Mehdi Gholamalifard

Dept. of Environment, Faculty of Natural Resources, Tarbiat Modares University

PO Box 46414-356, Postcode 46417-76489 Noor, Mazandaran, Iran

Mobile: (+98) 912 4765546

Email: gholamalifard@gmail.com

Linkedin: https://ir.linkedin.com/in/mehdi-gholamalifard-60868072

Google Scholar:

https://b2n.ir/Mehdi.Gh

Academic Qualifications

Ph.D. - Faculty of Natural Resources, Tarbiat Modares University – Aug 2008 to Jul 2013
Dissertation - Satellite Monitoring of Optically Active Components of the Caspian Sea by Inverse Modelling of Radiative Transfer Equation
GPA - 18.14 / 20
Supervisor: Dr. A. Abkar; Advisors: Dr. Tiit Kutser; Dr. B. Naimi

M.Sc. - Faculty of Natural Resources, Tarbiat Modares University – Sept 2004 to Oct 2006
Dissertation - Presenting a Spatio-Temporal Model of Landfill Supply and Demand on Urban Dynamics Modelling in a GIS Environment (Case Study: Gorgan City)
GPA - 18.14 / 20
Supervisor: Dr. A. S. Mahiny

B.Sc. - Faculty of Natural Resources, IAU-Arak – Sept 2000 to Jul 2004
Dissertation - Multi-Criteria Evaluation (MCE) & Land Use Planning.
GPA – 17.22 / 20

Research Fields

- Ocean Colour Remote Sensing;
- Spatio-Temporal Modelling of Optically Active Constituents (OACs);
- Climate Change and its consequence on Optically Active Constituents (OACs);
- Applications of Geo-Informatics and ocean colour remote sensing in Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA);
- Open-source software development & Web-GIS;

Skills

- **GIS & Remote Sensing software:**   Idrisi, TerrSet, ArcGIS, ENVI, Imagine ERDAS, SeaDAS, BEAM.

- **Programming language:** R, Python.

- **Marine Equipment:** CTD, Spectrophotometer, Niskin, Grab.

Achievements

- **2th Ranked** B.Sc. student of Environment, IAU-Arak University, (Received Certificate: 34992, 30th August 2008);
- **Top five Examinees** in National Graduate Studies Entrance Exam, March 2004. Full Scholarship award to continue M.Sc. studies at Tarbiat Modares University, Iran, 2004-2006;
- **Top Ranked** M.Sc. student of Environment, Tarbiat Modares University, (Certificate: 15th November 2007);
- **Qualified for Facilities of National Elite Foundation** (Certificate: s/51471, 27th November 2007);
- **Selected – Exceptional Talents** Ph.D. Entrance Exam - Tarbiat Modares University, (Certificate: 43/41217, 4th October 2008);
- **Full Government Scholarship Award** to complete Ph.D. studies from Ministry of Science, Research and Technology;
- **Erasmus Mundus 8 Fellowship** from European Commission at ITC - Netherlands 2012;
- **Assistant Professor** at TMU, the only exclusively graduate university in Iran since 2013;
- **Publication** of 27 ISI Papers; **Manager** of 12 National/Regional Projects; **Collaboration** in 11 National/Research Projects;

Work Experience

- Assistant professor, Department of Environment, Tarbiat Modares University, Iran - September 23 2013 –Present; (http://www.modares.ac.ir/en-nat)
- Deputy Dean for Students Affairs, Faculty of Natural Resources and Marine sciences, Tarbiat Modares University, Iran - October 2016 –Present; (http://www.modares.ac.ir/en-nat/administration)
- Faculty member, Department of Environment, Tarbiat Modares University, Iran - September 23 2010 – July 10 2013; http://www.modares.ac.ir/en-nat
- Project coordinator & Spatial Analyst, SAP consulting engineers Co. Tehran, Iran – September 23 2005 –October 30 2008; (http://www.sabzandish.com/En/en-home.htm)
- Project Manager, Establishing a Web-GIS for Marine Deputy of Department of Environment, Iran – 2015-2017; (www.marinegis.doe.ir)

Projects

Project Manager:

