

SUMMARY OF QUALIFICATIONS AND SKILLS

- Ten years of experience in spatial data science, geospatial data engineering, and analysis
- Professionally programmed projects using Python, JavaScript, PostgreSQL, PostGIS, QGIS, SQL, R, FME, Esri Suite (ArcGIS, ArcGIS Enterprise, ArcSDE, ArcGIS Maps SDK for JavaScript, ArcPy) on multiple platforms
- Proficient in manipulating geospatial data in vector, LiDAR, raster, GeoJSON, and satellite imagery
- Proficient in producing advanced GIS applications and web mapping solutions by creating systems
- Experience in machine learning implementation in GIS, including K-Means Clustering, Decision Tree, Random Forest, Deep Learning, and Satellite Image Segmentation (DeepLabV3)
- Various data analyses and GIS certificates are accessible [here](#).
- Excellent problem-solving ability
- National Interest Waiver (NIW) cardholder

RELEVANT PROFESSIONAL EXPERIENCE

Senior IT Geospatial Analyst, Transportation and Public Works Department, Austin, TX, *May 2023 – Present*

- Programmed GIS solutions for **Vision Zero's** goal of reducing the number of fatal and serious injury crashes
- Used Python, SQL, FME, and PostGIS to create a data pipeline and automation
- Implemented ArcGIS Enterprise Web Maps through ArcGIS Enterprise and **ArcGIS Maps SDK for JavaScript**
- Custom programming and mapping solutions for internal and external use by combining PostgreSQL and AGOL

Adjunct Professor at *Texas State University*, San Marcos, Texas, *March 2026*

- Taught the course. **Energy Resource Management**

Adjunct Professor at *Western New Mexico University*, Jan 2025

- Taught an asynchronous undergraduate class titled *Intro to GIS*
- Taught an asynchronous undergraduate class titled *Spatial Analysis in GIS*

Adjunct Professor at *Northwest Missouri State University*, Maryville, Missouri, *May 2021 – May 2023*

- Taught an asynchronous graduate class titled *Internet GIS*
- ArcGIS Server: Creation and Implementation of web maps and services by using the ArcGIS Server

GIS Visiting Faculty, *Clark University*, Department of Sustainability and Social Justice, Worcester, Massachusetts, *Aug 2021 – May 2023*

- Taught courses at graduate and undergraduate levels: Programming for GIS, Python Programming, Web Mapping, Spatial Database Development (PostgreSQL and PostGIS), and Advanced Vector GIS

GIS Course Coordinator and Lab Instructor, Texas State University, San Marcos, Texas, *Jan 2018 – Jan 2021*

- Provided lab materials, assessments, solutions, and advising services to GIS instructors and students

RELEVANT SHORT-TERM PROJECTS AND CONSULTANCY

Senior GIS Analyst, NET IMPACT and PG&E, California, *Sep 2019 - Dec 2019*

- Analyzed and produced a forecasting map of electric vehicle charging stations in Northern California

GIS Coordinator, Midco Communication, Sioux Falls, South Dakota, *June 2018 - Aug 2018*

- Collected GNSS data, conducted analysis, and implemented optic fiber network design.

[Sustainability Consultant, Environmental Defense Fund Fellow, Utility Services, Texas State University, June 2016 - Aug 2016](#)

- Implemented a sustainability plan based on green energy sources for Texas State University's "Renewable Energy Project. "

EDUCATIONAL BACKGROUND

- Doctor of Philosophy (Ph.D.) in GIS, Texas State University, San Marcos, Texas, May 2021
- Master of Science in Sustainability Studies, Texas State University, San Marcos, Texas, July 2017
- Master of Arts in Enterprise Communication, Università degli Studi di Perugia, Italy, July 2015
- Bachelor of Arts in Communication Science, Università degli Studi di Perugia, Italy, February 2010

OTHER RELEVANT PROJECTS

[Financial and Spatial Analysis to Facilitate Sustainable Energy Investments in Large Infrastructure](#)

- Conducted site suitability and cluster analysis to identify energy usage patterns, quantifying the saving potentials

[Examining Open Space, Socioeconomic Status, Housing Market Strength, and Solar Energy Potential in Buffalo's West Side, New York](#)

- Explored the suitability for residential solar power installations through geospatial analysis

Analysis of Tweeting Activity Before and During Hurricane Harvey in Texas

- Analyzed the spatial distribution of tweets on the day Hurricane Harvey made landfall based on the Twitter API V.1
- Compared the change in tweeting activity between the Friday of Hurricane Harvey and a typical Friday before the event

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