VITAE

I. Academic/Professional Background

A. **Name:** Milad Mohammadalizadehkorde **Title:** IT Geospatial Analyst/Adjunct Professor

B. Educational Background

- **Ph.D. in Geographic Information Science (GIS),** 05/2021, Texas State University, San Marcos, Texas. Dissertation: Financial and Spatial Analysis to Facilitate Sustainable Energy Investments in Large Public Universities: Toward a More Proper Coupling Between Institutional, Environmental, and Social Systems.
- **M.S., Sustainability,** 07/2017, Texas State University, San Marcos, Texas. Thesis: Universities as Models of Sustainable Communities? An Energy Efficiency Assessment at Texas State University.
- **M.S., in Enterprise Communication,** 07/2015, Università degli Studi di Perugia, Italy.
- **B.A., in Communication Science,** 02/2010, Università degli Studi di Perugia, Italy.

C. University Experience

Position	***University***	***Dates***
Visiting Assistant Professor in GIS	Clark University	2021 - 2023
Adjunct Professor for an Online Asynchronous Course on *Internet GIS*	Northwest Missouri State University	2022 - 2023
Coordinator of Undergraduate Courses of GIS (GEO 2426)	Texas State University	Spring 2021
Instructor of Record for GIS Fundamentals GEO 2426	Texas State University	2020- 2021
Instructor of Record for Geography of North Africa and the Middle East	Texas State University	Fall 2019
GIS Lab Instructor	Texas State University	2018-2019
Graduate Teaching Assistant	Texas State University	2017-2019
Graduate Research Assistant	Università degli Studi di Perugia, Italy	2012-2013

D. Courses Taught

Code	Title	University	Dates
GEO 2426	**Fundamentals of Geographic Information Science**	Texas State University	2019-2021
GEO 3328	**Geography of North Africa and the Middle East**	Texas State University	2018-2019
IDCE 302	**Python Programming**	Clark University	2021-2022
IDCE 30262	**Web Mapping and Open-Source GIS**	Clark University	2021-2022
IDCE 30274	**Programming for GIS**	Clark University	2021-2022
ID 296	**Advanced Vector GIS**	Clark University	2021-2022
IDCE 376	**Spatial Database Development**	Clark University	2021-2022
IDCE 310	**Introduction to Geographic Information Science**	Clark University	2021-2022
32-642-80	**Internet GIS**	Northwest Missouri State University	2022-2023

- **I am prepared to teach and conduct research based on the following topics:**

Topic	Level	Detailed Topics
Statistics	• Introductory • Advanced	• Cluster Analysis • Multivariate Inferential Statistics • Machine Learning
Web Mapping	• Introductory • Advanced	• Node.js • Web GIS • Open Source Web GIS • ArcGIS API implementation • Google Map API implementation • Google Earth Engine • Leaflet, MapBox, Folium • Server Creation on PostgreSQL • Server Deployment on AWS • Open Source and Web-Based GIS
Social Media Mining	• Introductory • Advanced	• Twitter/X API v1 and v2 • NLP • API implementation • Social media and natural disasters
Remote Sensing	• Introductory • Advanced	• Google Earth Engine • Supervised Classification • Unsupervised Classification • Accuracy Assessment • Change Detection
GeoSpatial Analysis in R	• Introductory • Advanced	• Creation of Spatial Object in R • Shapefiles in R • Spatial Data Manipulation in R • Making Maps in R • Leaflet.js in R
Maps and Map Making	• Introductory • Advanced	• Geodesy • Thematic Cartography • Color Theory
Environmental Geography	• Introductory • Advanced	• Risk Assessment • Air Quality Assessment • Hydrology and Surface Runoff • Wildlife Ecology

E. Relevant Professional Experience

Position	*Entity*	*Dates*
IT Geospatial Analyst Sr.	Austin Transportation and Public Works	May 2023 -Current
GIS Consultant	NET IMPACT and PG&E	Fall 2019
GIS Coordinator	MIDCO Communication	Summer 2018
GIS Analyst	Institute for Government Innovation	Summer 2017
EDF Fellowship	Environmental Defense Fund	Summer 2016

F. Professional Certification and Experience

Python	**Energy Efficiency and Sustainability**
Advanced Python	Demand Response and the Smart Grid
Python Scripting for Geoprocessing Workflows	Energy Audits
Python Scripting for Map Automation	Energy Efficiency Fundamentals
Python Data Analysis	Energy Rate Structures: Concepts and Unit Pricing
ArcGIS API for Python	Introduction to HVAC Systems
Prediction Analysis	Pump Types and Performance
Database Development and Management (SQL)	Efficient Flow Control in Pumps
Spatial Database Deployment and Maintenance	Lighting Systems
Archiving Data in a Multiuser Geodatabase	Financial Analysis
Geodatabase Domains and Subtypes in ArcGIS	**Advanced GIS**
Geodatabase Topology	Transforming Data for the Suitability Model
SQL	Statistical Cluster Analysis
PostgreSQL	Spatial Interpolation
PostGIS	Network Analysis
Advanced SQL for Data Science: Time Series	Prediction Surface in ArcGIS
Microsoft Excel Database	Spatial Statistics
Web Development	Geo-Processing
Advanced HTML, CSS	Geospatial Data by Power Map in Excel
Google Maps API, Twitter API, ArcGIS API	Creating Prediction Surfaces in GIS
API implementation in web development	QGIS
Leaflet Web Mapping	Administering ArcGIS Online Members
Collaborative Programming (Github)	Cartography
Django HTML Web Development	Maps and map-making
ArcGIS Enterprise	Geo-statistical Analysis
ArcGIS Server	**Remote Sensing**
JavaScript	LiDAR data manipulation
Google Maps API for JavaScript	Google Earth Engine Deployment
ArcGIS API JavaScript	Terrain Modeling
Build an App with jQuery	Python Raster Analysis
Folium	
Node.js	

*All certificates are accessible online at this link.

