




# MOSTAFA REZAALI

## PERSONAL

---

✉: mostafarezaali@gmail.com  
🏠: 212, Meysam St., Niroom St., Est. Hash-Behesht, Isfahan, Iran  
☎: +98-9130886809  
Place and Date of Birth: Isfahan, Iran, May 19<sup>th</sup>, 1993  
Nationality: Iranian  
📄 TOEFL: 102 (R = 27, L = 26, S = 23, W = 26)  
Left-handed  
Links:   

## EDUCATION

---

🎓 : 2011/9-2016/2 B.Sc. in Civil and Environmental Engineering - IAUKHSH, Isfahan, Iran  
🎓 : 2016/9-2018/9 M.Sc. in Civil and Environmental Engineering - Qom University of Technology, Qom, Iran  
Top Student 5<sup>th</sup> of 122 all M.Sc. entries since establishment  
Thesis: Intelligent Pressure Control of Urban Water Distribution Network Using Artificial Intelligence, Case Study: Mahdie Residential Complex  
Purpose: Pressure Control in Water Distribution Network by Integration of EPANET2 and Recurrent Neural Networks  
GPA: 4.00 (19.24/20)

## EMPLOYMENT

---

🏢 TA and RA: Dr. Abdolreza Karimi Lab  
👤 AERMOD Model Workshop Tutor: Yazd University of Medical Sciences  
✍ MSc. Advisor, Nayereh Rezaei Rahimi: May 2019- Oct. 2019, Qom University of Medical Sciences  
📄 *Tropospheric Ozone Concentration Prediction Using Deep Learning Models*  
✍ MSc. Advisor, Mohammadreza Hosseini: May 2021- Present, Alborz University of Medical Sciences  
📄 *Application of neural network models for predicting impact of climate change on dust phenomenon in the southwestern provinces of Iran*

## RESEARCH INTERESTS (📄)

---

Climate Change  
Extreme Weather Events  
Water Resources Research  
AI Applications in Meteorological/Environmental Forecasting  
Hydroclimatology  
Hydrology  
Air Quality Modeling

## JOURNAL PUBLICATIONS (📄)

---

📄 H-INDEX = 5, CITATIONS = 116 (LAST UPDATED: MAY 6, 2022)

- 1- **Rezaali, M.**, Quilty, J. and Karimi, A., 2021. Probabilistic urban water demand forecasting using wavelet-based machine learning models. **Journal of Hydrology**, 600, p.126358.
- 2- **Rezaali, M.**, Fouladi-Fard, R., Mojarad, H., Sorooshian, A., Mahdinia, M. and Mirzaei, N., 2021. A wavelet-based random forest approach for indoor BTEX spatiotemporal modeling and health risk assessment. **Environmental Science and Pollution Research**, 28(18), pp.22522-22535.
- 3- **Rezaali, M.**, Karimi, A., Yekta, N.M. and Fard, R.F., 2020. Identification of temporal and spatial patterns of river water quality parameters using NLPKA and multivariate statistical techniques. **International Journal of Environmental Science and Technology**, 17(5), pp.2977-2994.
- 4- Rahimi, N.R., Fouladi-Fard, R., Aali, R., Shahryari, A., **Rezaali, M.**, Ghafouri, Y., Ghalhari, M.R., Ghalhari, M.A., Farzinnia, B., Fiore, M. and Gea, O.C., 2020. Bidirectional association between COVID-19 and the environment: A systematic review. **Environmental Research**, p.110692.
- 5- Mojarrad, H., Fouladi Fard, R., **Rezaali, M.**, Heidari, H., Izanloo, H., Mohammadbeigi, A., Mohammadi, A. and Sorooshian, A., 2020. Spatial trends, health risk assessment and ozone formation potential linked to BTEX. **Human and Ecological Risk Assessment: An International Journal**, 26(10), pp.2836-2857.
- 6- Gabris, M.A., Jume, B.H., **Rezaali, M.**, Shahabuddin, S., Nodeh, H.R. and Saidur, R., 2018. Novel magnetic graphene oxide functionalized cyanopropyl nanocomposite as an adsorbent for the removal of Pb (II) ions from aqueous media: equilibrium and kinetic studies. **Environmental Science and Pollution Research**, 25(27), pp.27122-27132.
- 7- **Rezaali, M.** and Fouladi-Fard, R., 2021. Aerosolized SARS-CoV-2 exposure assessment: dispersion modeling with AERMOD. **Journal of Environmental Health Science and Engineering**, pp.1-9.
- 8- Mostafaii, G., Bakhtyari, Z., Atoof, F., Baziar, M., Fouladi-Fard, R., **Rezaali, M.** and Mirzaei, N., 2021. Health risk assessment and source apportionment of heavy metals in atmospheric dustfall in a city of Khuzestan Province, Iran. **Journal of Environmental Health Science and Engineering**, 19(1), pp.585-601.

