Mahmood Akbari

Academic Position:

Assistance Professor of Civil Engineering

Academic Background:

Ph.D. Water Resources Management, Iran University of Science and Technology, Iran, 2005-2010.

M.Sc. Hydraulic Structures, Iran University of Science and Technology, Iran, 2000-2002.

B.Sc. Civil Engineering, Isfahan University of Technology, Isfahan, Iran, 1996-2000

Honors and Scholarship:

Visiting Scholar, Delft University of Technology (TU Delft), Faculty Civil Engineering & Geosciences, The Netherlands, 2009.

M. Sc. **With Honors**, Hydraulic Structures, Iran University of Science and Technology, Iran, 2001.

Ph.D. **With First-Honors**, Water Resources Management, Iran University of Science and Technology, Iran, 2010.

Personal:

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Teaching Experiences:

Undergraduate Level:

Fluid Mechanics

Engineering Hydrology

Open Channel Hydraulics

Hydraulic Structures

Water and wastewater Engineering

System Engineering

Soil Mechanics

Graduate Level:

System Analysis and Water Resources Management

Flood Control

Soft Computing

Research Area

Optimization Techniques and their Application in Water Industry

Machine Learning and Artificial Intelligence Tools

Hydro-System Engineering and Management

Risk and Uncertainty analysis

Flood Control

Flow forecasting

Hydraulic Structures

Soft Computing

Structure Optimization

Reviewer to

Environmental Earth Sciences

Journal of Water Resources Management

Journal of Water Science and Technology

Journal Papers

1. M Akbari, HMD Kabir, A Khosravi, F Nasirzadeh (2021) "ANN-based LUBE model for interval prediction of compressive strength of concrete" Iranian Journal of Science and Technology.
2. Nasirzadeh, F., Kabir, H. D., Akbari, M., .Khosravi, A., Nahavandi, S., & Carmichael, D. G. (2020). "ANN-based prediction intervals to forecast labour productivity" Engineering, Construction and Architectural Management.
3. Bahrami, N., Zohrabi, M., Mahmoudy, S. A., & Akbari, M. (2020). "Optimum recycled concrete aggregate and micro-silica content in self-compacting concrete: Rheological, mechanical and microstructural properties". Journal of Building Engineering, 101361.
4. Bidabadi, M. S., Akbari, M., & Panahi, O. (2020). "Optimum mix design of recycled concrete based on the fresh and hardened properties of concrete". Journal of Building Engineering, 101483.
5. Akbari, M., Jafari, V. (2020) " Data driven models for compressive strength prediction of concrete at high temperatures" Frontiers of Structural and Civil Engineering
6. Akbari, M., & Henteh, M. (2019). "Comparison of Genetic Algorithm (GA) and Particle Swarm Optimization Algorithm (PSO) for Discrete and Continuous Size Optimization of 2D Truss Structures." Soft Computing in Civil Engineering, 3(2), 78-98.
7. Li, X., Khademi, F., Liu, Y., Akbari, M., Wang, C., Bond, P. L., ... & Jiang, G. (2019) "Evaluation of data-driven models for predicting the service life of concrete sewer pipes subjected to corrosion" Journal of Environmental Management
8. Khademi, F., Akbari, M., Jamal, S. M., and Nikoo, M. (2017). "Multiple linear regression, artificial neural network, and fuzzy logic prediction of 28 days compressive strength of concrete", *Frontiers of Structural and Civil Engineering*
9. Khademi, F., Akbari, M*., and Nikoo, M. (2017). "Displacement Determination of Concrete Reinforcement Building using Data-Driven models".* International Journal of Sustainable Built Environment
10. *Khademi, F., Akbari, M. and Jamal, S.M., (2015) "Measuring Compressive Strength of Puzzolan Concrete by Ultrasonic Pulse Velocity Method", i-manager's Journal on Civil Engineering*
11. *Khademi, F., Akbari, M. and Jamal, S.M., (2015) "Prediction of Compressive Strength of Concrete by Data-Driven Models ", i-manager's Journal on Civil Engineering*
12. *Mirzavand, M., Sadatinejad S.J., Ghasemie, H., Akbari, M., Shariati, H. M., (2014) " Groundwater level fluctuation forecasting Using Artificial Neural Network in Arid and Semi-Arid Climate Condition", Journal of Applied Hydrology*
13. *Akbari, M., Afshar, A., A. And Mousavi S.J., (2014) "Multi Objective Reservoir Operation under Emergency Condition: Abbaspour Reservoir Case Study with Non-Functional Spillways", J. of Flood Risk Management*
14. *Akbari, M., Afshar, A., (2014) "Similarity-Based Error Prediction Approach for Real-Time Inflow Forecasting, J. Hydrology Research*

15. Akbari, M., P. J. Van Overloop, Afshar, A., (2011) "Clustered K Nearest Neighbor Algorithm for Daily Inflow Forecasting", J. Water Resources Management

16. Akbari, M., Afshar, A. And Mousavi S.J., (2010) "Stochastic Multiobjective Reservoir Operation under Imprecise Objectives; Multicriteria Decision Making Approach", J. of Hydroinformatics

17. Afshar, M. H., Akbari, M. And Marino, M. A. (2009) "Closure to 'Simultaneous Layout and Size Optimization of Water Distribution Networks: Engineering Approach' by Afshar, M. H. , Akbari, M. And Marino, M. A ", J. of Infrastructure Systems, ASCE

18. Akbari, M., Afshar, A. And Rezaei Sadrabadi M.(2009) " Fuzzy Rule Based Models Modification by New Data: Application to Flood Flow Forecasting", J. Water Resources Management

19. Afshar, M. H. , Akbari, M. And Marino, M. A. (2005)"Simultaneous Layout and Size Optimization of Water Distribution Networks: Engineering Approach ", J. of Infrastructure Systems, ASCE