PERSONAL INFORMATION Ebrahim Ghaderpour

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- www.researchgate.net/profile/Ebrahim-Ghaderpour
- www.github.com/Ghaderpour/
- in www.linkedin.com/in/ebrahim-ghaderpour-ph-d-47973991
- D ORCID 0000-0002-5165-1773

WORK EXPERIENCE

May 2020 - present Founder and CEO

Earth and Space Inc., Canada

- Preparing proposals and prototypes
- Training and supervising data scientists
- Developing novel data analytics techniques for processing Earth observation data

June 2022 – present Assistant Professor in Remote Sensing for Engineering Geology

Department of Earth Sciences - Sapienza University of Rome, Italy

- Trained and supervised graduate students and researchers
- Developed and delivered courses on data analytics applied to geophysics and geology
- Worked on ground deformation processes through remote sensing techniques
- Analyzed remote sensing and Radar data for monitoring landslides and cultural heritage

June 2021 - May 2022 Postdoctoral Associate

Department of Geomatics Engineering, University of Calgary, Canada

- Conducted research in the areas of hydrology and climate change
- Prepared proposals and reports for grant applications
- Provided technical support to the graduate students

September 2016 – April 2022

Sessional Instructor

Department of Mathematics and Statistics, University of Calgary, Canada

- Designed and delivered 12 undergraduate courses
- Developed digital learning materials and exams
- Supervised teaching assistants

January 2021 - April 2022

Sessional Instructor

Department of Mathematics and Computer Science, University of Lethbridge, Canada

- Taught three undergraduate courses
- Prepared lectures, videos, labs, assignments, and exams

September 2019 - April 2020

Research Associate

University of Calgary and Alberta Environment and Parks, Canada

- Developed a software package to compute climate indices
- Investigated the relationship between climate and water flow in Alberta
- Trained graduate students and government employees

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July 2016 – July 2018 Postdoctoral Scholar

Department of Mathematics and Statistics, University of Calgary, Canada

- Proposed novel methods of seismic data regularization
- Trained graduate students for seismic data processing

May 2016 – April 2019 Remote Sensing Scientist

Farmers Edge Inc., Canada

- Developed code and proposed robust methods for management zone delineation, crop disease forecasting, and cloud-shadow detection
- Conducted field survey and trained several employees at Farmers Edge

September 2013 – April 2016 Research and Teaching Assistant

Department of Earth and Space Science and Engineering, York University, Canada

- Proposed robust methods of analysing unequally sampled time series
- Analysed gravity, global positioning system, interferometry, and astronomical time series
- Taught many engineering, data science, and environmental courses as a teaching assistant

September 2010 - August 2013 Research and Teaching Assistant

Department of Mathematics and Computer Science, University of Lethbridge, Canada

- Introduced signed group orthogonal designs and improved some results for the existence of orthogonal designs and Hadamard matrices of certain orders
- Proved the Hamiltonicity of Cayley graphs of certain orders
- Taught many mathematics and computational courses as a teaching assistant

FDUCATION AND TRAINING

October 2018 Doctor of Philosophy | Data Analytics - Earth Sciences

Exceptional Dissertation Entitled: "Least-Squares Wavelet Analysis and Its Applications in Geodesy and Geophysics"

York University, Canada

October 2024 Course Certificate

Indigenous Canada, University of Alberta, Canada

Link https://coursera.org/verify/343HBBW04T4W

September 2016 Teaching Certificate

Taylor Institute for Teaching and Learning, University of Calgary, Canada

May 2014 Doctor of Philosophy | Theoretical and Computational Science

Dissertation Title: "Asymptotic Existence of Orthogonal Designs"

University of Lethbridge, Canada

January 2010 Master of Science | Mathematics

Dissertation Title: "Polynomial Numerical Hull for Operators on Hilbert Spaces" Isfahan University of Technology, Iran