Project Title: Zoning of Establishment of Desalination Plants in the Coastal Areas of Persian Gulf and Oman Sea (Phase 1: Hormozgan Province)
Employer – Client: Deputy of Marine Environment, Department of Environment, Iran.
Consulting engineer: Tarbiat Modares University.
Contract Number & Date: 20th January 2019, 97/173;

Project Title: Establishing the Pollutant Inventory in Tabriz City, Siting in GIS and Modeling;
Employer – Client: East Azarbayejan Province, Department of Environment, Iran.
Consulting engineer: Tarbiat Modares University.
Contract Number & Date: 19th February 2018, 33d/35674;

Project Title: Environmental Management Program (EMP) of TJPA-PC (Takhte-Jamshid Pars Asalouyeh-Petrochemical Company)
Employer – Client: TJPA-PC (Takhte-Jamshid Pars Asalouyeh-Petrochemical Company)
Consulting engineer: Tarbiat Modares University.
Contract Number & Date: 19th February 2018, 33d/35676;

Project Title: Deployment of Geodatabase and Extension for Coastal and Marine Areas of Boushehr Province in GIS Environment.
Employer – Client: Bushehr Province, Department of Environment, Iran.
Consulting engineer: ACECR (Academic centre for Education, Culture and Research), Branch of Kharazmi University, Iran.
Contract Number & Date: 6th April 2009, 122-169.

Project Title: Determination of Coastal Changes of Mazandaran Province using Satellite Imageries in GIS Environment.
Employer – Client: Marine Deputy, Department of Environment, Iran.
Consulting engineer: Research Deputy, Kharazmi University, Iran.
Contract Number & Date: 7th February 2010, 34-71380.

Project Title: Determination of Coastal Changes of Bushehr Province using Satellite Imageries in GIS Environment.
Employer – Client: Bushher Province, Department of Environment, Iran.
Consult: ACECR (Academic center for Education, Culture and Research), Branch of Sharif University, Iran
Contract Number & Date: 23th December 2009, 122-11854.

Project Title: Deployment of Geodatabase for Coastal Areas of Golestan Province and Determination of Persistant Organic Pollutants (POPs) in Gorgan Bay.
Employer – Client: Golestan Province, Department of Environment, Iran.
Consult: Department of Environment, Faculty of Natural resources, Tarbiat Modares University, Iran.
Contract Number & Date: 16th March 2011, 125/8306.

Project Title: Deployment of Geodatabase and Web-GIS System (marinegis.doe.ir) for Coastal and Marine Areas of Persian Gulf and Oman Sea.
Employer – Client: Marine Deputy, Department of Environment, Iran.
Consult: ACECR (Academic center for Education, Culture and Research), Branch of Kharazmi University, Iran
Contract Number & Date: 23th January 2013, 91/331.

Project Title: Investigation, Need Assessment and Data Collection of Environmental pollution data in Coastal and Marine Areas of Persian Gulf and Oman Sea and Establishment of Metadata and Attribute tables of Spatial Features.
Employer – Client: Marine Deputy, Department of Environment, Iran
Consult: ACECR (Academic center for Education, Culture and Research), Branch of Kharazmi University, Iran.
Contract Number & Date: 24th February 2013, 33/2013735,

Project Title: Need Assessment and Data Collection of Environmental pollution data and Deployment of Geodatabase and Web-GIS System (marinegis.doe.ir) for Coastal and Marine Areas of Caspian Sea.
Employer – Client: Marine Deputy, Department of Environment, Iran
Consult: Azad university of Hamedan.
Contract Number & Date: 27th July 2013, 92/14901.

Project Title: Environmental Impact Assessment of Takhte-Jamshid Pars Assalouyeh Petrochemical Company – 2016-2017; (https://www.tjpa-pc.com/en/home)
Employer – Client: Takhte-Jamshid Pars Assalouyeh Petrochemical Company **Consult**: Department of Environment, Faculty of Natural resources, Tarbiat Modares University, Iran.
Date: 2015-2017.

Project Title: Compilation of the distribution list of pollutants in the metropolitan area of Tabriz, Siting and modeling in the GIS softwares and modeling.
Employer – Client: Eastern Azarbayejan Province, Department of Environment, Iran.
Consult: Department of Environment, Faculty of Natural resources, Tarbiat Modares University, Iran.
Date: 2015-2017.

