



TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO

ID CODE \_\_\_5069\_\_\_

I the undersigned asks to participate in the public selection, for qualifications and examinations, for the awarding of a type B fellowship at **Dipartimento di Scienze Agrarie e Ambientali - Produzione, Territorio, Agroenergia** Scientist- in - charge: **Dott. Daniele Masseroni**

[Majid Niazkar]

**CURRICULUM VITAE**

**PERSONAL INFORMATION**

Surname	Niazkar
Name	Majid

**PRESENT OCCUPATION**

Appointment	Structure
Lecturer	Ardakan University, Ardakan, Yazd Province, Iran (one term contract)
Book editor	A multi-authors contributed book named "Water Resource Modeling and Computational Technologies" published in "Current Directions in Water Scarcity Book Series" by Elsevier (From May 2021)

**EDUCATION AND TRAINING**

Degree	Course of studies	University	year of achievement of the degree
One-year Postdoc	Civil Engineering, Water Resources	Shiraz University	2021
PhD	Civil Engineering, Water Resources	Shiraz University	2019
Master	Civil Engineering, Hydraulic Structures	Shiraz University	2014
Bachelor of Science	Civil Engineering	Shiraz University	2012

**REGISTRATION IN PROFESSIONAL ASSOCIATIONS**

Date of registration	Association	City



FOREIGN LANGUAGES

Languages	level of knowledge
English	Advance
French	Basic
Germany	Basic
Arabic	Basic
Persian	Native

AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
September 2019	Post-doc scholarship from Iran's National Elites Foundation
September 2017	One-year scholarship from Iran's National Elites Foundation
April 2016	Behpour Engineer award sponsored by Shiraz University
2019	First top student in Ph.D. courses, Shiraz University, Shiraz, Iran
2014	First top student in MSc. courses, Shiraz University, Shiraz, Iran
September 2016	Membership of Shiraz University Talent Center, Shiraz, Iran

TRAINING OR RESEARCH ACTIVITY

Over the past years, the focus of my research work was on not only modeling hydrological processes in watersheds but also developing physically-based methods for computing river floods and sediment transport. In addition, I worked on applying machine learning to develop data-driven models using both ground-based and remotely-sensed data. In addition, I have worked with meteorological data. To be more specific, I have a manuscript and a book chapter on the trend analysis of precipitation, while the former is under review in "Theoretical and Applied Climatology". Also, I am working a new manuscript on statistical downscaling of general circulation models (GCMs) outputs.

I have published 34 peer-reviewed scientific papers in international journals, which were cited more than 480 times, based on my Google Scholar profile. Additionally, I presented 31 papers in national and international conferences. Also, I am the first author in 30 out of 34 journal papers, and published a few papers all by myself.

In addition to working as an independent researcher, I developed four research groups Turkish, Spanish, Canadian and Indian researchers. These collaboration teams are active in publishing scientific papers. Furthermore, my Indian co-authors and I prepared a book proposal and submitted it for Elsevier. Hopefully, it was accepted, and we are now serving as editors of a multi-authors contributed book which will be published by Elsevier.

PROJECT ACTIVITY

Year	Project
Apr. 2019 - Sep. 2020	A research member of the River Engineering and Hydraulic Structures Group in the Special Committee on National Flood Report, Iran, This committee investigates on floods occurred in March 2019 in Iran. To be more specific,



	on 25 March 2019, flash floods occurred after several rainy days in Shiraz Quran Gate. It drifted and crashed many cars, killed some people and caused drastic damages. After this incident, I joined the River Engineering and Hydraulic Structures Group to study the event. My task was to gather ground-based and remotely-sensed data, develop hydrological models of the corresponding watershed and prepare a report. Working on this project gave me a practical insight on mitigating the peak of a flood induced by continuous precipitations. In the project, the catchment was modeled, while the main focus was on not only finding the important factors involved but also proposing practical solutions to avoid such natural-based threats.
Apr. 2020 - Apr. 2021	Postdoc researcher, Shiraz University, The fund was awarded from Iran’s National Elites Foundation. The research title was “Design of district metered area based on critical assets”.