January 2007 Bachelor of Science | Applied Mathematics

University of Isfahan, Iran

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HONOURS AND AWARDS 2022 - 2025 Listed among the World's Top 2% Scientists (Stanford University & Elsevier List) 2024 Best Paper Award from International Journal of Applied Earth Observation and Geoinformation 2019 York University Distinguished Scholar Prize 2015 Best Paper Award in Geodesy from the Canadian Geophysical Union 2015 Best Presentation Award from York University 2013 - 2015 York Graduate Scholarships and Awards from York University 2013 - 2015 Top Student at Department of Earth and Space Science and Engineering, York University 2010 - 2013 Advantage and Admission Awards from the University of Lethbridge 2010 - 2012 Top Student at the Department of Mathematics and Computer Science, University of Lethbridge 2003 – 2010 On the Dean's Honour List Every Semester PROFESSIONAL QUALIFICATION Italian National Scientific Qualification (Abilitazione Scientifica Nazionale): Associate Professor 2024 - 2035(04/A3 – Applied Geology, Physical Geography, and Geomorphology) **SKILLS** Languages Farsi (native), English (professional), Italian (intermediate), Arabic (basic) Technical skills - Programming: Python, MATLAB, C++, R, Java, Maple - GIS & Remote Sensing: QGIS, ArcGIS, Google Earth Engine - Data Processing: Machine Learning, Signal and Time Series Analysis Documentation: Latex, Photoshop, Microsoft Office Suite (Excel, Word, PowerPoint) Other skills/hobbies Biking, Bodybuilding, Driving, Hiking, Painting, Ping Pong, Soccer, Tennis **PUBLICATIONS**

Please refer to the following websites for the complete list of my publications, including **98** papers indexed in the Web of Science:

- Web of Science: https://www.webofscience.com/wos/author/record/2137751
- **Scopus:** https://www.scopus.com/authid/detail.uri?authorId=55356304800
- Researchgate: www.researchgate.net/profile/Ebrahim-Ghaderpour
- Google Scholar: https://scholar.google.com/citations?user=0C7H1nwAAAAJ
- ORCID: www.orcid.org/0000-0002-5165-1773
- As of October 2025, I have an h-index of 30 (based on Scopus and Web of Science), reflecting publications in top-tier journals where I served as first and/or corresponding author.
 I have been recognized among the World's Top 2% Scientists by Stanford University and Elsevier (2022–2025) in the subfield of Geological and Geomatics Engineering.

Table 1: The summary of my publications and presentations.

Publications & Presentations	-	Total Count
Peer-Reviewed Journal Articles		92
Book Chapters		2
Conference Papers & Proceedings		5
Patents		1
Technical Reports		6
Oral Presentations and Posters		32
Journal Articles (Under Review/Revision)		10
	Grand Total	148

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NOTE: In the following lists * means the corresponding author.

