#### **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
- Experience in machine learning implementation in GIS, including K-Means Clustering, Decision Tree, Random Forest, Deep Learning, and Satellite Image Segmentation (DeepLabV3)
- Proficient in producing advanced GIS applications and web mapping solutions by creating systems
- Proficient in manipulating geospatial data in vector, LiDAR, raster, GeoJSON, and satellite imagery
- Various data analyses and GIS certificates are accessible here.
- Excellent problem-solving ability
- National Interest Waiver (NIW) cardholder

## **RELEVANT PROFESSIONAL EXPERIENCE**

IT Geospatial Analyst Senior, 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 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: <a href="https://drmiladkorde.com/">https://drmiladkorde.com/</a>

Personal Weblog: <a href="https://miladkordeh.wordpress.com/">https://miladkordeh.wordpress.com/</a>

Google Scholar: <a href="https://scholar.google.com/citations?user=ABzqWPgAAAAJ&hl=en">https://scholar.google.com/citations?user=ABzqWPgAAAAJ&hl=en</a>

Personal GitHub Account: <a href="https://github.com/Milad84">https://github.com/Milad84</a>,
Professional GitHub Account: <a href="https://github.com/MiladMAK">https://github.com/MiladMAK</a>

Medium: <a href="https://medium.com/@milad.kordeh">https://medium.com/@milad.kordeh</a>

**Languages:** English, Italian, Persian