PATENTS

Patent

CONGRESSES AND SEMINARS

Date	Title	Place
24-26 November 2020	Third Congress of Iranian Water and Wastewater Science and Engineering	Shiraz University, Shiraz, Iran
30 April-1 May 2019	11th National Congress on Civil Engineering	Shiraz University, Shiraz, Iran
8-10 May 2018	11th International Congress on Civil Engineering	University of Tehran, Tehran, Iran
26-28 December 2017	5th International Congress on Civil Engineering, Architecture and Urban Development	Shahid Beheshti University, Tehran, Iran
21 December 2017	1st International and 3rd National Conference and Exhibition on Sustainable Development in Road Construction Focusing on Environmental Protection	Shiraz, Iran
17-19 October 2017	4th International Conference on Long-term Behaviour and Environmentally Friendly Rehabilitation Technologies of Dams (LTBD2017)	IRIB International Conference Center, Tehran, Iran
5-9 July 2017	10th World Congress on Water Resources and Environment “Panta Rhei”	Athens, Greece
19-20 April 2017	10th National Congress on Civil Engineering	Sharif University of Technology, Tehran, Iran
27-29 December 2016	4th International Congress on Civil Engineering, Architecture and Urban Development	Shahid Beheshti University, Tehran, Iran
3-5 December 2016	International Conference on Water	University of Tehran, Tehran, Iran



	and Environment in the New Millennium: Education and Capacity Building	
27-29 September 2016	1th International Conference on Water, Environment and Sustainable Development	University of Mohaghegh Ardabili, Ardabil, Iran
10-11 May 2016	9th National Congress on Civil Engineering	Ferdowsi University of Mashhad, Mashhad, Iran
19-21 January 2016	10th International River Engineering Conference	Shahid Chamran University, Ahwaz, Iran
29-31 December 2015	3th International Congress on Civil Engineering, Architecture and Urban Development	Shahid Beheshti University, Tehran , Iran
14 December 2015	International Conference on Research in Science and Technology	Kualalumpur, Malaysia
1 December 2015	International Conference on Science and Engineering	Dubai, UAE
10-12 November 2015	First International and Fourth National Conference on Engineering Education	Shiraz University, Shiraz, Iran
29-30 July 2015	International Conference on Civil Engineering, Architecture and urban infrastructure	Tabriz, Iran
5-7 May 2015	10th International Congress on Civil Engineering	University of Tabriz, Tabriz, Iran
7-8 May 2014	8th National Congress on Civil Engineering	Babol Noshirvani University of Technology, Babol, Iran
12-14 November 2014	13th Iranian Hydraulic Conference	Tabriz University, Tabriz, Iran
29-30 October 2013	12th Iranian Hydraulic Conference	Water Engineering Department, Tehran University, Karaj, Iran

PUBLICATIONS

Majid Niazkar, and Mohammad Zakwan. (2021) Parameter Estimation of a New Four-Parameter Muskingum Flood Routing Model. In “Computers in Earth and Environmental Sciences” edited by Professor Hamid Reza Pourghasemi and published by Elsevier. (Current status: Accepted for publication).

Mohammad Zakwan, Abdul Wahid, Majid Niazkar, and Uday Chatterjee. (2021) “Water Resource Modeling and Computational Technologies” Current Directions in Water Scarcity Book Series, ELSEVIER (Current status: Call for book chapters)

Niazkar, M. (2021) “Optimum Design of Straight Circular Channels Incorporating Constant and Variable Roughness Scenarios: Assessment of Machine Learning Models” Mathematical Problems in Engineering, Volume 2021, Article ID 9984934, 1-21. DOI: 10.1155/2021/9984934.

Zakwan, M., and Niazkar, M. (2021) “A Comparative Analysis of Data-Driven Empirical and Artificial Intelligence Models for Estimating Infiltration Rates” Complexity, Volume 2021, Article ID 9945218, 1-13. DOI: 10.1155/2021/9945218.

