Safoura Safari

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Education

P.h. D. candidate in Disaster Resilience Center – Department of Civil and Environmental Engineering
University of Maryland, College Park – MD (**GPA = 3.93/4**)
Jun 2023 - Present

M.Sc., Water Resources Engineering and Management - Department of Civil Engineering
University of Tehran - Tehran, Iran (**GPA: 17.88/20)**
Sep 2018 ~Aug 2021
Thesis:
Developing a Market-based Model for Groundwater Allocation using a Remote Sensing Method
[Supervisors: Dr. Reza Kerachian, Dr. Hamideh Noory]

B.Sc., Department of Civil Engineering
Isfahan University of Technology - Esfahan, Iran (**GPA: 15.45/20)**
Sep 2013 ~ Aug 2017.

Publication

- **Safari, S., Kerachian, R., Noory, H., Sharghi, S**. (2023). A market-based mechanism for long term groundwater reallocation Using remotely sensed data, *Journal of Environmental Management* (Published)
- **Shargi, S., Kerachian, R., Safari, S**., (2023). Market-based Groundwater Resources Management Considering the Uncertainty of Water Consumption Monitoring. *Modares Civil Engineering Journal* (Published)
- **Abbasi, D., Safari, S., Reilly, A.C.,** (2024). Exploring Machine Learning Approaches for Evaluating the Adaptive Capacity of School Districts in the Face of Hurricane-Induced School Closures. *Natural Hazards*, (Ready to submit)
- **Abbasi, D., Safari, S., Reilly, A.C.,** (2024). Data on hurricane-induced unplanned school closures in the East and Gulf Coast of the US, Data in Brief, (Ready to Submit)

Ongoing research projects

- Exploring **Equity** in Usage Patterns of EV Charging Stations: An In-Depth Analysis of Daily, Monthly, and Seasonal Port Utilization in the United States
- Nationwide Analysis of **EV charging behavior** Using Machine Learning Techniques
- Progressive **Clean Technology Adoption** for Carbon Emission Reduction: A County-Level Analysis in the United States with a Case Study of Maryland state
- Equity in D.C. Public School Maintenance: **Pattern Analysis** on Socioeconomic, Demographic Factors, and Work Order requests.
- EV Charging Station Accessibility and Usage During Extreme Weather Events: Insights from **Hurricane**

Awards and Honors

- **WTS DC Chapter** Graduate Scholarship Recipient, Fall 2024
- **WTS International Helene M. Overly Memorial** Graduate Scholarship Nominee, Fall 2024
- **Dean's Fellowship**, University of Maryland, College Park, Fall 2024
- **NSF NHERI Computational Academy Travel Grant** Recipient, NSF Natural Hazards Engineering Research Infrastructure (NHERI), July 2024
- **Ranked 2nd** in the M.Sc. cohort of 2018, Civil Engineering Water Resource Engineering and Management Program, University of Tehran.
- **Ranked 128th** among over 15,000 participants in the Nationwide Entrance Exam for M.Sc. in Civil
- Engineering group, 2018.
- (2013 ~ 2017)
- **Ranked among top 1000** in the Nationwide University Entrance Exam with over 280,000 participants, 2013.
- **Ranked 1st among 50** in the National Astronomy Observatory Contest, Tehran, Iran, 2012.

Teaching Experiences

- **Mentorship experience:** University of Maryland, College Park (*June 2023-present*)
  1. Mentoring undergraduate students for the project:
     Progressive **Technology Adoption** for Carbon Emission Reduction: A County-Level Analysis in the United States with a Case Study of Maryland state
     [Supervisors: Dr. Jiehong Lou; Prof. Deb Niemeier]
- **Teaching Assistant**: University of Tehran, Department of Civil and Environmental Eng., Tehran, Iran.
  1. **Water Quality Management:** *(Jan 2020 ~ June 2020)*
  [Supervisor: Prof. Reza Kerachian]
  2. **Environmental Management and Sustainable Development:** *(Sep 2020 ~ Dec 2020)*
  [Supervisor: Prof. Reza Kerachian]

Work Experience and collaboration

- **NSF NHERI Graduate Student Council (GSC)** Treasurer *(October 2024 ~ Present)*
- **Member of Graduate Student Council** of NSF Natural Hazard Engineering Research Infrastructure (NHERI), (*April 2024 ~ Present*)
- **Internship: FooladTechnic International Engineering Company**, Isfahan, Iran *(June 2017 ~ Sep 2017)*
- [Responsibility: Structural Designer]
- **Social Activity: Students Guild Council**, Isfahan University of Technology- Isfahan, Iran *(Sep 2013 ~ Aug 2017)* Responsibility: Head of Executive Team
- **Member of Indoor Soccer (Futsal) Team**, Isfahan, Iran (2015 ~ 2017)
- **Member of Local Astronomy Non-government Organization**, Isfahan, Iran (2012 – 2016)

Software and Technical Skills

- **Hydrologic Modeling:** HEC-HMS, MODFLOW, GMS, Water GEMs
- **Remote Sensing Analysis:** ENVI, Image processing tools in MATLAB
- **Programming Language:** MATLAB**,** Phyton, R
- **Data Assimilation and Mining Techniques:** Remote Sensing, Genetic Algorithm, Artificial Neural Network, Supervised and unsupervised machine learning
- **Spatial Analysis:** ArcGIS, QGIS, AutoCAD, Civil3D
- **Statistical Analysis:** Minitab, Monte Carlo, ArcGIS
- **Other Engineering Software:** Expert Choice, Ref_ET, CropWat