

Amin Riazi

Department of Civil and Environmental Engineering
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EDUCATION

University of Tennessee at Chattanooga M.S. in Data Analytics	2022-2024
Eastern Mediterranean University, Turkey Ph.D. in Civil Engineering (Hydraulic Engineering)	2013-2017
Shiraz University (International Division), Iran M.S. in Civil Engineering (Hydraulic Structures)	2008-2010
Azad University, Iran B.S. in Civil Engineering	2001-2007

ACADEMIC POSITIONS

Assistant Teaching Professor Seattle University	2023-Present
Vice head of Civil Engineering Department Cyprus International University	2021-2022
Assistant Professor Civil Engineering Department: Cyprus International University	2018-2022
Program Coordinator Civil Engineering Department: Final International University	2017-2018
Member of Quality Assurance and Strategic Planning Office Final International University	
Researcher and Instructor Civil Engineering Department: Final International University	
ABET committee member Civil Engineering Department: Eastern Mediterranean University	2015-2017
Research Assistant Civil Engineering Department: Eastern Mediterranean University	2014-2017

KEY SKILLS

Programming Languages: C++, Python

Data Analysis: Statistical Modeling, Machine Learning Techniques, Data Cleaning and Preprocessing

Machine Learning: Optimization Techniques, Genetic Algorithms, Neural Networks (Deep Learning), Convolutional Neural Networks (Image Processing), Applied AI

PUBLICATIONS

Dissertations

- **Riazi, A.** (2024). Analyzing Information Diffusion in Social Media Networks. MS. Thesis. University of Tennessee at Chattanooga, USA
- **Riazi, A.** (2017). Validity of Equilibrium Beach Profiles. PhD Thesis. Eastern Mediterranean University, Cyprus
- **Riazi, A.** (2010). Digital Modeling of Wave Propagation in (Confined) Aquifers. MS. Thesis. Shiraz University (International Division), Iran.

Peer-Reviewed Articles

- **Riazi, A.**, Türker, U., & Slovinsky, P. A. (2022). Subaerial Beach Profiles: the Application of Erosion and Accretion Balanced Approach in Southwestern Maine, USA. *Estuaries and Coasts*, 1-16.
- Mohammadian, E., Liu, B., & **Riazi, A.** (2022). Evaluation of Different Machine Learning Frameworks to Estimate CO₂ Solubility in NaCl Brines: Implications for CO₂ Injection into Low-Salinity Formations. *Lithosphere*, 2022(Special 12), 1615832.
- **Riazi, A.**, & Slovinsky, P. A. (2021). Subaerial beach profiles classification: An unsupervised deep learning approach. *Continental Shelf Research*, 226, 104508.
- **Riazi, A.**, Türker, U., & Rakhshandehroo, G. R. (2021). The impact of diurnal surface water fluctuations on groundwater diffusion: assessment through Fick's second law. *Environmental Science and Pollution Research*, 1-9.
- Kayan, G., **Riazi, A.**, Erten, E., Türker, U. (2021). Peak unit discharge estimation based on ungauged watershed parameters. *Environmental Earth Sciences*, 80, 42.
- **Riazi, A.**, Vila-Concejo, A., Salles, T., Türker, U. (2020). Improved drag coefficient and settling velocity for carbonate sands. *Scientific Reports*, 10, 9465.
- **Riazi, A.** (2020). Accurate tide level estimation: A deep learning approach. *Ocean Engineering*, 198, 107013.
- **Riazi, A.**, Karmo, D., Shikh Ibrahim, M. A., & Amadou, S. (2019). Estimating the weight and the failure load of a spaghetti bridge: a deep learning approach. *Journal of Experimental & Theoretical Artificial Intelligence*, 1-10.
- Ashoor, A., & **Riazi, A.** (2019). Stepped Spillways and Energy Dissipation: A Non-Uniform Step Length Approach. *Applied Sciences*, 9(23), 5071.
- **Riazi, A.** (2019). Genetic algorithm and a double-chromosome implementation to the traveling salesman problem. *SN Applied Sciences*, 1:1397.
- **Riazi, A.**, & Türker, U. (2019). The drag coefficient and settling velocity of natural sediment particles. *Computational Particle Mechanics*, 6(3)-427-437.
- **Riazi, A.**, & Türker, U. (2018). A genetic algorithm-based search space splitting pattern and its application in hydraulic and coastal engineering problems. *Neural Computing and Applications*, 30(12), 3603-3612.
- **Riazi, A.**, & Türker, U. (2017). Equilibrium beach profiles: erosion and accretion balanced approach. *Water and Environment Journal*, 31(3), 317-323.

Conference Presentations

- **Riazi, A.**, & Wang, Y. (2022). Using Topological Analysis to Investigate True and False Information Diffusion. In 2022 International Conference on Computational Science and Computational Intelligence (CSCI) (pp. 851-855). IEEE.
- Layeghi, R., **Riazi, A.**, & Türker, U. (2022). Cyprus Beaches in the Context of Parabolic Bay Shaped Beach Model. In International Conference on Natural Resources and Sustainable Environmental Management (pp. 173-182). Springer, Cham.
- Türker U., Yagci O., **Riazi A.**, & Sedat Kabdasli (2016) Influence of emergent vegetation on sediment yield at cross-shore coastal environments. 35th International conference on coastal engineering, Antalya Turkey
- **Riazi, A.**, & Türker, U. (2014). Computer Based Modeling for Wave Propagation in Confined Aquifers. 11th International Congress on Advances in Civil Engineering. Istanbul, Turkey.

AWARDS & PATENTS

Multidisciplinary Research Award Seattle University	2024
Undergraduate Student/Faculty Research Support Award Seattle University	2024
Outstanding Graduate Student Award University of Tennessee at Chattanooga, USA	2024
Abroad scholarship University of Sydney, Australia	2016

SUPERVISION OF POSTGRADUATE THESIS & DISSERTATIONS

Cyprus International University Thesis title: Stepped spillways with non-uniform step length Student name: Abdelwanees Ashoor	2020
Cyprus International University Thesis title: Drinking water quality assessment in Mogadishu Student name: Abdikafi Elmi Abdishakur	2020

TEACHING EXPERIENCE

Undergraduate

- Fluid Mechanics
- Applied Hydraulics
- Water Supply and Wastewater Engineering
- Surveying and Geomatics
- Engineering Drawing (AutoCAD)
- Global Engineering Economics

Graduate

- Water Quality Management
- Computer Applications in Hydraulics