Niazkar, M., Talebbeydokhti, N., and Afzali, S. H. (2021) “Bridge backwater estimation: A Comparison between artificial intelligence models and explicit equations” Scientia Iranica, 28(2), 573-585. DOI:



10.24200/sci.2020.51432.2175.
Niazkar, M., Hajizadeh mishi, F., and Eryılmaz Türkkan, G. (2021) "Assessment of Artificial Intelligence Models for Estimating Lengths of Gradually-Varied Flow Profiles" Complexity, Volume 2021, Article ID 5547889, 1-11. DOI: 10.1155/2021/5547889.
Niazkar, M., and Eryılmaz Türkkan, G. (2021) "Application of third-order schemes to improve the convergence of the Hardy Cross method in pipe network analysis" Advances in Mathematical Physics, Volume 2021, Article ID 6692067, 1-12. DOI: 10.1155/2021/6692067.
Niazkar, M., and Zakwan, M. (2021) "Assessment of Artificial Intelligence Models for Developing Single-value and Loop Rating Curves" Complexity, Volume 2021, Article ID 6627011, 1-21. DOI: 10.1155/2021/6627011.
Niazkar, M., Eryılmaz Türkkan, G., Niazkar, H. R., and Alptekin Türkkan, Y. (2020) "Assessment of Three Mathematical Prediction Models for forecasting the COVID-19 Outbreak in Iran and Turkey" Computational and Mathematical Methods in Medicine, Volume 2020, Article ID 7056285, 1-13. DOI: 10.1155/2020/7056285.
Niazkar, M. (2020) "An Excel VBA-Based Educational Module for Bed Roughness Predictors" Computer Applications in Engineering Education, DOI: 10.1002/cae.22358.
Niazkar, H. R., and Niazkar, M. (2020) "Application of Artificial Neural Networks to Predict the COVID-19 Outbreak" Global Health Research and Policy, 5, 50. DOI: 10.1186/s41256-020-00175-y.
Niazkar, M. (2020) "Assessment of Artificial Intelligence Models for Calculating Optimum Properties of Lined Channels" Journal of Hydroinformatics, 22(5), 1410-1423. DOI: 10.2166/hydro.2020.050.
Niazkar, M., and Niazkar, H. R. (2020) "COVID-19 Outbreak: Application of Multi-gene Genetic Programming to Country-based Prediction Models" Electronic Journal of General Medicine, 17(5), em247. DOI: 10.29333/ejgm/8232.
Niazkar, M. (2020) "Discussion of "Accurate and Efficient Explicit Approximations of the Colebrook Flow Friction Equation Based on the Wright $\omega$ -Function" by Dejan Brkić; and Pavel Praks, Mathematics 2019, 7, 34; doi:10.3390/math7010034" Mathematics, 8(5), 793. DOI: 10.3390/math8050793.
Niazkar, H. R., and Niazkar, M. (2020) "COVID-19 international outbreak and the need for a suitable estimation model: A second-order polynomial equation with constant coefficients based on imported infected cases seems inadequate" Asian Pacific Journal of Tropical Medicine, 13(4), 185-186. DOI: 10.4103/1995-7645.280234.
Niazkar, M., and Talebbeydokhti, N. (2020) "Comparison of explicit relations for calculating Colebrook friction factor in pipe network analysis using h-based methods" Iranian Journal of Science and Technology, Transactions of Civil Engineering, 44(1), 231-249. DOI: 10.1007/s40996-019-00343-2.
Niazkar, M., Talebbeydokhti, N., and Afzali, S. H. (2019) "One dimensional hydraulic flow routing incorporating a variable grain roughness coefficient" Water Resources Management, 33(13), 4599-4620. DOI: 10.1007/s11269-019-02384-8.
Niazkar, M. (2019) "Revisiting the Estimation of Colebrook Friction Factor: A Comparison between Artificial Intelligence Models and C-W Based Explicit Equations" KSCE Journal of Civil Engineering, 23(10), 4311-4326. DOI: 10.1007/s12205-019-2217-1.
Niazkar, M., Talebbeydokhti, N., and Afzali, S. H. (2019) "Novel grain and form roughness estimator scheme incorporating artificial intelligence models" Water Resources Management, 33(2), 757-773. DOI: 10.1007/s11269-018-2141-z.
Niazkar, M., Talebbeydokhti, N., and Afzali, S. H. (2019) "Development of a new flow-dependent scheme for calculating grain and form roughness coefficients" KSCE Journal of Civil Engineering, 23(5), 2108-2116. DOI: 10.1007/s12205-019-0988-z.
Niazkar, M., Talebbeydokhti, N., and Afzali, S. H. (2019) "Application of Artificial Intelligence Models to Estimate Discharge over Semicircular Weirs" Advance Researches in Civil Engineering, 4(1), 19-31. DOI: 10.30469/arce.2019.96032.