Peer-Reviewed Journal Articles

- [1] Rezvan, H.; Valadan Zoej, M.J.*; Hassanpour, G.; Youssefi, F.; Hanafi-Bojd, A.A.; **Ghaderpour, E.*** A Two-steps Remote Sensing and Machine Learning Framework for Predicting Malaria Prone Areas by Mapping Anopheles Larval Habitats. *Earth Systems and Environment*, 2025, doi: 10.1007/s41748-025-00865-y.
- [2] Kardan, N.; Motamadnia, A.; **Ghaderpour, E.***; Mazzanti, P. Employing Advanced Optimization Algorithms to Forecast the Depth of Scouring Downstream of Culvert Boxes. *Results in Engineering*, 2025, 28, 107482.
- [3] Aliabad, F.A.; **Ghaderpour, E.***; Zare, M.; Bozzano, F. A novel remote sensing approach for estimating soil temperature at depth. *Ecological Informatics*, 2025, 91, 103432.
- [4] Rezvan, H.; Valadan Zoej, M.J.*; Youssefi, F.; **Ghaderpour, E.*** Automated Rice Seedling Segmentation and Unsupervised Health Assessment Using Segment Anything Model with Multi-Modal Feature Analysis. *Sensors*, 2025, 25, 5546.
- [5] Dadkhah, H.*; Rana, D.; **Ghaderpour, E.***; Mazzanti, P. Analyzing wildfire patterns and climate interactions in Campania, Italy: A multi-sensor remote sensing study. *Ecological Informatics*, 2025, 90, 103249.
- [6] **Ghaderpour, E.***; Bozzano, F.; Scarascia Mugnozza, G.; Mazzanti, P. Analyses of MODIS Land Cover/Use and Wildfires in Italian Regions Since 2001. *Land*, 2025, 14, 1443.
- [7] Ahmadi, P.; Valadan Zoej, M.J.*; Mokhtarzade, M.; Kardan Halvaie, N.; **Ghaderpour, E.*** A capsule network framework for flood mapping integrating remote sensing fusion techniques. *Environmental Research Communications*, 2025, 7, 065031.
- [8] Haghighi Gashti, E.; Bahiraei, H.; Valadan Zoej, M.J.*; **Ghaderpour, E.*** Fusion of Aerial and Satellite Images for Automatic Extraction of Building Footprint Information Using Deep Neural Networks. *Information*, 2025, 16, 380.
- [9] Ghaderpour, E.*; Mineo, S.; Meisina, C.; Pedretti, L.; Scarascia Mugnozza, G.; Pappalardo, G. InSAR-Based Monitoring of Ground Deformation in Industrial Areas and Its Relationship with Climate and Groundwater. PFG – Journal of Photogrammetry, Remote Sensing and Geoinformation Science, 2025, doi: 10.1007/s41064-025-00350-1.
- [10] Jannati, H.; Zoej, M.J.V.; Ghaderpour, E.*; Mazzanti, P. Dense Matching with Low Computational Complexity for Disparity Estimation in the Radargrammetric Approach of SAR Intensity Images. Remote Sensing, 2025, 17, 2693.
- [11] Parto Dezfooli, F.; Valadan Zoej, M.J.*; Youssefi F.; **Ghaderpour, E.*** Integrating remote sensing, GIS, and machine learning for zoonotic cutaneous leishmaniasis modelling. *Environmental Research Communications*, 2025, 7, 085017.
