



PERSONAL INFORMATION:

Full Name: Mohsen Hosseinalizadeh

Nationality: Iranian

Academic Level: Associate Professor

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EDUCATION:

University of Tehran, Iran (2007/2012) Ph.D. in Watershed Management Engineering

Dissertation: "Optimization of sampling patterns for spatial simulation of erosion"

Gorgan University of Agricultural Sciences and Natural Resources
(GUASNR), IRAN (2002-2005)

M.Sc. in Watershed Management Engineering

Thesis: "Soil Erosion Prediction Using Morgan-Morgan-Finney"

Yazd University, IRAN (1998-2002)

B.Sc. in Rangeland and Watershed Management Engineering

Watershed Management

RESEARCH INTEREST:

Soil Erosion, Spatial Statistic, UAV application in geo-hazards, Loess landscapes evolution

PUBLICATION:

Rivaz, F., **Hosseinalizadeh, M.**, Pebesma, E., 2014. Optimal network design for spatial prediction of soil redistribution (^{137}Cs) based on a minimax approach, Eurasian Journal of Soil Science 3, 33 – 41

2- **Hosseinalizadeh, M.**, Ahmadi, H., Feiznia, S., Rivaz, F., Naseri, S, Multivariate geostatistical analysis of fallout radionuclides activity measured by

- in-situ gamma-ray spectrometry: Case study: Loessial paired sub-catchments in northeast Iran, *Quaternary International*, 2017, Volume (429), 108-118.
- 3- Jafari, R., Sheikh, V., **Hosseinalizadeh, M.**, RezaiiMoghadam, H, Effect of Soil Sample Size on Saturated Soil Hydraulic Conductivity, *Communications in Soil Science and Plant Analysis Journal*, 2017, 908-919
- 4- **Hosseinalizadeh, M.**, Ahmadi, H., Feiznia, S., Rivaz, F., Naseri, S, Multivariate geostatistical analysis of fallout radionuclides activity measured by in-situ gamma-ray spectrometry: Case study: Loessial paired sub-catchments in northeast Iran, *Quaternary International*, 2017, Volume (429), 108-118
- 5- **Hosseinalizadeh, M.**, Kariminejad, N., Alinejad, M., & Mohammadian Behbahani, A. (2018). The spatial association between Halocnemum strobliaceum and Nebkas in North of Golestan Province, Iran. *Desert Ecosystem Engineering Journal*, 1(2), 55-66.
- 6- Roshanizarmehri, M.R., Fotovata, A., Emami, H., Kehl, M., Hirmas, D. R, **Hosseinalizadeh, M.**, Ramezanian, N, Combined effects of polyacrylamide and nanomagnetite amendment on soil, *Journal of Environmental Management*, 2018, Volume (223), 703-712
- 7- **Hosseinalizadeh, M.**, Kariminejad, N., Alinejad, M., An application of different summary statistics for modelling piping collapses and gully headcuts to evaluate their geomorphological interactions in Golestan Province, Iran, *Catena*, 2018, Volume (171), 613-621
- 8- **Hosseinalizadeh, M.**, Kariminejad, N., Campetella, G., Jalalifard, A.R., Alinejada, M, Spatial point pattern analysis of piping erosion in loess-derived soils in Golestan Province, Iran, *Geoderma*, 2018, Volume (328), 20-29
- 9- **Hosseinalizadeh, M.**, Kariminejad, N., Rahmati, O., Keesstra, S., Alinejad, M., Mohammadian Behbahani, A, How can statistical and artificial intelligence approaches predict piping erosion susceptibility?, *Science of the Total Environment*, 2019, Volume (646), 1554-1566
- 10- **Hosseinalizadeh, M.**, Kariminejad, N., Chen, W., Pourghasemi, H. R., Alinejad, M., Behbahani, A. M., & Tiefenbacher, J. P. (2019). Spatial modelling of gully headcuts using UAV data and four best-first decision classifier ensembles (BFTree, Bag-BFTree, RS-BFTree, and RF-BFTree). *Geomorphology*, 329, 184-193.
- 11- **Hosseinalizadeh, M.**, Kariminejad, N., Chen, W., Pourghasemi, H. R., Alinejad, M., Mohammadian Behbahani, A., & Tiefenbacher, J. P. (2019). Gully headcut susceptibility modeling using functional trees, naïve Bayes tree, and random forest models. *Geoderma*.
- 12- Kariminejad, N., **Hosseinalizadeh, M.**, Pourghasemi, H. R., Bernatek-Jakiel, A., Campetella, G., & Ownegh, M. (2019). Evaluation of factors affecting gully headcut location using summary statistics and the maximum entropy model: Golestan Province, NE Iran. *Science of the Total Environment*, 677, 281-298.
- 13- Kariminejad, N., **Hosseinalizadeh, M.**, Pourghasemi, H. R., Bernatek-Jakiel, A., & Alinejad, M (2019). GIS-based susceptibility assessment of the occurrence of gully headcuts and pipe collapses in a semi-arid environment: Golestan Province, NE Iran. *Land Degradation & Development*, 1-15.