Motaman, F., Rakhshandehroo, G. R., Hashemi, M. R., and Niazkar, M. (2018) "Application of RBF-DQ Method to Time-Dependent Analysis of Unsaturated Seepage" *Transport in Porous Media*, 125(3), 543-564. DOI: 10.1007/s11242-018-1138-7.

Niazkar, M., and Afzali, S. H. (2018) "Developing a new accuracy-improved model for estimating scour depth around piers using a hybrid method" *Iranian Journal of Science and Technology, Transactions of Civil Engineering*, 43(2), 179-189. DOI: 10.1007/s40996-018-0129-9.

Niazkar, M., Rakhshandehroo, G. and Afzali, S. H. (2018) "Deriving explicit equations for optimum design of a circular channel incorporating a variable roughness" *Iranian Journal of Science and Technology, Transactions of Civil Engineering*, 42(2), 133-142. DOI: 10.1007/s40996-017-0091-y.

Niazkar, M., and Afzali, S. H. (2018) "Application of new hybrid method in developing a new semicircular-weir discharge model" *Alexandria Engineering Journal*, 57 (3), 1741-1747. DOI: 10.1016/j.aej.2017.05.004.

Niazkar, M., and Afzali, S. H. (2018) "Closure to Assessment of Modified Honey Bee Mating Optimization for Parameter Estimation of Nonlinear Muskingum Models" *Journal of Hydrologic Engineering ASCE*, 23(4), 07018003. DOI: 10.1061/(ASCE)HE.1943-5584.0001602.

Niazkar, M., Talebbeydokhti, N., and Afzali, S. H. (2017) "Relationship between Hazen-William coefficient and Colebrook-White friction factor: Application in water network analysis" *European Water*, 58, 513-520. [http://www.ewra.net/ew/issue\\_58.htm](http://www.ewra.net/ew/issue_58.htm)

Niazkar, M., and Afzali, S. H. (2017) "Parameter estimation of an improved nonlinear Muskingum model using a new hybrid method" *Hydrology Research*, 48(4), 1253-1267. DOI: 10.2166/nh.2016.089.

Niazkar, M., and Afzali, S. H. (2017) "New Nonlinear Variable-parameter Muskingum Models" *KSCCE Journal of Civil Engineering*, 21 (7), 2958-2967. DOI: 10.1007/s12205-017-0652-4.

Niazkar, M., and Afzali, S. H. (2017) "Analysis of water distribution networks using MATLAB and Excel spreadsheet: h-based methods" *Computer Applications in Engineering Education*, 25 (1), 129-141. DOI: 10.1002/cae.21786.

Niazkar, M., and Afzali, S. H. (2017) "Analysis of water distribution networks using MATLAB and Excel spreadsheet: Q-based methods" *Computer Applications in Engineering Education*, 25 (2), 277-289. DOI:10.1002/cae.21796.

Niazkar, M., and Afzali, S. H. (2016) "Application of New Hybrid Optimization Technique for Parameter Estimation of New Improved Version of Muskingum Model" *Water Resources Management*, 30 (13), 4713-4730. DOI: 10.1007/s11269-016-1449-9.

Niazkar, M., and Afzali, S. H. (2016) "Streamline Performance of Excel in Stepwise Implementation of Numerical Solutions" *Computer Applications in Engineering Education*, 24 (4), 555-566. DOI: 10.1002/cae.21731.

Afzali, S. H., Darabi, A. and Niazkar, M. (2016) "Steel frame optimal design using MHBMO algorithm" *International Journal of Steel Structures*, 16 (2), 455-465. DOI: 10.1007/s13296-016-6016-y.

Niazkar, M., and Afzali, S. H. (2015) "Optimum Design of Lined Channel Sections" *Water Resources Management*, 29 (6), 1921-1932. DOI: 10.1007/s11269-015-0919-9.

Niazkar, M., and Afzali, S. H. (2015) "Assessment of Modified Honey Bee Mating Optimization for Parameter Estimation of Nonlinear Muskingum Models" *Journal of Hydrologic Engineering ASCE*, 20 (4), 04014055. DOI: 10.1061/(ASCE)HE.1943-5584.0001028.