- [12] Mai, V.T.; Jani, F.; Alattas, K.A.; **Ghaderpour, E.***; Mohammadzadeh, A.* A Robust Finite-Time Fault-Tolerant Tracking Control for Quadrotor Attitude System With Stochastic Actuator Faults and Input Delays. *IEEE Access*, 2025, 13, 64627-64637.
- [13] Yan, S.-R.; Guo, W.; Alattas, K.A.; Shakibjoo, A.D.; **Ghaderpour, E.***; Mohammadzadeh, A.* Type-3 Fuzzy Online Modeling and Robust Comprehensive Control and Energy Management of Variable Speed Wind Turbines. *International Journal of Energy Research*, 2025, 7746281.
- [14] Mai, V.T.; Mohammadzadeh, A.*; Alattas, K.A.; Taghavifar, H.; Ghaderpour, E.* Cybersecurity in maritime power systems: A comprehensive review of cyber threats and mitigation techniques. *Electric Power Systems Research*, 2025, 247, 111797.
- [15] Santhosh, K.; Dev, P.P. Jose A, B.; Lynton, Z.; Das, P.*; **Ghaderpour, E.*** A modified Gray Wolf Optimization algorithm for early detection of Parkinson's Disease. *Biomedical Signal Processing and Control*, 2025, 109, 108061.
- [16] Su, L.; Alattas, K.A.; Ayadi, W.; Lynton, Z.; Ghaderpour, E.*; Mohammadzadeh, A.*; Zhang, C.* A novel fuzzy reinforcement learning approach for personalization deep brain stimulation with communication delay. *Biomedical Signal Processing and Control*, 2025, 106, 107736.
- [17] Tian, M.-W.; Zhu, L.; Sabzalian, M.H.; Tavoosi, J.; Sarvenoee, A.K.; D'Urso, P.; Ghaderpour, E.*; Mohammadzadeh, A.* A Type-3 Fuzzy-Based Model Predictive Control Approach for Management of Constant Energy. Energy Science & Engineering,, 2025, 13, 2647–2662.
- [18] Roy, S.K.; Jamali, A.; Chanussot, J.; Ghamisi, P.; **Ghaderpour, E.**; Shahabi, H.* SimPoolFormer: A Two-Stream Vision Transformer for Hyperspectral Image Classification. *Remote Sensing Applications: Society and Environment*, 2025, 37, 101478.
- [19] Yan, S.-Y.; Nadershahi, M.; Guo, W.; **Ghaderpour, E.***; Mohammadzadeh, A.* A Multi-Objective Decision-Making Neural Network: Effective Structure and Learning Method. *Concurrency and Computation: Practice and Experience*, 2025, 37, e70031.
- [20] Adhikari, S.; Choudhury, N.; Bhattacharya, S.; Deb, N.; Das, D.; Ghosh, R.; Phadikar, S.; **Ghaderpour, E.*** Analysis of frequency domain features for the classification of evoked emotions using EEG signals. *Experimental Brain Research*, 2025, 243, 65.
- [21] Arabi Aliabad, F.; **Ghaderpour, E.*** Modeling Soil Heat Flux from MODIS Products for Arid Regions. *Ecological Informatics*, 2025, 86, 103005.
- [22] Entezami, H.; Mojarrad, F.*; Darand, M.; Ghaderpour, E.* Trend Analysis of Snow Cover Changes Using Statistical Downscaling Model and Climate Scenarios in Sefid-Rud Basin (Iran). Italian Journal of Engineering Geology and Environment, 2025, 2, 77–86.