- 14- Kariminejad, N., Rossi, M., **Hosseinalizadeh, M.**, Pourghasemi, H. R., & Santosh, M. (2020). Gully head modelling in Iranian Loess Plateau under different scenarios. *Catena*, 194, 104769
- 15- Kariminejad, N., **Hosseinalizadeh, M.**, Pourghasemi, H. R., Ownegh, M., Rossi, M., & Tiefenbacher, J. P. (2020). Optimizing collapsed pipes mapping: Effects of DEM spatial resolution. *Catena*, 187, 104344.
- 16- Kariminejad, N., **Hosseinalizadeh, M.**, Pourghasemi, H. R., Ownegh, M., Rossi, M., & Tiefenbacher, J. P. (2021). Change detection in piping, gully head forms, and mechanisms. *Catena*, 206, 105550.
- 17- Kariminejad, N., Shariati, M., **Hosseinalizadeh, M.**, Pourghasemi, H. R., & Maleki, S. (2022). Investigating geometrical characteristics of collapsed pipes and the changing role of driving factors. *Journal of Environmental Management*, 312, 114910.
- 18- Kariminejad, N., Pourghasemi, H. R., Maleki, S., & **Hosseinalizadeh, M.** (2022). Digital soil mapping and modeling in Loess-derived soils of Iranian Loess Plateau. *Geocarto International*, 1-19.
- 19- Kariminejad, N., Pourghasemi, H.R. & **Hosseinalizadeh, M.** (2022). Analytical techniques for mapping multi-hazard with geo-environmental modeling approaches and UAV images. *Sci Rep* **12**, 14946 (2022). <https://doi.org/10.1038/s41598-022-18757-w>
- 20- Bahremand, A., & **Hosseinalizadeh, M.** (2022). Development of conceptual hydrological FLEX-Topo model for loess watersheds influenced by piping and tunnel erosion in Golestan Province of Iran. *Journal of Water and Soil Conservation*, 29(1), 115-133.
- 21- Koozehgar Kaleji, M., Kazemi, H., Kamkar, B., Amirnejad, H., & **Hosseinalizadeh, M.** (2023). Evaluation, quantification, and mapping of ecosystem services in canola agroecosystems. *Landscape and Ecological Engineering*, 1-23.
- 22- Khermandar, K., **Hosseinalizadeh, M.**, Mahdavi, A., Mohammadian Behbahani, A., & Yeganeh, H. (2023). Ecological restoration of polluted soils in arid region (Case study: bauxite crusher of Jajarm alumina). *Desert Management*.

ACADEMIC TEACHING EXPERIENCE:

GUASNR, IRAN

Ph.D.: Geostatistic, Soil & Water Bioengineering.

M.Sc.: Soil Erosion Modeling, Soil & Water in Arid Zone, Desert Biodiversity, Soil Bioengineering.

B.Sc.: Soil & water conservation, Soil & Water Conservation Structures, Meteorology: Weather and Climatology.

- Supervision of students' theses:
- Supervised 10 MSc theses
- Supervised 4 PhD theses

AWARDS:

9 month- scholarship as sabbatical student (University of Munster). awarded by the Ministry of Science and Technology of Iran (2010-2011).

LANGUAGES: Persian, English (academic language).



*Gorgan University of Agricultural
Sciences & Natural Resources*