Articles in reviews

Majid Niazkar, and Nasser Talebbeydokhti. (2021) Multi-Gene Genetic Programming and its Various Applications. In "3-Volume Handbook of Hydroinformatics (HandHyd, Elsevier) edited by Professor Saeid Eslamian, HandHyd Chief Editor, Elsevier (Current status: the first revision is under review).



Niazkar, M., and Zakwan, M. (2021) "Application of machine learning methods for developing daily sediment rating curves" <i>Mathematical Problems in Engineering</i> , under review
Mohammad Reza Goodarzi, Amirreza R.Niknam, Maryam Sabaghzadeh, Mohammad Hossein Mokhtari, and Majid Niazkar (2021) "Impact assessment of COVID-19 lockdowns on two water quality indices using remotely-sensed data in Anzali wetland, Iran" <i>International Journal of Hygiene and Environmental Health</i> , under review
Zakwan, M. and Niazkar, M. (2021) "Discussion of "Reverse Flood Routing in Rivers Using Linear and Nonlinear Muskingum Models" by Badfar et al.," <i>Journal of Hydrologic Engineering</i> , under review
M. R. Goodarzi, R. H. Mohtar, R. Bachour, H. Vagheei, B. T. Daher, R. Lawford and M. Niazkar (2021) "A Review on Water-Energy-Food Nexus: Challenges and Opportunities" <i>Energy, Sustainability and Society</i> , under review
Hamid Reza Niazkar, Majid Niazkar (2021) "Applications of Genetic Programming in Medicine: A Review Article" <i>AI in medicine</i> , under review
Tuğçe Hirca, Gökçen Eryılmaz Türkkan, Majid Niazkar (2021) "Applications of Innovative Polygonal Trend Analyses to Precipitation Series of Eastern Black Sea Basin, Turkey" <i>Theoretical and Applied Climatology</i> , under review

Congress proceedings
Niazkar, M., and Talebbeydokhti, N. (2020), "Review of risk-analysis and vulnerability-assessment models of critical infrastructure of urban water supply networks and sewerage systems," <i>Proc. Of Third Congress of Iranian Water and Wastewater Science and Engineering</i> , Shiraz University, Shiraz, Iran, 24-26 November [in Persian].
Niazkar, M., Talebbeydokhti, N., and Afzali, S. H. (2019), "Numerical modeling of unsteady flow: implicit scheme revisited," <i>Proc. of the 11th National Congress on Civil Engineering</i> , Shiraz University, Shiraz, Iran, 30 April-1 May.
Niazkar, M., Talebbeydokhti, N., and Afzali, S. H. (2019), "Application of Artificial Intelligence models to estimate discharge over semicircular weirs," <i>Proc. of the 11th National Congress on Civil Engineering</i> , Shiraz University, Shiraz, Iran, 30 April-1 May.
Niazkar, M., Nikooee, E., Ansari, A. and Maghareh, M. (2019), "New prediction models for infiltration rate in soil using multi-gen genetic programming and artificial neural networks," <i>Proc. of the 11th National Congress on Civil Engineering</i> , Shiraz University, Shiraz, Iran, 30 April-1 May.
Niazkar, M., Talebbeydokhti, N., and Afzali, S. H. (2018), "Implementation of grain and form roughness effects in a Modified version of Manning's equation," <i>Proc. of the 11th International Congress on Civil Engineering</i> , University of Tehran, Tehran, Iran, 8-10 May.
Motaman, F., Rakhshandehroo, G., and Niazkar, M. (2017), "Investigation on time-dependent seepage in unsaturated soil using meshless RFB-DQ method," <i>Proc. of the 5th International Congress on Civil Engineering, Architecture and Urban Development</i> , Shahid Beheshti University, Tehran, Iran, 26-28 December [in Persian].
Niazkar, M., and Talebbeydokhti, N. (2017), "Application of a hybrid algorithm to explicit estimation of bridge backwater," <i>Proc. of the 1st International and 3rd National Conference and Exhibition on Sustainable Development in Road Construction Focusing on Environmental Protection</i> , Shiraz, Iran, 21 December.
Nematollahi Sarvestani, B., Niazkar, M., and Talebbeydokhti, N. (2017), "Analytical Solution for Level Pool Routing Equation Based on Various Inflow Hydrographs," <i>Proc. of the 4th International Conference on Long-term Behaviour and Environmentally Friendly Rehabilitation Technologies of Dams (LTBD2017)</i> , IRIB International Conference Center, Tehran, Iran, 17-19 October.
Niazkar, M., Talebbeydokhti, N., and Afzali, S. H. (2017), "Relationship between Hazen-William