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- [23] Entezami, H.; Mojarrad, F.*; Shahabi, H.; **Ghaderpour, E.*** Spatiotemporal Variability in Snow and Land Cover in Sefid-Rud Basin, Iran. *Sustainability*, 2024, 16, 9381.
- [24] Arabi Aliabad, F.; **Ghaderpour, E.***; Mazidi, A.; Houshmandzade, F. Gap-filling of land surface temperature in arid regions by combining Landsat 8 and 9 imageries. *Environmental Research Communications*, 2024, 6, 105037.
- [25] Xue, W; Zhou, B.; Chen, F; **Ghaderpour, E.***; Mohammadzadeh, A.* Design of a robust intelligent controller based neural network for trajectory tracking of high-speed wheeled robots. *Physica Scripta*, 2024, 99, 115023.
- [26] Esmaeeli, R.; Valadan Zoej, M.J.; Safdarinezhad, A.*; **Ghaderpour, E.*** Recognition and Scoring Physical Exercises via Temporal and Relative Analysis of Skeleton Nodes Extracted from the Kinect Sensor. *Sensors*, 2024, 24, 6713.
- [27] Arabi Aliabad, F.; Zare, M.; Ghafarian Malairia, H.; Pouriyeh, A.; Shahabi, H.; **Ghaderpour, E.***; Mazzanti, P. Reconstructing Daytime and Nighttime MODIS Land Surface Temperature in Desert Areas Using Multi-Channel Singular Spectrum Analysis. *Ecological Informatics*, 2024, 83, 102830.
- [28] Zhou, X.; Dai, Y; **Ghaderpour, E.***; Mohammadzadeh, A; D'Urso, P. A Novel Intelligent Control of Discrete-Time Nonlinear Systems in the Presence of Output Saturation. *Heliyon*, 2024, 10, e38279.
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- [31] Zhou, A.; Zhu, Z.*; **Ghaderpour, E.***.; Shakibjoo, A.D.; Taghavifar, H.; Mohammadzadeh, A.*; Zhang, C.* Fault Detection and Isolation in Wind Turbines: Type-3 Fuzzy Logic Systems and Adaptive Random Search Learning. *IEEE Access*, 2024, 12, 129347–129361.
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- [33] Majnoun Hosseini, M.; Valadan Zoej, M.J.*; Taheri Dehkordi, A.; **Ghaderpour, E.*** Cropping Intensity Mapping in Sentinel-2 and Landsat-8/9 Remote Sensing Data Using Temporal Transfer of a Stacked Ensemble Machine Learning Model Within Google Earth Engine. *Geocarto International*, 2024, 39, 2387786.
- [34] Zhuang, J.; Wang, C.; Cheng, Q.; **Ghaderpour, E.***; Mohammadzadeh, A. Stabilizing Electric Vehicle Systems Using Proximal Policy-Based Self-Structuring Control. *International Journal of Automotive Technology*, 2024, 25, 1485–1502.
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- [37] Yan, S.R.; Dai, Y.; Shakibjoo, A.D.; Zhu, L.; Taghizadehd, S.; **Ghaderpour, E.***; Mohammadzadeh, A.* A Fractional-Order Multiple-Model Type-2 Fuzzy Control for Interconnected Power Systems Incorporating Renewable Energies and Demand Response. *Energy Reports*, 2024, 12, 187–196.
- [38] Yan, S.R.; Mohammadzadeh, A.*; **Ghaderpour, E.*** Type-3 Fuzzy Logic and Lyapunov Approach for Dynamic Modeling and Analysis of Financial Markets, *Heliyon*, 2024, 10, e33730.
- [39] Mai, V.T.*; Alattas, K.A.; Bouteraa, Y; **Ghaderpour, E.***; Mohammadzadeh, A.* Personalized Blood Pressure Control by Machine Learning for Remote Patient Monitoring, *IEEE Access*, 2024, 12, 83994–84004.
- [40] **Ghaderpour, E.***; Mazzanti, P.; Bozzano, F.; Scarascia Mugnozza, G. Trend Analysis of MODIS Land Surface Temperature and Land Cover in Central Italy. *Land*, 2024, 13, 796.
