Meysam Majidi Nezhad

PhD	***Engineering of Energy and Environment***. Department of Astronautics, Electrical and Energy Engineering (DIAEE). Sapienza University of Rome, Italy. Thesis: "*Renewable Energy Source Assessment Using Remote Sensing Techniques and Studies for Off-grid System*" Oct 2016 – Feb 2020. Supervisor: Prof. Fabrizio Cumo
M.Sc.	***Engineering of Natural Resources***. Faculty of Agriculture and Natural Resources. University Science and Research Branch, Tehran, Iran. Thesis title: "*Comparison Longitudinal Strain and Stress in Acer SPP and Quercus Castaneifolia C.A.M in West Mazandaran*" Sep 2010 - Feb 2013. Supervisor: Prof. Habibolah Khademi Eslam
B.Sc.	***Engineering of Natural Resources*** (Faculty of Agriculture and Natural Resources). Azad University Chalus, Iran Sep 2006 – Mar 2010.

Research Experiences

1. ***Postdoctoral researcher***, proposal award titled: "Renewable Energy Sources (RESs) assessment using Remote Sensing techniques". Department of Astronautics, Electrical and Energy Engineering (DIAEE), Sapienza University of Rome, Italy. Nov 2019 to present time.
2. ***European Project Researcher***, ODYSSEA "Operating a Network of Integrated Observatory Systems in the Mediterranean Sea", by prof. D. Astiaso Garcia. Department of Astronautics, Electrical and Energy Engineering (DIAEE), Sapienza University of Rome, Italy April 2019- September 2019.
3. ***Researcher,*** at GIS and Forest monitoring laboratory Azad University Science and Research Branch, Tehran, Iran (Nov 2012- Jan 2016).
4. ***Research Associate***, in Biomass laboratory of Azad University Science and Research Branch, Tehran, Iran (Apr 2012- Sep 2016).

List of publications

1. R. Syah, M. Rezaei, M. Elveny, **M. Majidi Nezhad**. Day-ahead electricity price forecasting using WPT, VMI, LSSVM-based self adaptive fuzzy kernel and modified HBMO algorithm. *Scientific Reports. https://doi.org/10.1038/s41598-021-96501-6*
2. **M. Majidi Nezhad** et al. A novel forecasting model for wind speed assessment using sentinel family satellites images and machine learning method. *Renewable Energy. https://doi.org/10.1016/j.renene.2021.08.013*
3. A. Razmjoo, P. Alberg Østergaard, M. Denaï, **M. Majidi Nezhad**, S. Mirjalili. effective policies to overcome barriers in the development of smart cities. Energy Research & Social Science. https://doi.org/10.1016/j.erss.2021.102175
4. E. Amini, R. Asadi, D. Golbaz, M. Nasiri, S. Taghi Omid Naeeni, **M. Majidi Nezhad** et al. Comparative Study of Oscillating Surge Wave Energy Converter Performance: A Case Study for Southern Coasts of the Caspian Sea. Sustainability.
5. M. Neshat, **M. Majidi Nezhad** et al. Wind turbine power output prediction using a new hybrid neuro-evolutionary method. Energy 201. 229, 120617. *https://doi.org/10.1016/j.energy.2021.120617*
6. A. Razmjoo, **M. Majidi Nezhad** et al. Investigating smart city development based on green buildings, electrical vehicles and feasible indicators. *Sustainability 2021, 13(14), 7808; https://doi.org/10.3390/su13147808*
7. M. Neshat, N. Sergiienko, S. Mirjalili, **M. Majidi Nezhad**, Multi-mode wave energy converter design optimisation using an improved moth flame optimisation algorithm. *Energies 2021, 14(13), 3737; https://doi.org/10.3390/en14133737*
8. **M. Majidi Nezhad** et al. A primary offshore wind farm site assessment using reanalysis data: a case study for Samothraki island. *Renewable Energy* 2021. 172, 667-679. https://doi.org/10.1016/j.renene.2021.03.045
9. **M. Majidi Nezhad** et al. A new methodology for offshore wind speed assessment integrating Sentinel-1, ERA-Interim and in-situ measurement. *Renewable Energy 2021, 172. 1301-1313. https://doi.org/10.1016/j.renene.2021.03.026*
10. N. Kokkos, M. Zoidou, K. Zachopoulos, **M. Majidi Nezhad** et al. Wind climate and wind power resource assessment based on gridded scatterometer data: A thracian sea case study. *Energies 2021, 14(12), 3448; https://doi.org/10.3390/en14123448*
11. A. Heydari, **M. Majidi Nezhad** et al. A combined fuzzy gmdh neural network and grey wolf optimization application for wind turbine power production forecasting considering scada data. *Energies 2021, 14(12), 3459; https://doi.org/10.3390/en14123459*
12. M. Neshat, **M. Majidi Nezhad** et al. A deep learning-based evolutionary model for short-term wind speed forecasting: A case study of the Lillgrund offshore wind farm. *Energy Conversion and Management 2021. 236, 114002. https://doi.org/10.1016/j.enconman.2021.114002*
13. E. Amini, **M. Majidi Nezhad** et al, A Comparative Study of Metaheuristic Algorithms for Wave Energy Converter Power Take-Off Optimisation: A Case Study for Eastern Australia, *J. Mar. Sci. Eng.2021,9, 490. https://doi.org/10.3390/jmse9050490*
14. A. Heydari, **M. Majidi Nezhad** et al. Air pollution forecasting application based on deep learning model and optimization algorithm. Clean Technologies and Environmental Policy. *https://doi.org/10.1007/s10098-021-02080-5*
15. A. Heydari, **M. Majidi Nezhad** et al. Short-term electricity price and load forecasting in isolated power grids based on composite neural network and gravitational search optimization algorithm. *Applied Energy 277*