II. SCHOLARLY/CREATIVE

A. Works in Print (including works accepted, forthcoming, in press):

1. Relevant Articles:

a. Refereed Journal Articles:

1. Maleki, S., Dede-Bamfo, N., Ekren, E., Mohammadalizadehkorde, M. and Villagran, M., 2024. Mapping Access to Children's Hospitals in Texas. *International Journal of Environmental Research and Public Health*, *21*(2), p.140.
2. Maleki, S., and Mohammadalizadehkorde, M., 2021. A Visual Insight into Tweeting Activity before and during Natural Disasters: Case Study of Hurricane Harvey. *International Journal of Applied Geospatial Research*. DOI: 10.4018/IJAGR.2021070102
3. Mohammadalizadehkorde, M., and Weaver, R., 2020. Quantifying potential savings from sustainable energy projects at a large public university: An energy efficiency assessment for Texas State University. *Sustainable Energy Technologies and Assessments, 37, p.100570*.
4. Lopez, C.W., Mohammadalizadehkorde, M., Andrievskikh, D., Ponstingel, J., and Weaver, R., 2019. Community Geography: Examining Open Space, Socioeconomic Status, Housing Market Strength, and Solar Energy Potential in Buffalo's West Side, New York. Papers in *Applied Geography, pp.1-27.*
5. Mohammadalizadehkorde, M., and Weaver, R., 2018. Universities as models of sustainable energy-consuming communities? A review of selected literature. *Sustainability, 10: 3250; DOI:10.3390/su100932*

2. Reports:

1. Mohammadalizadehkorde, M. Chavez, C. Abdullah, M., 2019. Market Analysis for Business-Based Electric Vehicle Charging Station Development in California (Net Impact, October 2019).
2. Ponstingel, J. Lopez, C. Andrievskikh, D. Mohammadalizadehkorde, M. Gomes, J and Weaver, R. Open Space Planning, Selected Socioeconomic and Housing Conditions, and Solar Energy Potential in Buffalo's West Side: A Report for PUSH Buffalo, 2018.
3. Mohammadalizadehkorde, M. Energy Efficiency Assessment at Texas State University. 2016.

3. Papers Presented at Professional Meetings:

1. Wind Turbine Site Selection (Conference presentation at AAG 2018) link for the abstract.
2. Mapping the Change in Spatial Distribution of Tweets on the Day of Hurricane Harvey (Conference presentation at AAG 2019) link for abstract.
3. Demidov, N. Fischer, J. Mohammadalizadehkorde, M. Chavez, C. Abdullah, M. Dual Decentralization 2018. Presented at Shell's Future Energy Challenge, San Francisco, 2018.

4. Manuscripts in Preparation or Submitted:

1. Does Long-Run Profitability Characterize Solar Panel Investments in Higher Education Institutions? A GIS Approach to Improve Financial Analysis
2. Do Communities Reflect on What is Accomplished with Sustainable Plans in Higher Education Systems? A Cluster Analysis of Consumer Surveys
3. Does Long-Run Profitability Characterize Small Wind Turbine Investments in the Higher Education Institutions? A GIS Approach to Improve the Financial Analysis
4. The Conceptual Landscape of Properly Coupled Environment-Social System

5. Books in Preparation:

1. GIS for Programmers: Everything a developer needs to know about GIS.

6. Invitation to Review Scientific Articles:

- International Journal of Sustainability in Higher Education
- Applied Economics

7. Guest Lecture:

- **Cornell University**: Modeling Transportation Network for Hazardous Materials Using Vector and Raster Data Models

III. SERVICE

E. Service Honors, Scholarships, and Awards:

2020	Teaching Award of Honor, Texas State Alumni Association
2020	Graduate College Doctoral Research Fellowship ($5000)
2020	Phi Kappa Phi Love of Learning Award ($500)
2020	Hellman Family Graduate Geography Scholarship ($750)
2020	Student Government Scholarship at Texas State University ($648)
2019	2019 Mao-Geng Zhan Scholarship for Academic Excellence ($500)
2019	Student Government Scholarship at Texas State University ($2000)
2019	Graduate College Scholarship ($1000)
2019	Member of Phi Kappa Phi National Honor Society
2018	Graduate College Scholarship ($2000)
2018	Member of Alpha-Chi National Honor Society
2018	Awarded the 2018 Alamo Area GIS Scholarship ($1000)
2018	Awarded "Best Project," winning first place for Shell's Powering Progress Together Conference in April 2018. Title of the project: "Dual Decentralization"
2016	Awarded "Best Paper" for "Energy Efficiency Assessment at Texas State University" in the master's category of the Eighth International Research Conference for Graduate Students at Texas State University, November 2016
2016	Winner of the Map Competition (Parks and Trails) at GIS Day 2016 at Texas State University, organized by SOGIS, November 2016
2012	Awarded "Outstanding Position Paper" for "Responding to famine in Somalia," representing Ethiopia in the African Union committee at National Model United Nations (NMUN), April 2012
2012	Awarded "Honorable Mention Delegation," representing Ethiopia at the National Model United Nations Conference (NMUN), April 2012

IV. LINKS

Personal Website: https://drmiladkorde.com/
Personal Weblog: https://miladkordeh.wordpress.com/
Google Scholar: https://scholar.google.com/citations?user=ABzqWPgAAAAJ&hl=en
Personal GitHub Account: https://github.com/Milad84,
Professional GitHub Account:https://github.com/MiladMAK
Medium: https://medium.com/@milad.kordeh

Languages: English, Italian, Persian