coefficient and Colebrook-White friction factor: Application in water network analysis,” Proc. Of the 10th World Congress on Water Resources and Environment “Panta Rhei”, Athens, Greece, 5-9 July.
Niazkar, M., and Rakhshandehroo, G. (2017), “Application of different explicit Runge-Kutta methods to solve gradually varied flow equations,” Proc. of the 10th National Congress on Civil Engineering, Sharif University of Technology, Tehran, Iran, 19-20 April.
Niazkar, M., and Afzali, S. H. (2016), “Assessment of loop corrector methods with third-order convergence for solving pipe networks,” Proc. of the 4th International Congress on Civil Engineering, Architecture and Urban Development, Shahid Beheshti University, Tehran, Iran, 27-29 December.
Niazkar, M., and Talebbeydokhti, N. (2016), “Challenges and recommendations for improving engineering education in Iran,” Proc. of the International Conference on Water and Environment in the New Millennium: Education and Capacity Building, University of Tehran, Tehran, 3-5 December.
Niazkar, M., and Afzali, S. H. (2016), “Parameter estimation of two innovative Muskingum models,” Proc. of the 1th International Conference on Water, Environment and Sustainable Development, University of Mohaghegh Ardabili, Ardabil, 27-29 September.
Niazkar, M., and Afzali, S. H. (2016), “Modified Hardy-Cross methods with fifth-order convergence,” Proc. of the 9th National Congress on Civil Engineering, Ferdowsi University of Mashhad, Mashhad, Iran, 10-11 May.
Niazkar, M., and Afzali, S. H. (2016), “Application of a new hybrid method in determining a new scour depth model around piers,” Proc. of the 10th International River Engineering Conference, Shahid Chamran University, Ahwaz, 19-21 January.
Niazkar, M., and Afzali, S. H. (2015), “A new model for design of lined channel sections using a new hybrid method,” Proc. of the 3th International Congress on Civil Engineering, Architecture and Urban Development, Shahid Beheshti University, Tehran, Iran, 29-31 December.
Darabi, Z., Afzali, S. H., Darabi, A. and Niazkar, M. (2015), “Shiraz Khan school recognition from the perspective of sustainability,” Proc. of the 3th International Congress on Civil Engineering, Architecture and Urban Development, Shahid Beheshti University, Tehran, Iran, 29-31 December [in Persian].
Niazkar, M., and Afzali, S. H. (2015), “A New improved correlation for determining Darcy-Weisbach friction factor,” Proc. of the International Conference on Research in Science and Technology, Kualalumpur, Malaysia, 14 December.
Niazkar, M., and Afzali, S. H. (2015), “A modified stage-discharge model for semicircular weirs using a new hybrid method,” Proc. of the International Conference on Science and Engineering, Dubai, UAE, 1 December.
Niazkar, M., and Afzali, S. H. (2015), “Application of Excel spreadsheet in engineering education,” Proc. of the First International and Fourth National Conference on Engineering Education, Shiraz University, Shiraz, 10-12 November.
Niazkar, M., and Afzali, S. H. (2015), “Muskingum flood routing model: Calibration review, Challenges and future trends,” Proc. of the International Conference on Civil Engineering, Architecture and urban infrastructure, Tabriz, Iran, 29-30 July.
Niazkar, M., and Abedini, M. J. (2015), “Identification of appropriate resistance equation in analysis of water distribution networks,” Proc. of the 10th International Congress on Civil Engineering, University of Tabriz, Tabriz, Iran, 5-7 May.
Niazkar, M., and Afzali, S. H. (2015), “Modified linear Muskingum Model,” Proc. of the 10th International Congress on Civil Engineering, University of Tabriz, Tabriz, Iran, 5-7 May.
Niazkar, M., and Afzali, S. H. (2014), “Parameter Estimation of Nonlinear Muskingum Models Using the Modified Honey Bee Mating Optimization,” Proc. of the 8th National Congress on Civil Engineering, Babol Noshirvani University of Technology, Babol, Iran, 7-8 May.
Niazkar, M., and Afzali, S. H. (2014), “Optimal Parameter Estimation of linear Muskingum Model based on the Modified Honey Bee Mating Optimization algorithm,” Proc. of the 8th National Congress on Civil





