#### Arman Oliazadeh<sup>1</sup>

#### **EDUCATION**

# Ph.D., University of Georgia, GA, USA.

Expected 2027

Graduate Teaching Assistant/ Department of Georgraphy.

# M.Sc., University of Tehran, Tehran, Iran.

2020

Master of Water Resources Engineering

<u>Thesis</u>: Development of an Urban Runoff Management Model by Remoted Sensing Precipitation Data in using LID Systems under Climate Change Condition

# B.Sc., Ferdowsi University of Mashhad, Mashhad, Iran.

2012

Bachelor of Water Engineering

#### RESEARCH INTERESTS

• Hydrology, Stormwater Management, Climate Change Mitigation, Remote Sensing data analysis, Coastal wetland, Blue Carbon monitoring, Machine-learning Methods, Optimization Algorithms, Reservoir Operation, and Water Quality Modeling.

#### **PUBLICATIONS**

- Selahvarzi, M., Naghedifar, S. M., **Oliazadeh, A.**, & Loáiciga, H. A. (2024). Hierarchical pseudocontinuous machine-learning-based pedotransfer models for infiltration curves: An investigation on the role of regularization and ensemble modeling. *Journal of Hydrology*, 132459. (https://doi.org/10.1016/j.jhydrol.2024.132459)
- Oliazadeh, A., Bozorg-Haddad, O., Pakdaman, M., Baghbani, R., & Loáiciga, H. A. (2022). Optimal merging of multi-satellite precipitation data in urban areas. *Theoretical and Applied Climatology*, 147(3), 1697-1712. (https://doi.org/10.1007/s00704-021-03895-4)
- Oliazadeh, A., Bozorg-Haddad, O., Mani, M., & Chu, X. (2021). Developing an urban runoff management model by using satellite precipitation datasets to allocate low-impact development systems under climate change conditions. *Theoretical and Applied Climatology*, 146(1), 675-687. (https://doi.org/10.1007/s00704-021-03744-4)
- Arefinia, A., Bozorg-Haddad, O., **Oliazadeh, A.**, & Loáiciga, H. A. (2020). Reservoir water quality simulation with data mining models. *Environmental Monitoring and Assessment*, 192(7), 1-13. (https://doi.org/10.1007/s10661-020-08454-4)

# **Book Chapters:**

• Oliazadeh, A., Bozorg-Haddad, O., Loáiciga, H.A., Ahmad, S., Singh, V.P. (2022). The Effect of Climate Change on Water Resources. Climate Change in Sustainable Water Resources Management. *Springer*, Singapore. <a href="https://doi.org/10.1007/978-981-19-1898-8\_4">https://doi.org/10.1007/978-981-19-1898-8\_4</a>.

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- Oliazadeh, A., Bozorg-Haddad, O., Arefinia, A., Ahmad, S. (2022). Ant Colony Optimization Algorithms: Introductory Steps to Understanding. Computational Intelligence for Water and Environmental Sciences *Springer*, Singapore. <a href="https://doi.org/10.1007/978-981-19-2519-1\_7">https://doi.org/10.1007/978-981-19-2519-1\_7</a>.
- Oliazadeh, A., Bozorg-Haddad, O., Rahimi, H., Yuan, S., Lu, C., Ahmad, S. (2022). Genetic Programming (GP): An Introduction and Practical Application. Computational Intelligence for Water and Environmental Sciences. *Springer*, Singapore. <a href="https://doi.org/10.1007/978-981-19-2519-1\_12">https://doi.org/10.1007/978-981-19-2519-1\_12</a>.
- Arefinia, A., Bozorg-Haddad, O., **Oliazadeh, A.**, Zolghadr-Asli, B., Keller, A.A. (2022). Firefly Algorithms (FAs): Application in Water Resource Systems. Computational Intelligence for Water and Environmental Sciences. *Springer*, Singapore. https://doi.org/10.1007/978-981-19-2519-1

#### Conference:

• Oliazadeh, A., Hawman, P., Mishra, D. (2024). Machine Learning Methods to Determine Salt Marsh Light Use Efficiency based on Environmental Scalers. *AGU24*.

# **EXPERIENCE**

#### University of Georgia, GA, USA.

2023 -present

#### Department of Geography, Graduate Teaching Assistant

- Teaching Assistant of "Remote sensing of Environment" in Fall 23 for undergraduate students.
- Teaching Assistant of "Advanced GeoAI" in Spring 24 for graduate students.
- Teaching Assistant of "Aerial Photographs and Image Interpretation" in Fall 24 for undergraduate students.

# University of Tehran, Tehran, Iran. *Teaching Assistant*

2018 - 2019

• Conducted seminars, graded essays, and contributed to curriculum design. Classes taught totaled over 20 students and comprised a master research seminar, and two master's courses (Analysis of water resources systems and Supplementary water resources engineering)

# RELEVANT SKILLS

#### Software

Matlab (Evolutionary optimization algorithms and optimization toolbox), ArcGIS, Water Quality Modeling (CE-Qual-W2), Climate Change Downscaling Models (LARS-WG, SDSM and Change Factor), Storm Water Management Model (SWMM), (IHACRES), Data Mining Methods (GP, ANN, LSTM, RF and SVM), Remote Sensing data analysis.

#### **Courses**

Coursework covering fundamentals of statistics, risk-benefit and decision analysis, Optimization algorithms, Reservoir operation, Options in engineering, and engineering math.

#### **Projects**

Simulated reservoir operation policies (quantitative and qualitative) by using CE-Qual-W2 Model (Course - Seminar); researched system design optimization techniques as part of a course portfolio (Course – Supplementary water resources management Options).

# **Review Service**

- Agricultural Water Management, Sustainable Cities and Society, Journal of Photogrammetry and Remote Sensing, Earth system governance, Elsevier.
- Environmental Monitoring and Assessment, Theoretical and Applied Climatology, Springer.

# **Awards & Membership**

- International Doctoral Summer School Scholarship on "Extremes in Water Science", 2022, Palermo, Italy.
- CZNet summer travel scholarship \$500 University of Illinois at Urbana-Champaign, Aug 2023.
- Climate Advocacy: Making Policy Change, Cornell University June 2024.
- ASCE (American Society of Civil Engineering) 2018.
- AAG (American Association of Geographers) 2023.
- UGA Geography, GGSA Executive Board, Physical Geography Representative 2023.