(2020) 115503. https://doi.org/10.1016/j.apenergy.2020.115503

16. E. Amini, D. Golbaz, F. Amini, **M.Majidi Nezhad**, M. Neshat, D.A. Garcia, *A* parametric study of wave energy converter layouts in real wave models, *Energies 2020, 13(22), 6095; https://doi.org/10.3390/en13226095*

17. **M. Majidi Nezhad** *et al.* A SWOT Analysis for Offshore Wind Energy Assessment Using Remote-Sensing Potential. *Appl. Sci. 2020, 10(18), 6398; https://doi.org/10.3390/app10186398*

18. M. Neshat, N.Y. Sergiienko, E. Amini, **M.Majidi Nezhad** *et al*, A new bi-level optimisation framework for optimising a multi-modewave energy converter design: A case study for the marettimo island, mediterranean sea. *Energies 2020, 13(20), 5498; https://doi.org/10.3390/en13205498*

19. M. Lamagna, B. Nastasi, D. Groppi, **M. Majidi Nezhad** & D. Astiaso Garcia. Hourly energy profile determination technique from monthly energy bills. *Build. Simul. (2020). https://doi.org/10.1007/s12273-020-0698-y*

20. **M. Majidi Nezhad** *et al*, Wind source potential assessment using Sentinel 1 satellite and a new forecasting model based on machine learning: A case study Sardinia islands. *Renewable Energy. 155 (2020) 212-224. https://doi.org/10.1016/j.renene.2020.03.148*

21. A. Razmjoo, N. Khalili, **M. Majidi Nezhad** *et al*, The main role of energy sustainability indicators on the water management. *Modeling Earth Systems and Environment. 2020. https://doi.org/10.1007/s40808-020-00758-1*

22. **M. Majidi Nezhad** *et al*, Wind energy potential analysis using Sentinel-1 satellite: A review and a case study on Mediterranean islands. *Renewable and Sustainable Energy Reviews 109 (2019) 499–513. https://doi.org/10.1016/j.rser.2019.04.059*

