Farnoosh Roozkhosh

PhD Student, University of Georgia, Department of Geography

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Education

University of Georgia (UGA)| Ph.D. of Geography | GPA: 4.0/4.0   *08/2022 – 05/2026*
Athens, GA, USA

- Thesis title " Understanding Electric Vehicle Users' Charging Behaviors: A GeoAI Approach Using Mobile Phone Location Data". (Winner of the NSF Doctoral Dissertation Research Improvement (DDRI) Grant)

University of Guilan | M.S in Urban Planning | GPA: 3.93/4.0   *02/2016 – 09/2018*
Rasht, Guilan, Iran

University of Bojnourd | B.S in Urbanism Engineering | GPA: 3.83/4.0   *10/2011 – 08/2015*
Bojnourd, NKH, Iran

Work Experience

Teaching Assistant | Department of Geography, University of Georgia   *08/2024 – 05/2025*
09/2025- present
Athens, GA, USA

- Advanced Geospatial Analysis
- Introduction to Geographic Information Systems (GIS)

Research Fellow | Electric Vehicle (EV) charging station energy modeler, Georgia Network   *05/2025 – 08/2025*
for Electric Mobility(GNEM)   *Athens, GA, USA*

- Estimating energy and accessibility gap between current charging stations supply and demand
- EV charging station demand prediction
- EV charging stations facility maps

Internship | Transportation Data Modeler, Atlanta Regional Commission (ARC)   *05/2025 – 08/2025*
Atlanta, GA, USA

- Working with OSM data to create bike/ped mobility network using GIS, Python, Visum

Research Assistant | Urban Geo-Analytic Lab Group, University of Georgia

- Developing an integrated framework for planning and operating a smart and scalable   *07/2023- 06/2024*
  network of EV charging stations project   *Athens, GA, USA*

- EV charging stations placement optimization and demand prediction

Instructor of Record | Department of Geography, University of Georgia   *08/2022- 05/2023*
Athens, GA, USA

- Introduction to physical geography | teaching and grading | ~80 students

Lecturer | Department of Urban Planning, University of Bojnourd   *01/2020- 06/2022*
Bojnourd, Iran

- Urban comprehension and presentation | teaching and grading | ~40 students
- Specialized English language in urban planning | teaching and grading | ~40 students
- Quantitative models in urban planning | teaching and grading | ~40 students

Skills

Expertise	GIS, Geo-Spatial Analysis, Optimization, Transportation Planning, Machine Learning, E-mobility, GeoAI, Microsoft Office
Tools	ArcGIS Pro, QGIS, ArcGIS Online, Story Map, Sketchup, AutoCAD, TransCAD, GeoDa
Programming	Python, R
Libraries and Frameworks	Pandas, NumPy, Networkx, igraph, Scikit-Learn, Seaborn, Scipy
GIS Libraries and Frameworks	Geopandas, Shapely, GDAL/OGR, PySAL
Machine Learning	Supervised Learning, Unsupervised Learning, Transfer Learning, Neural Networks, Classification, Regression, Clustering
Statistics	Time series Analysis, Hypothesis Testing, Spatial Statistics, Multivariate Analysis, Geostatistics
Certificates	GIS (University of Georgia, 2024), Machine learning (Stanford University, Coursera, 2024), Python (University of Michigan, Coursera, 2022)

Journal Papers

Bridging Data Gaps for EV Demand Estimation: A Transfer Learning Approach

Roozkhosh, F., Yao, X. A., Tahmasbi, B., Yang, H., & Mai, G. *Journal of Transport Geography,* Revised, preprint.   *2025*

From theory to deep learning: Understanding the impact of geographic context factors on traffic violations.   *2025*

Yang, H., Yao, X. A., **Roozkhosh, F**., Liu, R., & Mai, G. *Computers, Environment and Urban Systems*. LINK

Geospatial Analysis of Dementia Mortality and its Associations with Demographic and Socioeconomic Factors   *2024*

