

YANAN WU

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EDUCATION

The University of Texas at Dallas	2019-2024
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Ph.D. student in Geospatial Information Sciences Advisor: Dr. May Yuan

Binghamton University	2019
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M.A. in Geography

Thesis: Integration of Earth observations and in situ data for analyzing lake level changes in Minnesota (1990-2016)

Advisor: Dr. Qiusheng Wu

Xi'an University of Science and Technology, China	2016
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B.S. in Resource Environment and Urban-Rural Planning Management.

Thesis: Analysis of drought evolvement characteristics based on Temperature Vegetation Dryness Index (TVDI) in the Huaihe River basin. Advisor: Dr. Xiaoliang Shi

APPOINTMENTS

The University of Texas at Dallas	2019-current
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- **Teaching Assistant**, Geospatial Information Sciences 2022-current

GIS 6385 GIS Theories Models and Issues

EPPS 2302 Methods of Quantitative Analysis in the Social and Policy Science

- **Instructor**, Geospatial Information Sciences 2021-2022

GIS 3304 Principles of Geospatial Information Sciences

EPPS 2302 Methods of Quantitative Analysis in the Social and Policy Science

- **Teaching Assistant**, Geospatial Information Sciences 2020-2021

GIS 6325 Remote Sensing Fundamentals

GIS 4325 Introduction to Remote Sensing

GIS 4386 Global Changes and its Challenges

GIS 3304 Principles of Geospatial Information Science

- **Research Assistant**, Geospatial Information Sciences 2019-2020

Participated in the NIST-funded research project: SAFE-NET: An Integrated Connected Vehicle and Computing

Platform for Public Safety Applications

Binghamton University	2017-2019
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- **Graduate Assistant**, Department of Geography 2017-2019

Process global remote sensing image; detect changing pattern of lakes from GRACE data

PUBLICATIONS

Wu, Y., Yang, Y., & Yuan, M. (2023). Understanding the role of geographical environments in emergency dispatches with GPS trajectories. *Abstracts of the ICA*, 6, 276.

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*.

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 the Geography Department at Binghamton University
2015 Outstanding Prize in GeoDesign at Esri GIS Software Development Contest

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

ACADEMIC SERVICE

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

CERTIFICATION

Spatiotemporal Innovation Workshop Sentiment Analysis on Social Media, 2022

AREAS of RESEARCH

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

RESEARCH SKILLS

Extensive experience in Python, R, ArcGIS, SPSS

Knowledgeable in MATLAB, AutoCAD, Gephi,