

## Yanan Wu

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### EDUCATION

- 2019-2024 **Ph.D. student** in Geospatial Information Sciences, The University of Texas at Dallas, Richardson, TX, USA. Advisor: Dr. May Yuan
- 2019 **M.A.** in Geography. Binghamton University, Binghamton, NY, USA.  
Thesis: Integration of Earth observations and in situ data for analyzing lake level changes in Minnesota (1990-2016). Advisor: Dr. Qiusheng Wu
- 2016 **B.S.** in Resource Environment and Urban-Rural Planning Management. Xi'an University of Science and Technology, China.  
Thesis: Analysis of drought evolution characteristics based on Temperature Vegetation Dryness Index (TVDI) in the Huaihe river basin. Advisor: Dr. Xiaoliang Shi
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### APPOINTMENTS

- 2022-current **Teaching Assistant**, Geospatial Information Sciences, The University of Texas at Dallas  
EPPS 2302 Methods of Quantitative Analysis in the Social and Policy Science
- 2021-2022 **Instructor**, Geospatial Information Sciences, The University of Texas at Dallas  
GISC 3304 Principles of Geospatial Information Sciences  
EPPS 2302 Methods of Quantitative Analysis in the Social and Policy Science
- 2020-2021 **Teaching Assistant**, Geospatial Information Sciences, The University of Texas at Dallas  
GISC 6325 Remote Sensing Fundamentals  
GISC 4325 Introduction to Remote Sensing  
GISC 4386 Global Changes and its Challenges  
GISC 3304 Principles of Geospatial Information Science
- 2019-2020 **Research Assistant**, Geospatial Information Sciences, The University of Texas at Dallas  
Participated in the NIST funded research project: SAFE-NET: An Integrated Connected Vehicle and Computing Platform for Public Safety Applications
- 2017-2019 **Graduate Assistant**, Department of Geography, Binghamton University  
Process global remote sensing image; detect changing pattern of lakes from GRACE data
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### AWARDS

- 2023 International Cartographic Association Scholarship
- 2023 Travel award from USNC for ICA with NSF funding to attend the ICC2023
- 2023 Betty & Gifford Johnson Travel Award, UTD
- 2022 Graduate student participants of the Grad WINGS Workshop, UCGIS
- 2022 International Cartographic Association Scholarship
- 2022 Second Place, Student Lightning Talk Award, UCGIS Symposium
- 2022 Third Place in GIS day 2022 Awarded by Geospatial Information Sciences Program, UTD
- 2022 Travel award from UCGIS to attend the UCGIS Symposium
- 2022 The University of Texas at Dallas 2022 Three Minute Thesis (3MT) Competition, Finalist
- 2022 Honorable mentions, GI Science & Systems Student Honors Paper Competition session, AAG
- 2021 International Cartographic Association Scholarship
- 2021 Travel award from USNC for ICA with NSF funding to attend the ICC2021
- 2021 Pioneers Student Research Fund, Geospatial Information Sciences Program, UTD
- 2021 PhD Research Small Grants Awarded by the Office of Graduate Education, UTD
- 2021 First Place in GIS day 2021 Awarded by Geospatial Information Sciences Program, UTD
- 2019 First Place in GIS day 2019 Awarded by Geospatial Information Sciences Program, UTD

- 2019 Pioneers Student Research Fund, Geospatial Information Sciences Program, UTD  
2019 First Place in GIS day 2019 Awarded by Geography Department at Binghamton University  
2015 Outstanding Prize in GeoDesign at Esri GIS Software Development Contest
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#### PRESENTATIONS

- 2022 Driving pattern analysis for emergency vehicle (EV), *AutoCarto*, November  
2022 Understanding emergency vehicle movement from GPS trajectory data, *GIS Day in UTD*, November  
2022 Understanding 911 Response time from GPS trajectory data, *UTD Research Day*, October  
2022 Driving pattern analysis for emergency vehicle (EV) using multi-source data, *UCGIS, Syracuse, NY*, June  
2022 Why is there a delay in a 911 vehicle arriving? The Three Minute Thesis (3MT) Competition, *UTD*, April  
2022 Location analytics of routine occurrences (LARO) to identify locations with regularly occurring events with a case study on traffic accidents, *USGIF GEOINT Symposium, Aurora, CO*, April  
2022 Location analytics of routine occurrences (LARO) with a case study on traffic accidents, *Association of American Geographers (AAG), New York*, February  
2021 Where and why there: location analytics of routine occurrences (LARO) with a case study on traffic accidents, *ICC conference, Florence, Italy*, December  
2021 Emergency vehicle data map-matching utilizing the Dijkstra's Algorithm, *GIS Day in UTD*, November  
2021 Spatial-temporal analysis of traffic accidents for increasing sustainable transportation, *The Center for Spatial Studies at UCSB*  
2021 The Three Minute Thesis (3MT) Competition, *The University of Texas at Dallas*, April  
2020 Research Showcase Poster Competition, *EPPS, The University of Texas at Dallas*, October  
2019 Visualizing (Wild) Fires in Sentinel-2 imagery using custom script in EO Browser, *GIS Day in UTD*, November  
2019 Developing an hourly risk model for street networks in Dallas, *SWAAG, Fort Worth, Texas*. October  
2019 Integration of Earth observations and in situ data for analyzing lake level changes in Minnesota (1990-2016), *GIS Day in Binghamton University*, March  
2019 Integration of Earth observations and in situ data for analyzing lake level changes in Minnesota (1990-2016). *Association of American Geographers (AAG), Washington D.C.* April
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#### PUBLICATION

Wu, Y., & Yuan, M. (2021). Where and why there: location analytics of routine occurrences (LARO) with a case study on traffic accidents. *Abstracts of the ICA*, 3, 318.

#### CONFERENCE PROCEEDINGS

Wu, Y., Yang, Y., Yuan, M. Analyze emergency-vehicle dispatches in Dallas, Texas, USA, In *AutoCarto 2022 Proceedings*.

Yang, Y., Wu, Y., Yuan, M. Quantifying the impacts of social infrastructure on human networks, In *AutoCarto 2022 Proceedings*.

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#### SERVICE

- 2022 Student judge for Faculty Three Minutes Thesis (3MT) Competition in UTD  
2022 USGIF Student Assistant Program at the 2022 GEOINT Symposium
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#### CERTIFICATION

Spatiotemporal Innovation Workshop Sentiment Analysis on Social Media, 2022

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#### AREAS of RESEARCH

- Geographic Information Science (GIS)
  - Urban Environment and development
  - Web-based Mapping and information Processing
  - Geospatial Data Science
  - Spatial analysis and modeling
  - Remote Sensing digital image processing
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#### RESEARCH SKILLS

Extensive experience in Python, R, ArcGIS, SPSS  
Knowledgeable in MATLAB, AutoCAD, Gephi,