Project Partner:

Project Title: Determination of suitable sites for capture and reproduction of Cervus elaphus maral in Golestan province in GIS environment.
Employer – Client: Golestan Province, Department of Environment, Iran.
Consult: Gorgan university of agricultural sciences & natural resources.
Certificate date: October 2006.

Project Title: Establishing of spatial decision support system (SDSS) for siting of thermal power plants based of environmental considerations in GIS environment.
Employer – Client: Ministry of Energy, Iran
Consulting enginners: Sabz-andish payesh (SAP) consulting engineering company.
Date: 2006-2009.

Project Title: Design and deployment of geodatabase for Integrated Coastal Zone Management (ICZM), Iran.
Employer – Client: Port & maritime organization, Ministry of Roads & Urban Development, Iran.
Consulting engineers: Sabz-andish payesh (SAP) consulting engineering company.
Date: 2006-2009.

Project Title: Environmental Impact Assessment (EIA) of 1000 hectare development in Semnan Industrial Park (responsible for Ecological Capability Evaluation (ECE)).
Employer – Client: Iran Small industries and industrial parks organization.
Consulting engineer: Sabz-andish payesh (SAP) consulting engineering company.
Date: 2006-2009.

Project Title: Land use planning of Lorestan province.
Employer – Client: Lorestan governor, Iran.
Consulting engineers: Sabz-andish payesh (SAP) consulting engineering company.
Date: 2006-2009.

Project Title: Siting of Hazardous waste landfill in Sistan & Baluchestan province in GIS Environment.
Employer – Client: Soil and water pollution office, Department of Environment, Iran.
Consulting: Department of environmental engineering, Faculty of Environment, University of Tehran, Iran.
Date: 2010.

Project Title Developing of Multi-Criteria Evaluation (MCE) model for siting of receiving stations of satellite imageries in Iran (Case study: Kerman, Hormozagan and Sistan & Baluchestan provinces).
Employer – Client: Department of GIS, National Geographic Organization, Iran.
Date: 2007-2008.

Project Title: Environmental Impact Assessment (EIA) of dam and irrigation network and drainage network of Kalghan-Chay, Tabriz, Iran.
Employer – Client: Regional water organization of eastern Azarbayejan province, ministry of energy, Iran.
Consult engineer: Environmental monitoring consulting engineering company.
date: 2009-2010.

Project Title: Determination of Suitable sites for Animal Husbandry of Bushehr province in GIS environment.
Employer – Client: Livestock Department of the Agricultural Jahad Department of Bushehr Province
Consult engineer: Idehpardazan-Toseeh consulting engineering company.
Date: 2009-2010.

Project Title: Siting and EIA of Hazardous waste landfill in PSEEZ (Pars Special Economic Energy Zone) in GIS Environment.

Employer – Client: PSEEZ (Pars Special Economic Energy Zone) organization, Petroleum Ministry, Iran.

Consult: Department of environmental pollutants, Environmental research center, Shahid Beheshti University.

Date: 2016-2017.

Teaching Experience

- Land-Use Planning; M.Sc. Course, 10 Semesters, Tarbiat Modares University, Iran.
- Environmental Impact Assessment (EIA); M.Sc. Course, 6 Semesters, Tarbiat Modares University, Iran
- Geographic Information System (GIS); B.Sc. Course, 2 Semesters, Ferdowsi University, Iran
- Remote Sensing (RS); M.Sc. Course, 2 Semesters, Tarbiat Modares University, Iran
- Environmental Modelling (R Programming); Ph.D. Course, 1 Semesters, Tarbiat Modares University, Iran

ISI Publications:

32- Haghshenas, E., **Gholamalifard, M.**, & Mahmoudi, N. (2021). Ecosystem services trade-offs informing impacts of marine aquaculture development in the southern Caspian Sea. Marine Pollution Bulletin, 171, 112792.

31- Shooshtari, S. J., Shayesteh, K., **Gholamalifard, M.**, Azari, M., & López-Moreno, J. I. (2021). Responses of surface water quality to future land cover and climate changes in the Neka River basin, Northern Iran. Environmental Monitoring and Assessment, 193(7), 1-21.