9- Safari, Z., Fouladi-Fard, R., Vahidmoghdam, R., Hosseini, M.R., Mohammadbeigi, A., Omid Oskouei, A., **Rezaali, M.**, Ferrante, M. and Fiore, M., 2021. Awareness and Performance towards Proper Use of Disinfectants to Prevent COVID-19: The Case of Iran. **International journal of environmental research and public health**, 18(4), p.2099.

10- **Rezaali, M.**, and Fouladi-Fard, R., 2021. A Narrative Summary of Air Pollution Awareness: The Recent Modeling Implications. **Journal of Environmental Health and Sustainable Development**, 6(1), pp.1175-1177.

11- **Rezaali, M.**, Karimi, A., Mohammadnezhad, B. and Rasouli, A., 2020. Studying the Effect of Wavelet Transform on the Uncertainty of Artificial Neural Network-Based Models and Extreme Learning Machines for the Prediction of Urban Water Demand., **Iran-Water Resources Research**

12- **Rezaali, M.**, and Karimi, A., 2019. Decentralized Wastewater Treatment Plants Site Selection of Qom Province by Using Fuzzy Logic and AHP, **Iran-Water Resources Research**, 15(1), pp.76-91.

13- **Rezaali, M.**, and KARIMI, A., 2019. Site Selection of Decentralized Wastewater Treatment Plants in Qom Province by Using Fuzzy Logic and AHP, **Iran-Water Resources Research**

14- Fouladi-Fard, R., Safari, Z., Hosseini, M.R., Vahidmoghdam, R., Ferrante, M., **Rezaali, M.**, Omid Oskouei, A. and Fiore, M., Impact of COVID-19 Outbreak on Air Pollutants, in 2020 in Compare to the Same Period in 2019, in Qom, Iran. **Journal of Environmental Health and Sustainable Development**, pp.0-0.

.  
. .

+ more than 10 international conferences publications

#### REFERENCES

✍ Abdolreza Karimi, Assistant Professor, Department of Civil and Environmental Engineering, Qom University of Technology

✉ karimi@qut.ac.ir

✍ John Quilty, Assistant Professor, Department of Civil and Environmental Engineering, University of Waterloo

✉ john.quilty@uwaterloo.ca

✍ Reza Fouladi-Fard, Assistant Professor, Department of Environmental Health Engineering, Faculty of Health, Qom University of Medical Sciences

✉ rfouladi@muq.ac.ir

#### JOURNAL REVIEWER

👁 Springer Nature Applied Science journal (SNAS)

#### PROGRAMMING LANGUAGES [1,10]

</> MATLAB » Big data analysis / Processing 4D Matrices/ NetCDF Processing / Machine Learning - 10

</> Python » Tensorflow / Sklearn / Numpy / Jupyter - 6

</> Linux - 5

</> R - 5

</> Arcpy - 5

</> L<sup>A</sup>T<sub>E</sub>X - 5

</> C# - 3

#### SOFTWARE EXPERIENCE

⚙ WRF-ARW

⚙ HEC-RAS

⚙ CE-Qaul-W2

⚙ GRASS GIS

⚙ AERMOD

⚙ Water GEMS

⚙ AutoCAD

⚙ ArcGIS

⚙ EPANET2

⚙ EPA PMF

⚙ IDRISI (TerrSet)

⚙ MS Office

⚙ Sewer GEMS

⚙ AutoCAD Civil 3D

#### HONORS AND AWARDS

✍ Iranian National Elite, Member of the Elite Graduates Program, Iranian National Elites Foundation

✍ Two-years M.Sc. Scholarship Winner

#### RESEARCH PROPOSALS

📅 Dec 2018 -Present:

Uncertainty Quantification of Machine Learning Models for Urban Water Demand Forecasting

Grant number 729

[Link to Proposal Certificate](#)

📅 Dec 2020 -Mar 2021:

Bidirectional Association Between COVID-19 and Environment A Systematic Review

Grant number 1766

[Link to Proposal Certificate](#)

📅 Dec 2020 -Feb 2021: Modeling SARS-CoV-2-laden Aerosols in AERMOD

Grant number 1761

[Link to Proposal Certificate](#)