- [41] **Ghaderpour, E.***; Bozzano, F.; Scarascia Mugnozza, G.; Mazzanti, P. Ground Deformation Monitoring via PS-InSAR Time Series: An Industrial Zone in Sacco River Valley, Central Italy, *Remote Sensing Applications: Society and Environment*, 2024, 34, 101191.
- [42] Arabi Aliabad, F.; **Ghaderpour, E.***; Zare, M.; Ghafarian Malamiri, H. A Comparative Study of Estimating Hourly Images of MODIS Land Surface Temperature Using Diurnal Temperature Cycle Models in Arid Regions, *IEEE Access*, 2024, 12, 44858–44872.
- [43] **Ghaderpour, E.***; Antonielli, B.; Bozzano, F.; Scarascia Mugnozza, G.; Mazzanti, P. A Fast and Robust Method for Detecting Trend Turning Points in InSAR Displacement Time Series, *Computers & Geosciences*, 2024, 185, 105546.
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- [45] Abdali, E.; Valadan Zoej, M.J.; Taheri Dehkordi, A.; **Ghaderpour, E.*** A Parallel-Cascaded Ensemble of Machine Learning Models for Crop Type Classification in Google Earth Engine Using Multi-Temporal Sentinel-1/2 and Landsat-8/9 Remote Sensing Data, *Remote Sensing*, 2024, 16, 127.
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- [51] Arabi Aliabad, F.; Ghafarian Malmiri, H.; Sarsangi, A.; Sekertekin, A.; **Ghaderpour, E.*** Identifying and Monitoring Gardens in Urban Areas Using Aerial and Satellite Imagery. *Remote Sensing*, 2023, 12, 4053.
- [52] Bie, H.; Li, P.*; Chen, F.; **Ghaderpour, E.*** An Observer-Based Type-3 Fuzzy Control for Non-Holonomic Wheeled Robots. *Symmetry*, 2023, 15, 1354.
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- [60] Grobbelaar, M.; Phadikar, S.*; **Ghaderpour, E.**; Struck, A.F.; Sinha, N.; Ghosh, R.; Ahmed, M.Z.I. A Survey on Denoising Techniques of Electroencephalogram Signals Using Wavelet Transform. *Signals*, 2022, 3, 577–586.
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- [2] **Ghaderpour, E.***; Antonielli, B.; Bozzano, F.; Scarascia Mugnozza, G.; Mazzanti, P. Detecting Trend Turning Points in PS-InSAR Time Series: Slow-Moving Landslides in Province of Frosinone, Italy, *Engineering Proceedings*, 2024, 68, 12.
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- [1] **Ghaderpour, E.***; Bozzano, F.; Scarascia Mugnozza, G.; Mazzanti, P. Trend Analysis of MODIS Land Cover/Use for Italian Regions, The 11th International conference on Time Series and Forecasting (ITISE), Gran Canaria, Spain. (Oral)
- [2] **Ghaderpour, E.** Climate and Land Cover Monitoring Through Earth Observation Data and Advanced Data Analytics Methods, Department of Computer Science, University of Calgary, 30 August 2024. (Oral)
- [3] Dadkhah, H.; Rana, D.*; Mastrantoni, G.; **Ghaderpour, E.**; Mazzanti, P. Subsidence risk assessment for enhancing urban infrastructure sustainability: A case study in Ravenna, Italy, URBIS24 URBan Insights from Space, Frascati, Italy, 16–18 September 2024 (Oral)
- [4] Ghaderpour, E.*; Antonielli, B.; Bozzano, F.; Scarascia Mugnozza, G.; Mazzanti, P. Detecting Trend Turning Points in PS-InSAR Time Series: Slow-Moving Landslides in Province of Frosinone, Italy. The 10th International conference on Time Series and Forecasting (ITISE), Gran Canaria, Spain. (Oral)

