Esri User Conference, [Map Gallery](#) (Virtual, July 2020)
- UCGIS Symposium 2020, [Poster Gallery](#) (Virtual, Jun 2020)
- AAG Annual Meeting 2020 (Virtual, Apr 2020)
- AAG Annual Meeting 2019, [Paper Presentation](#) (Washington, D.C., USA, Apr 2019)
- AAG Annual Meeting 2017, [Paper Presentation](#) (Boston, MA, USA, Apr 2017)
- Southeast Division of AAG Annual Meeting (Columbia, SC, USA, Nov 2016)
- Georgia Geospatial Conference (Athens, GA, USA, Oct 2016)
- 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)

AWARDS

- Holtz Center for STS, Grants for Virtual Conference (NACIS 2020, AutoCarto 2020), UW-Madison (2020)
- "[Home Metro Map](#)" Ranked Top 2% in 650+ submissions, Esri User Conference 2020 Map Gallery (2020)
- Student Research Conference Travel Award, UW-Madison (2019)
- Trewartha/Odebolt Conference Travel Award, Department of Geography, UW-Madison (2019)
- Editors' Pick, 2016 Southeastern Geographer Photo Contest (2017)
- Excellent Graduate Award, SYSU (2015)
- Excellent Student Scholarship and Excellent League Student, SYSU (2012, 2013, 2014)
- 1st Prize in Web/Mobile Group, Esri Chinese College GIS Software Development Contest ([News](#)) (2014)
- Logo Bid Winner, Center of Integrated Geographic Info Analysis, SYSU (2013)
- 3rd Prize in the 6th Geographical Cultural Presentation Preliminary Contest in Southern China (2012)
- 3rd One of Hard Brush Chinese Calligraphy, "Yixian Cup" Lingnan Painting and Calligraphy Association (2012)

EXTRA-CURRICULAR

- Director of Technology (Sep 2020 - Present), COVID-19 Pandemic Cartographer (Jun 2020 - Present), MADNEWS, the largest Chinese media platform in Madison, WI (WeChat: Madison_news, [Facebook Page](#))
- Tin Whistle Player, Ensemble of Asian Musical Instrument Community (AMIC) ([YouTube](#)) (Sep 2017 - Apr 2019)
- Editor, Facebook Group "Human & Physical Geography" ([Facebook Page](#)) (Feb 2016 - Aug 2017)
- Co-founder, UGA Traditional Chinese Clothing Club (Aug 2016 - Aug 2017)
- Chair of Logistic Committee, First UGA GIS Day ([Facebook Page](#)) (Jul 2016 - Nov 2016)
- Student Librarian, Library of Geography and Planning School, SYSU (Oct 2013 - May 2015)
- Volunteer and Assistant, "Blue Letter Project" Left-Behind Childcare Org ([Website](#)) (Oct 2012 - May 2015)
- Deputy Director of Advertising, Geography School Student Union, SYSU (Sep 2012 - Jun 2013)
- Utility Model Patent: Water Bottle Cap ([Google Patent](#)) (2011), Elastic Pen-Cap Clip ([Google Patent](#)) (2010)