

2-page-CV of

Abdolreza Bahremand

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Education

Free University of Brussels (Vrije Universiteit Brussel)

PhD, Engineering, 2002 - 2006

Thesis' title: Simulating the effects of reforestation on floods using spatially distributed hydrologic modeling and GIS

Promotor: Prof. Florimond De Smedt

University of Tehran

Master of Science (MSc), Watershed Management Engineering, 1995 - 1997

Thesis' title: Comparison of reservoir flow routing methods (in Jiroft Dam)

Supervisor: Prof. Mohammad Mahdavi

University of Tehran

Bachelor's degree, Rangeland and Watershed Management Engineering, 1991 - 1995

Experience

Faculty member, Associate Professor at Gorgan University of Agricultural Sciences and Natural Resources

September 2006 - Present (14 years 8 months)

- Courses which I teach at Department of Watershed Management:

To B.Sc students: hydrology, cartography, hydraulic

To M.Sc students: hydrological modeling, rangeland ecosystem modeling, river engineering, flood control, rangeland hydrology, arid zone hydrology

To PhD students: advanced hydrology, watershed simulation

- Supervisor of 43 completed M.Sc theses

- Supervisor of 7 completed PhD theses

- Advisor of 4 completed PhD theses

- Eight completed university research projects as the principal investigator

Visiting Professor at University of Saskatchewan, Global Institute for Water Security

September 2017 - September 2019

Scientific Staff (as PhD student) at Vrije Universiteit Brussel

August 2002 - September 2006 (4 years 2 months)

Faculty Member, Lecturer at Azad University of Baft

September 2000 - August 2002 (2 years)

Senior Engineer at Natural resource management central office of Kerman Province

April 2000 - June 2002 (2 years 3 months)

Service Engineer Officer at Compulsory Military Service

July 1998 - March 2000 (1 year 9 months)

Researcher, Hydrologist at Soil Conservation and Watershed Management Research Institute of Iran (SCWMRI)

October 1995 - March 1998 (2 years 6 months)

Researcher, Rangeland Management at Forest and Rangeland Research Center of Iran

April 1995 - September 1995 (6 months)

Editorial Career

1. Editor-in-Chief of Journal of Water and Soil Conservation (Iranian journal)

2. Associate Editor of Natural Resources Modeling (Wiley Journal)

3. Editorial board member of Environmental Resources Research (Iranian journal)

Main Publication of last 5 years

1. **Bahreman**, A., Ahmadyousefi S, Sheikh V, Komaki C, **2020**, A Parameter Allocation Approach for Flow Simulation Utilizing the WetSpa-Python Model. *Hydrological Processes* 2020:1-18. Doi: 10.1002/hyp.13992
2. Tajiki, M., Schoups, G., Franssen, H. J. H., Najafinejad, A., & **Bahreman**, A. **2020**. Recursive Bayesian estimation of conceptual rainfall-runoff model errors in real-time prediction of streamflow. *Water Resources Research*, 56(2), <https://doi.org/10.1029/2019WR025237>
3. Kavian, A., Javidan, N., **Bahreman**, A., Gyasi-Agyei, Y., Hazbavi, Z., & Rodrigo-Comino, J. **2020**. Assessing the hydrological effects of land-use changes on a catchment using the Markov chain and WetSpa models. *Hydrological Sciences Journal*, 0(ja), null. <https://doi.org/10.1080/02626667.2020.1797046>
4. Parisaye, Z., Sheikh, V., **Bahreman**, A., Komaki, C., Abdollahi, K. **2019**. An Approach for Estimating Monthly Curve Number Based on Remotely-Sensed MODIS Leaf Area Index Products, *Water Resources Management*, vol. 33(8), pages 2955-2972.
3. Rahimzadeh O, **Bahreman** A, Noura N, Mukolwe M. Evaluating flood extent mapping of two hydraulic models, 1D HEC-RAS and 2D LISFLOOD-FP in comparison with aerial imagery observations in Gorgan flood plain, Iran. *Natural Resource Modeling*. **2019**; e12214. <https://doi.org/10.1111/nrm.12214>
4. A Kornejady, M Ownegh, O Rahmati, **A Bahreman**, Landslide susceptibility assessment using three bivariate models considering the new topo-hydrological factor: HAND Geocarto international, **2018**, 33(11):1155-1185.
5. **Bahreman** A., **2018**, WetSpa model application with and without calibration, EGU General Assembly Conference Abstracts. Viana, EGU 2018, 20, 5184.
6. Mostafazadeh, R., Sadoddin, A., **Bahreman**, A. et al. **2017**, Scenario analysis of flood control structures using a multi-criteria decision-making technique in Northeast Iran *Nat Hazards* (2017) 87: 1827. <https://doi.org/10.1007/s11069-017-2851-1>
7. Aiding Kornejady, Majid Ownegh, Abdolreza **Bahreman**, Landslide susceptibility assessment using maximum entropy model with two different data sampling methods, *CATENA*, Volume 152, **2017**, Pages 144-162, ISSN 0341-8162, <https://doi.org/10.1016/j.catena.2017.01.010>.
8. **A Bahreman**, HESS Opinions: Advocating process modeling and de-emphasizing parameter estimation, *Hydrology and Earth System Sciences*, 2016, Volume (20), 1433-1445.

Main First-authored Publications

- 1 – **A Bahreman**, Ahmadyousefi S, Sheikh V, Komaki C, **2020**, A Parameter Allocation Approach for Flow Simulation Utilizing the WetSpa-Python Model. *Hydrological Processes* 2020:1-18. Doi: 10.1002/hyp.13992
- 2 - **A Bahreman**, HESS Opinions: Advocating process modeling and de-emphasizing parameter estimation, *Hydrology and Earth System Sciences*, 2016, Volume (20), 1433-1445.
- 3 - **A Bahreman**, F De Smedt, Predictive analysis and simulation uncertainty of a distributed hydrological model, *Water Resources Management*, 2010, Volume (24), 2869-2880.
- 4 - **A Bahreman**, F De Smedt, Distributed hydrological modeling and sensitivity analysis in Torysa Watershed, Slovakia, *Water Resources Management*, 2008, Volume (22), 393-408.
- 5 - **A Bahreman**, F De Smedt, J Corluy, YB Liu, J Poorova, L Velcicka, E Kunikova, WetSpa model application for assessing reforestation impacts on floods in Margecany–Hornad Watershed, Slovakia, *Water Resources Management*, 2007, Volume (21), 1373-1391.
- 6 - **A Bahreman**, F Smedt, J Corluy, YB Liu, J Poorova, L Velcick, E Kunikova, Application of WetSpa model for assessing land use impacts on floods in the Margecany-Hornad watershed, Slovakia, *Water Science & Technology*, 2006, Volume (53), 37-45.
- 7 - **A Bahreman**, Simulating the effects of reforestation on floods using spatially distributed hydrologic modeling and GIS, PhD thesis, 2006, Department of Hydrology and Hydraulic Engineering, Vrije Universiteit Brussel, Brussels, Belgium.
- 8 - **A Bahreman**, J Corluy, Y Liu, F De Smedt, J Poórová, L Velcická, Stream flow simulation by WetSpa model in Hornad river basin, Slovakia, *Floods from Defence to Management*. Taylor-Francis Group, London, 2005, Volume (book chapter), 67-74.