Roozkhosh, F., Yao, A., Yang, H., Sond, S., and Liu, T. *Journal of Alzheimer's Disease Reports*. LINK

Encounter Network and Its Application to Studying Epidemic Spread through Public Transportation Networks   *2024*

Tahmasbi, B., **Roozkhosh, F**., and Yao, A. *Transportation Research Record*. LINK

Examining the potential of pharmacies to expand pre-exposure prophylaxis access along Georgia's fixed-route public transit: A geospatial analysis   *2024*

Gomez, B., **Roozkhosh, F**., Yao, A., Chastain, D. B., & Johnson, B. R. *Journal of the American Pharmacists Association*, 64(4), 102087.) LINK

Accessibility, Walkability, Mixed Land Uses, Analyzing in Diverse Textures Based on Space Syntax Theory   *2022*

Roozkhosh, F., Molavi, M., and Salaripour, A. *International Review for Spatial Planning and Sustainable Development*. LINK

Comparison of walkability in different urban districts using space syntax   *2020*

Roozkhosh, F., Molavi, M., and Salaripour, A. *Journal of Architecture and Urbanism*. LINK

Contributions and risks of artificial intelligence (AI) in building smarter cities: Insights from a systematic review of the literature

Yigitcanlar, T., Desouza, K. C., Butler, L., and **Roozkhosh, F**. *Energies*. LINK   *2020*

Journal Papers Submitted

From Pings to Plugs: A Robust Pipeline for Inferring Public-Charging EV Users from Passively Collected Mobility Traces   *2025*

Roozkhosh, F., Yao, A. *Transportation Research Part C: Emerging Technologies*

How do people charge their electric vehicles? A multidisciplinary review and framework   *2025*

Roozkhosh, F., Yao, A. *Transportation Research Part D: Transport and Environment*

Conference Papers

A Novel Approach to Identifying Electric Vehicle Users via Mobile Phone Location Data and Spatial Analysis   *2025*

Roozkhosh, F., Yao, X.A., Presented at the American Association of Geographers Annual Meeting, *Michigan, USA*

Transfer Learning-Based Prediction of Electric Vehicle charging stations Demand: Bridging Data Gaps Between Colorado and Minnesota   *2025*

Roozkhosh, F., Yao, X.A., Tahmasbi, B., Poster Presentation at the 104th TRB Annual Meeting 2025, Washington DC.

Electric Vehicle charging stations Demand prediction: Bridging Data Gaps   *2024*

Roozkhosh, F., Yao, X.A., Presented at the CAGIS+UCGIS Conference, Columbus, *Ohio, USA*.

Predicting Electric Vehicle Demand for Charging Stations: Time Series and Machine Learning Models   *2024*

Roozkhosh, F., Yao, X.A., Presented at the American Association of Geographers Annual Meeting, *Hawaii, USA*.

Assessing Epidemic Spreading Potential with Encounter Network (Short Paper)   *2023*

Tahmasbi, B., **Roozkhosh, F**., Yao, X.A., Presented in 12th International Conference on Geographic Information Science (GIScience 2023). *University of Leeds, Leeds, United Kingdom*. LINK

Honors & Awards

Scholarships:

2025	**NSF Doctoral Dissertation Research Improvement Award** (DDRI)	
2025	**Georgia Network for E-Mobility Summer Fellowship**	Athens, GA
2025	**UGA Summer Research Award**	Athens, GA
2024	**Geospatial Cyberinfrastructure Workshop** (NSF Scholarship)	Honolulu, Hawaii
2024	**International Cartographic Association (ICA) scholarship**	Columbus, Ohio
2023	**Iranian American Academics and Professionals (IAAP) Scholarship**	Washington DC
2022-2026	**UGA Graduate School Doctoral Fellow Award, University of Georgia**	Athens, GA

Travel Grants:

2024	**ByteBoost Workshop Travel Grant** (NSF)	Pittsburgh, PA
2024	**ACES (Accelerating Computing for Emerging Sciences) Workshop** (NSF)	Providence, RI

Languages

- **English: Fluent | Persian/Farsi: Fluent**