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- [5] Dadkhah, H.*; Rana, D.; Ghaderpour, E.; Ferrarotti, M.; Mazzanti, P. A Multi-Sensor Approach to Assessing Wildfire-Induced Landslide Risk: A Case Study of Ischia Island, Italy, International Geoscience and Remote Sensing Symposium (IGARSS), Athens, Greece, 7–12 July 2024. (Oral)
- [6] Dellino, P.; Esposito, C.; Freni, G.; Ghaderpour, E.; Lazzari, P.; Marani, M.; Montanari, A.; Marzocchi, W.*; Ongaro, M; Reale, M.; Struglia, M.V. A new perspective for multirisk assessment under multiuncertainty (Abstract). Workshop RETURN Torino, 1-2 February 2024. (Poster & Abstract)
- [7] Ferrarotti, M.*; Marmoni, G.M.; Fiorucci, M.; Rana, D.; Dadkhah, H.; **Ghaderpour, E.**; Esposito, C.; Mazzanti, P.; Mugnozza, G.S.; Lombardi, M.; Berardi, D.; Lei, A.; Di Martire, D.; Chicco, J.M.; Mandrone, G.; Martino, S. The preparatory role of natural and anthropogenic wildfires on the occurrence of shallow landslides and their territorial distribution in view of effect scenarios conditioned by the temporal distance from fire events (Abstract and Poster). Workshop RETURN Torino, 1-2 February 2024. (Poster & Abstract)
- [8] Nava, L.*; Catani, F.; Rosi, A.; Bhuyan, K.; Tufano, R.; Bausilio, G.; Confuorto, P.; **Ghaderpour, E.**; Di Martire, D. Machine learning approaches for the assessment of ground instabilities. An overview of Return VS2 approach against existing literature (Abstract and Poster). Workshop RETURN Torino, 1-2 February 2024. (Poster & Abstract)
- [9] Kumar, P.; Das, P.*; **Ghaderpour, E.** Decomposed and Hybridized deep learning models: An application to stock price prediction, 2023 International Conference on Modeling, Simulation & Intelligent Computing (MoSICom), Dubai, United Arab Emirates, 2023. (Oral)
- [10] Garuda, N.; Prasad, G.; Dev, P.P.; Das, P.*; **Ghaderpour, E.** CNNViT: A robust deep neural network for video anomaly detection, December 2023. IEEE ICDSIS 2023, Dubai. (Oral)
- [11] **Ghaderpour, E.***; Pagiatakis, S.; Scarascia Mugnozza, G.; Mazzanti, P., September 2023. GNSS Time Series Analysis by the Least-Squares Wavelet Analysis: Case of Roma, Remote Sesning Workshop, Sapienza University of Rome, Italy. (Oral)
- [12] **Ghaderpour, E.***; Bozzano, F.; Scarascia Mugnozza, G.; Mazzanti, P., November 2023. Detecting Trend Changes in Persistent Scatterer Interferometry Displacement Time Series: A Comparative Study and Application in Landslide Detection, The 6th World Landslide Forum, Florence, Italy. (Oral)
- [13] **Ghaderpour, E.***; Dadkhah, H.; Dabiri, H.; Bozzano, F.; Scarascia Mugnozza, G.; Mazzanti, P., July 2023. Precipitation Time Series Analysis and Forecasting for Italian Regions. The 9th International conference on Time Series and Forecasting (ITISE), Gran Canaria, Spain. (Oral)
- [14] **Ghaderpour, E.***, May 2023. Postfire landslide monitoring in central Italy via Earth observation data. Geosciences Colloquium, Sapienza University of Rome, Italy. (Oral)
- [15] **Ghaderpour, E.***, August 2022. Time series analysis and its applications, Brunch Talk, NHAZCA, a spin-off company of Sapienza University of Rome. Italy. (Oral)
- [16] **Ghaderpour, E.***; Masciulli, C.; Zocchi, M.; Marini, R.; Mastrantoni, G.; Reame, F.; Pantozzi, G.; Belcecchi, N.; Scarascia Mugnozza, G.; Mazzanti, P., June 2022. Least-Squares Wavelet Analysis of Rainfalls and Landslide Displacement Time Series Derived by PS-InSAR. The 8th International conference on Time Series and Forecasting (ITISE), Gran Canaria, Spain. (Oral)
- [17] **Ghaderpour, E.***, April 2021. Least-squares spectral and wavelet analyses and their applications in geodesy and geophysics, Colloquium Series 2020-2021, Department of Mathematics and Statistics, University of Calgary, Canada. (Oral)
- [18] Ghaderpour, E.*, March 2020. Chapter 9: Convolutional Network, Review of "Deep Learning" book by I. Goodfellow, Y. Benjio, and A. Courville, Lunch at the Lab Mathematical Finance Seminar Series, Department of Mathematics and Statistics, University of Calgary, Canada. (Oral)
- [19] **Ghaderpour, E.***; Ben Abbes, A.; Rhif, M.; Pagiatakis, S. D.; Farah, I. R., July 2019. Non-stationary and unequally spaced NDVI time series analyses by the LSWAVE software, International Union of Geodesy and Geophysics, Montreal, Canada. (Oral)
- [20] **Ghaderpour, E.***, July 2019. Time-varying Visualization with a Single Image Summary, Department of Computer Science, University of Calgary, Canada. (Oral)
- [21] **Ghaderpour, E.***, February 2019. Geoid and its applications, Department of Computer Science, University of Calgary, Canada. (Oral)
- [22] **Ghaderpour, E.***, March 2018. Multichannel antileakage least-squares spectral analysis for seismic data regularization beyond aliasing, Diversification Trends in Engineering Technology and Applied sciences (DTETA), Tokyo, Japan. (Oral)
- [23] **Ghaderpour, E.**; Ince, E. S.*, and Pagiatakis, S. D., March 2018. Least-squares wavelet analysis and its applications in geodetic and geophysical time series analyses, European Geosciences Union General Assembly, Vienna, Austria. (Poster)
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- [27] Abd El-Gelil, M.*; **Ghaderpour, E.**; Pagiatakis S. D., June 2016. The potential of the least-squares wavelet analysis for estimating the time-frequency transfer function of atmospheric variations effect of superconducting gravity data. The 18th international symposium on the Geodynamics and Earth Tide, Trieste, Italy. (Oral)
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- [29] Ghaderpour, E.*; Pagiatakis S. D., May 2015. Least-squares wavelet analysis, Canadian Geophysical Union, Montreal, Canada. (Oral)
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- [31] **Ghaderpour, E.***, 2013. The asymptotic existence of orthogonal design. Number Theory and Combinatorics, University of Lethbridge, Canada. (Oral)
- [32] Ghaderpour, E.*, 2012. Bounds for systems of lines, University of Lethbridge, Canada. (Oral)