23. **M. Majidi Nezhad** *et al*. A Sediment Detection Analysis with Multi Sensor Satellites: Caspian Sea and Persian Gulf case studies. *Proceedings of the 4th World Congress on Civil, Structural, and Environmental Engineering (CSEE'19) Rome, Italy – April, 2019. Paper No. ICEPTP 159. DOI: 10.11159/iceptp19.159*

24. **M. Majidi Nezhad** *et al*. Land Cover Classification by using Sentinel-2 Images: A case study in the city of Rome. *Proceedings of the 4th World Congress on Civil, Structural, and Environmental Engineering (CSEE'19) Rome, Italy – April, 2019.Paper No. ICEPTP 158. DOI: 10.11159/iceptp19.158.*

25. **M. Majidi Nezhad** *et al*. Nearshore wave energy converters comparison and Mediterranean small island grid integration. *Sustainable Energy Technologies and Assessments. 30(2018)68-76. https://doi.org/10.1016/j.seta.2018.08.009*

26. D.Vijaykumar, **M. Majidi Nezhad,** G. Laneve. Land Cover Mapping Analysis Using Sentinel 1 Satellite: A Case Study of Hyderabad in INDIA. *The 5th International Symposium on Environment Friendly Energies and Applications (EFEA 2018). September 24-26 in Rome, Italy. DOI: 10.1109/EFEA.2018.8617099.*

27. **M. Majidi Nezhad** *et al*. Mapping Sea Water Surface in Persian Gulf, Oil Spill Detection Using Sentinel-1 Images. *4th World Congress on New Technologies (NewTech'18). Madrid, Spain, August 19-21, 2018. DOI: 10.11159/icepr18.179.*

28. **M. Majidi Nezhad** *et al*. Nearshore Wave Energy Assessment of Iranian Coastlines. *4th World Congress on New Technologies (NewTech'18). Madrid, Spain, August 19-21, 2018. DOI:10.11159/icepr18.180.*

29. **M. Majidi Nezhad et al**. Oil Spill Detection Analyzing "Sentinel 2" Satellite Images: A Persian Gulf Case Study. *3rd World Congress on Civil, Structural, and Environmental Engineering (CSEE'18). Budapest, Hungary – April 8 - 10, 2018. DOI: 10.11159/awspt18.134.*

Research Projects	1. **PRISMI Project (Interreg MED framework):** PRISMI project has been completed with success and the PRISMI international network has been successfully developed. It comprehends academic and research institutions and, public or private organizations, at local or national level, and specialized agencies, interested or involved in the conversation and sustainable energy planning of Mediterranean islands**.** *Web Site: https://prismi.interreg-med.eu/*
	2. **ODYSSEA Project (2020 framework):** The platform will collect its data from the many databases maintained by agencies, public authorities, and institutions of Mediterranean EU and non-EU countries, integrating existing earth observation facilities and networks in the Mediterranean Sea building on key initiatives such as Copernicus, GEOSS, GOOS, EMODNet, ESFRI, Lifewatch, Med-OBIS, GBIF, AquaMaps, Marine IBA e-atlas, MAPAMED**.** *Web Site:http://odysseaplatform.eu/*
Scientific Committee Member, Workshops and Special Issues	1. **Special Issue Editor,** "GIS and Remote Sensing for Renewable Energy Assessment and Maps". *Energies Journal.*https://www.mdpi.com/journal/energies/special_issues/GIS_remote_sensing_renewable_energy_assessment_maps
	2. **Journals Reviewer Board Members** of Remote Sensing and Sustainability Journals, MDPI
	3. **Scientific Committee**. 6th International Conference on Environmental Pollution, Treatment and Protection (ICEPTP'21). March 14, 2021 - March 16, 2021, London, England. https://2021.iceptp.com/scientific-committee/
	4. **Symposium & Workshop.** 5th International Conference on Environmental Pollution, Treatment and Protection (ICEPTP'20). Energy and Environment Assessment based on Remote Sensing and Machine Learning. https://iceptp.com/symposium-workshop**/**
	5. **Scientific Advisory Board**, 15th Conference on Sustainable Development of Energy, Water and Environment Systems (SDEWES), September 1-5, 2020. Cologne, Germany. https://www.cologne2020.sdewes.org/scientific-advisory-board.