30- Tavangar, S., Moradi, H., Massah Bavani, A., & **Gholamalifard, M.** (2021). A futuristic survey of the effects of LU/LC change on stream flow by CA–Markov model: A case of the Nekarood watershed, Iran. Geocarto International, 36(10), 1100-1116.

29- Haghshenas, E., **Gholamalifard, M.**, Mahmoudi, N., & Kutser, T. (2021). Developing a GIS-Based Decision Rule for Sustainable Marine Aquaculture Site Selection: An Application of the Ordered Weighted Average Procedure. Sustainability, 13(5), 2672.

28- Mirzaei, M., Jafari, A., **Gholamalifard, M.**, Azadi, H., Shooshtari, S.J., Moghaddam, S.M., Gebrehiwot, K. & Witlox, F., (2020). Mitigating environmental risks: Modeling the interaction of water quality parameters and land use cover. Land Use Policy, 95, p.103766.

27- Hazbavi, Z., Sadeghi, S. H., **Gholamalifard, M.**, Davudirad, A. A., (2020). Watershed health assessment using the pressure–state–response (PSR) framework. Land Degradation & Development, 31(1), 3-19.

26- Ahmadi, B., **Gholamalifard, M.**, Kutser, T., Vignudelli, S., & Kostianoy, A. (2020). Spatio-Temporal Variability in Bio-Optical Properties of the Southern Caspian Sea: A Historic Analysis of Ocean Color Data. Remote Sensing, 12(23), 3975.

25- Zabihi, M., Moradi, H., **Gholamalifard, M.**, Khaledi Darvishan, A., Fürst, C., (2020). Landscape Management through Change Processes Monitoring in Iran. Sustainability, 12(5), 1753.

24- Hazbavi, Z., Sadeghi, S. H., **Gholamalifard, M.** (2019). Dynamic analysis of soil erosion-based watershed health. Geography, Environment, Sustainability, 12(3), 43-59.

23- Japelaghi, M., **Gholamalifard, M.,** & Shayesteh, K. (2019). Spatio-temporal analysis and prediction of landscape patterns and change processes in the Central Zagros region, Iran. Remote Sensing Applications: Society and Environment, 15, 100244.

22- Parsamehr, K., **Gholamalifard, M.,** Kooch, Y., (2019). Comparing three transition potential modeling for identifying suitable sites for REDD+ projects. *Spatial Information Research*, Accepted.

21- Sadeghi, S. H., Hazbavi, Z., & **Gholamalifard, M.** (2019). Interactive impacts of climatic, hydrologic and anthropogenic activities on watershed health. *Science of The Total Environment*, *648*, 880-893.

20- Hazbavi, Z., Keesstra, S. D., Nunes, J. P., Baartman, J. E., **Gholamalifard, M.,** & Sadeghi, S. H. (2018). Health comparative comprehensive assessment of watersheds with different climates. *Ecological Indicators*, *93*, 781-790.

19- Shooshtari, S. J., Shayesteh, K., **Gholamalifard, M.,** Azari, M., & López-Moreno, J. I. (2018). Land cover change modelling in Hyrcanian forests, Northern Iran: a landscape pattern and transformation analysis perspective. *Cuadernos de Investigación Geográfica*, *44*(2), 743-761.

18- Yaghmaei, H., Sadeghi, S. H., Moradi, H., & **Gholamalifard, M.** (2018). Effect of Dam operation on monthly and annual trends of flow discharge in the Qom Rood Watershed, Iran. *Journal of Hydrology*, *557*, 254-264.

17- Hazbavi, Z., Sadeghi, S. H., & **Gholamalifard, M.** (2018). Land cover based watershed health assessment. AGROFOR International Journal, 3(3), 47-55.

16- Joorabian Shooshtari, S., Shayesteh, K., **Gholamalifard, M.,** Azari, M., Serrano-Notivoli, R., & López-Moreno, J. I. (2017). Impacts of future land cover and climate change on the water balance in northern Iran. *Hydrological Sciences Journal*, *62*(16), 2655-2673.

15- Aliakbari Beidakhti, Z., Jalili Ghazide, M., **Gholamalifard, M.** (2017). Environmental impact assessment of municipal solid waste disposal site using rapid impact assessment matrix (RIAM) analysis in Mashhad city, Iran. *Environmental Engineering and Management Journal*, Volume 16, Issue 10, 2361-2369.