Journal Articles - Under-Review/Revision

- [1] Vegetation Segmentation in Photogrammetric 3D Point Cloud Data for Remote Sensing Applications
- [2] Neural Network-Based Framework for Risk Mapping of Zoonotic Cutaneous Leishmaniasis Using Remote Sensing and Geographic Information System
- [3] Robust Personalization Artificial Pancreas System for Blood Glucose Control of Diabetes Patients Using Proximal Policy Optimization
- [4] NeuroFeat: An Adaptive Neurological EEG Feature Engineering Approach for Improved Classification of Major Depressive Disorder
- [5] Monitoring slow-moving landslides through PS-InSAR and Antecedent Precipitation Index: A case study of Petacciato, Italy
- [6] Geological knowledge and land use: key drivers in determining natural background levels of groundwater contaminants arsenic, radon, and fluoride
- [7] Spatiotemporal Analysis of Terrestrial Water Storage and Water Availability and Their Coherency with Hydroclimatic Variables in the Middle East
- [8] Dynamic Batch Size Adjuster with Real-Time Adaptation for Deep Learning Optimization
- [9] An unsupervised domain adaptation approach for remote sensing scene classification using adaptive incremental density-based clustering and multi-objective optimization
- [10] Empirical Modeling of Salinity Intrusion Length in Alluvial Estuaries at High Water Slack

TEACHING EXPERIENCE	
Instructor	Department of Earth Sciences, Sapienza University of Rome, Italy
2022, 2023, 2024	Data Analytics for Earth Sciences (graduate course: PhD)
Sessional Instructor	Department of Mathematics and Statistics, University of Calgary, Canada
Winter 2022	Introduction to Statistics I (undergraduate course)
Falls 2017, 2020, 2021	Differential Equations for Engineers and Scientists (undergraduate course)
Winter 2021	Linear Methods I (undergraduate course)
Winter 2021	Mathematical Methods: Signal Processing (undergraduate course)
Winters 2017, 2020	Multivariable Calculus for Engineering and Scientists (undergraduate course)
Fall 2019	Calculus III (undergraduate course)
Falls 2016, 2017, 2019	Calculus I (undergraduate course)
Sessional Instructor	Department of Math and Computer Science, University of Lethbridge, Canada
Fall 2021, Winter 2022	Calculus for Management and Social Sciences (undergraduate course)
Winter 2021	Calculus II (undergraduate course)

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Teaching Assistant Department of Earth and Space Science and Engineering, York University, Canada

Winter 2016 Electricity, Magnetism, and Optics for Engineers (undergraduate course)

Falls 2013, 2014, Winter 2016 Earth Environment (undergraduate course)

Fall 2014, Winter 2015 Adjustment Calculus (undergraduate course)

Winter 2014 Continuum Mechanics (undergraduate course)

Summer 2014 The History of Astronomy (undergraduate course)

SERVICES

Editor Editorial duties:

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- Advances in Time Series Analysis in Sensors (MDPI): www.mdpi.com/journal/sensors/ special_issues/A_TSA

Chairman – Program Committee

The 8th, 9th, 10th, and 11th International conference on Time Series and Forecasting (ITISE)

Reviewer

Peer-reviewed over 1000 articles for various journals and publishers. A list of the verified reviews is available at https://www.webofscience.com/wos/author/record/2137751

Memberships

European Geophysical Union (EGU), Canadian Geophysical Union (CGU), International Union of Geodesy and Geophysics (IUGG), and Calgary Tesla Society (Nikola Tesla)

Supervision

Trained and supervised many researchers and students on the areas of big data analytics, remote sensing and engineering

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