Engineering, Babol Noshirvani University of Technology, Babol, Iran, 7-8 May.
Niazkar, M., and Afzali, S. H. (2014), "Nonlinear Muskingum Flood Routing Model with Variable Parameters," Proc. of the 8th National Congress on Civil Engineering, Babol Noshirvani University of Technology, Babol, Iran, 7-8 May.
Niazkar, M., and Abedini, M. J. (2014), "Analysis of Water Distribution Systems: A critical review," Proc. of the 8th National Congress on Civil Engineering, Babol Noshirvani University of Technology, Babol, Iran, 7-8 May.
Niazkar, M., and Afzali, S. H. (2014), "Optimum straightforward design of open channels," Proc. of the 13th Iranian Hydraulic Conference, Tabriz University, Tabriz, Iran, 12-14 November [in Persian].
Niazkar, M., and Afzali, S. H. (2014), "Development of estimating local scour depth around piers," Proc. of the 13th Iranian Hydraulic Conference, Tabriz University, Tabriz, Iran, 12-14 November [in Persian].
Niazkar, M., and Afzali, S. H. (2014), "Estimation of estimating local scour depth around piers using MHBMO algorithm," Proc. of the 13th Iranian Hydraulic Conference, Tabriz University, Tabriz, Iran, 12-14 November [in Persian].
Niazkar, M., and Abedini, M. J. (2013), "Analysis of pipe networks using linear and nonlinear finite element method," Proc. of the 12th Iranian Hydraulic Conference, Water Engineering Department, Tehran University, Karaj, Iran, 29-30 October [in Persian].

#### OTHER INFORMATION

<p>Previous work experience:</p> <p>Postdoc researcher, Shiraz University (Apr. 2020 - Apr. 2021)</p> <p>Research assistant, Shiraz University (Apr. 2019 - Apr. 2020)</p> <p>A research member of the River Engineering and Hydraulic Structures Group in the Special Committee on National Flood Report, Iran (Apr. 2019 - Sep. 2020)</p> <p>Teacher, Higher Education Center of Estahban (Sep. 2019 - Jan. 2020)</p> <p>Teacher, Islamic Azad University, Zarghan Branch (Sep. 2019 - Jan. 2020)</p> <p>Teacher, Higher Education Center of Estahban (Sep. 2017 - Jan. 2018)</p> <p>Teacher assistant, Shiraz University (Sep. 2012 - Jan. 2019)</p>
<p>Reviewer of peer-reviewed journals:</p> <ul style="list-style-type: none"><li>• Applied Energy (ISSN: 0306-2619)</li><li>• Ocean Engineering (ISSN: 0029-8018)</li><li>• Hydrology Research (ISSN: 1998-9563)</li><li>• Water Resources Management (ISSN: 0920-4741)</li><li>• Urban Water Journal (ISSN: 1744-9006)</li><li>• Progress in Physical Geography (ISSN: 0309-1333)</li><li>• Arabian Journal for Science and Engineering (ISSN: 2193-567X)</li><li>• IEEE Transactions on Automation Science and Engineering (ISSN: 1558-3783)</li><li>• Computer Applications in Engineering Education (ISSN: 1099-0542)</li><li>• Iranian Journal of Science and Technology Transactions of Civil Engineering (ISSN: 2364-1843)</li><li>• Scientia Iranica (ISSN: 1026-3098)</li><li>• International Journal of Hydrology Science and Technology (ISSN: 2042-7816)</li></ul>



• Revista Internacional de Métodos Numéricos para Cálculo y Diseño en Ingeniería (ISSN: 0213-1315)

• Journal of Hydraulics (ISSN: 2345-4237)

Computer skills: Experienced in MATLAB, Python, Excel and VBA, ArcGIS, EPANET, SPSS, LATEX, Word, and PowerPoint

Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.

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Place and date: Shiraz, Iran, 9/19/2021