6. ***Scientific Advisory Board***, the 1st Asia Pacific Conference on Sustainable Development of Energy, Water and Environment Systems. April 6-9, 2020, Gold Coast, Australia. http://www.goldcoast2020.sdewes.org/scientific-advisory-board.
7. ***Scientific Committee:*** 5th World Congress on Civil, Structural, and Environmental Engineering (CSEE'20) April 19 - 21, 2020. Lisbon, Portugal. https://cseecongress.com/committee.
8. ***Scientific Advisory Board***, the 4th southeast European Conference on Sustainable Development of Energy, Water and Environment Systems. June 28- July 02, 2020. Sarajevo, Bosnia, and Herzegovina. http://www.sarajevo2020.sdewes.org/organizers-and-committees.
9. ***Scientific Advisory Board,*** 14th Conference on Sustainable Development of Energy, Water and Environment Systems (SDEWES), October 1 – 5, 2019 Dubrovnik. Croatia http://www.dubrovnik2019.sdewes.org/sab.php
10. ***Scientific Advisory Board****,* 13th Conference on Sustainable Development of Energy, Water and Environment Systems (SDEWES), September 30- October 4, 2018**.** Palermo*,* Italy. http://www.palermo2018.sdewes.org/sab.php**.**
11. ***Scientific Advisory Board,*** 13th Conference on Sustainable Development of Energy, Water and Environment Systems (SDEWES), September 30- October 4, 2018. Palermo, Italy. http://www.palermo2018.sdewes.org/sab.php.
12. ***Scientific Committee Member,*** The 4th International Conference on Environmental Pollution, Treatment and Protection (ICEPTP'19), April 7 - 9, 2019. Rome, Italy. https://iceptp.com.
13. ***Best award paper*** in the 3rd World Congress on Civil, Structural, and Environmental Engineering (CSEE'18) Budapest, Hungary – April 8 - 10, 2018.

Courses, Summer School and Mobility

1. ***Ph.D. mobility:*** Royal institute of technology (KTH) and the school of Electrical Engineering. Managing Renewable energies Efficiency based on environment emission reduction using machine learning methodologies of KTH under Supervision of Prof, Lina Bertling Tjernberg. 2019
2. ***PhD Summer School:*** Remote Sensing for Wind Energy. DTU Wind Energy, Risø Campus, Roskilde, Denmark. 24 – 28 June 2019.
3. ***1st ODYSSEA Summer School:*** Operational Oceanography for Science, Business and Society, Organised by the ODYSSEA Project. Hosted by the Democritus University of Thrace. Nea Karvali, Kavala, Greece 3-12 September 2018.
4. ***Use Remote Sensing Sensing Satellite of Environment and Renewable energy*** (such as: oil spills, ship detection, agriculture and urbanization, wave, solar, wind, forest and geothermal source), By Prof. Giovanni Laneve. School of Aerospace Engineering, Sapienza Università di Roma. Italy.

Skills

SNAP, GNOME, GIS and ENVI software's, ADIOS model, Image processing, MATLAB, HOMER software, NASA and ESA (European Space Agency) satellite images analysis data and reanalysis dataset (MERRA and ECMWF).

Teaching Experience

1. ***Guest Lecturer*** of Renewable Energy: Course "source assessment", Razi University. Iran (2019).
2. ***Teaching Satellite SAR Images Analysis workshop,*** Razi University. Kermanshah. Iran (2019)
3. ***Reviewed and revised thesis*** for 5 MSc students in a broad range of subject areas including Natural Resources, Environment pollution, Forest and biomass (2019-present).
4. ***Teaching Assistant,*** "Satellite data and GIS" of Razi University, Kermanshah. Iran (2018).

Language (s)

Mother language: Persian

Languages	Understanding		Speaking		Writing
English	C1	C1	C1	C1	C1
Italian	A2	A1	A2	A2	A1

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user European Framework of Reference for Languages- IELTS Academic