14- Gholamalifard, M., Phillips, J., & Ghazizade, M. J. (2017). Evaluation of unmitigated options for municipal waste disposal site in Tehran, Iran using an integrated assessment approach. *Journal of environmental planning and management*, *60*(5), 792-820.

13- Phillips, J., & **Gholamalifard, M.** (2016). Quantitative evaluation of the sustainability or unsustainability of municipal solid waste options in Tabriz, Iran. *International journal of environmental science and technology*, *13*(6), 1615-1624.

12- Taheri, M., Riyahi Bakhtiari, A., Naimi, B., **Gholamalifard, M.,** Ketabforoush Badri, A., (2015). Mapping risk of metals (Pb and Cd) using a geostatistical approach in mangrove sediments of Persian Gulf–Iran. *International Journal of Chemical and Biomolecular Science*, Volume 1, Issue 4, 238-243.

11- Joorabian Shooshtari, Sh., **Gholamalifard, M.** (2015). Scenario-based land cover change modeling and its implications for landscape pattern analysis in the Neka watershed, Iran. *Remote Sensing Applications: Society and Environment*, Volume 1, 1-19.

10- Bihamta, N., Soffianian, A., Fakheran, S., **Gholamalifard, M.** (2015). Using the SLEUTH urban growth model to simulate future urban expansion of the Isfahan metropolitan area, Iran. *Journal of the Indian Society of Remote Sensing*, Volume 43, Issue 2, 407-414.

9- Taheri, M., **Gholamalifard, M.**, Jalili Ghazide, M., Rahimoghli, Sh. (2014). Environmental impact assessment (EIA) of municipal solid waste disposal site in Tabriz, Iran using rapid impact assessment matrix (RIAM). *Impact Assessment and Project Appraisal* (Journal of the International Association for Impact Assessment), Volume 32, Issue 2, 162-169.

8- **Gholamalifard, M.**, Esmaili-Sari, A., Abkar, A., Naimi, B. (2013). Bathymetric modeling from satellite imagery via single band algorithm (SBA) and principal components analysis (PCA) in southern Caspian sea. *International Journal of Environmental Research*, Volume 7, Number 4, 877-886.

7- **Gholamalifard, M.**, Esmaili-Sari, A., Abkar, A., Naimi, B., Kutser, T. (2013). Influence of vertical distribution of phytoplankton on remote sensing signal of case II waters: a southern Caspian sea case study. *Journal of Applied Remote Sensing*, Volume 7, Number 1, 073550-1-12.

6- **Gholamalifard, M.**, Kutser, T., Esmaili-Sari, A., Abkar, A., Naimi, B. (2013). Remotely sensed empirical modeling of bathymetry in the Souteastearn Caspian sea. *Remote Sensing*, Volume 5, Issue 6, 2746-2762.

5- **Gholamalifard, M.**, Zare-Maivan, H., Joorabian Shooshtari, Sh., Mirzaei, M. (2012). Monitoring land cover changes of coastal areas of northern Iran (1988-2010): A remote sensing approach. *Journal of the Persian Gulf (Marine Sciences)*, Volume 3, Number 10, 47-56.

4- Joorabian Shooshtari, Sh., Hosseini, S. M., Esmaili-Sari, A., **Gholamalifard, M.** (2012). Monitoring land cover change, degredation and restoration of the Hyrcanian forests in northern Iran (1977–2010). *International Journal of Environmental Sciences*, Volume 3, Issue 3, 1038-1056.

3- Salaman Mahiny, A. & **Gholamalifard, M.** (2011). Linking SLEUTH urban growth modeling to multi criteria evaluation for a dynamic allocation of sites to landfill. Book Chapter, Lecture Notes in Computer Science, Volume 6782, Pages 32-43.

2- Salman Mahini, A. & **Gholamalifard, M. (2007).** Dynamic spatial modeling of urban growth through cellular automata in a GIS environment. *International Journal of Environmental Research*, Volume 1, Number 3, 272-279.

1- Salman Mahini, A. & **Gholamalifard, M.** (2006). Siting MSW landfills with a weighted linear combination (WLC) methodology in a GIS environment. *International Journal of Environmental Science and Technology*, Volume 3, Number 4, 435-445.