

Curriculum Vitae

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Education:

B.Sc. in Electrical Engineering, Sharif University of Technology, Iran, 1980

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✓ Research Interests

- Future Grids
- Smart Grids
- Microgrids
- Energy Management
- Integration of Renewable Energy in Power System
- Planning and Control of Power Systems
- Eletrical Energy Storage

✓ Courses Taught

- Smart Grids
- Energy Management
- Modern Control Systems
- Optimization in Power Systems
- Computer Application in Power Systems
- Renewable Energy
- Design of Power Systems Control Centers
- Power System Dynamics
- Power System Analysis

✓ Journal Papers:

- [1] M. H. Amini, **M. P. Moghaddam**, and O. Karabasoglu, "Simultaneous allocation of electric vehicles' parking lots and distributed renewable resources in smart power distribution networks," *Sustain. Cities Soc.*, vol. 28, pp. 332–342, 2017.
- [2] S. Bahramara, **M. P. Moghaddam**, and M. R. Haghifam, "Optimal planning of hybrid renewable energy systems using HOMER: A review," *Renewable and Sustainable Energy Reviews*, vol. 62, pp. 609–620, 2016
- [3] S. Bahramara, **M. P. Moghaddam**, and M. R. Haghifam, "A bi-level optimization model for operation of distribution networks with micro-grids," *Int. J. Electr. Power Energy Syst.*, vol. 82, pp. 169–178, 2016.
- [4] M. I. Alizadeh, **M. P. Moghaddam**, N. Amjadi, P. Siano, and M. K. Sheikh-El-Eslami, "Flexibility in future power systems with high renewable penetration: A review," *Renew. Sustain. Energy Rev.*, vol. 57, pp. 1186–1193, 2016.
- [5] M.-H. Shariatkah, M.-R. Haghifam, M. Parsa-Moghaddam, and P. Siano, "Evaluating the reliability of multi-energy source buildings: A new analytical method for considering the dynamic behavior of thermal loads," *Energy Build.*, vol. 126, pp. 477–484, 2016.
- [6] M. Shafie-khah, E. Heydarian-Forushani, M. E. H. Golshan, P. Siano, **M. P. Moghaddam**, M. K. Sheikh-El-Eslami, and J. P. S. Catalão, "Optimal trading of plug-in electric vehicle aggregation agents in a market environment for sustainability," *Appl. Energy*, vol. 162, pp. 601–612, 2016.
- [7] M. H. Shariatkah, M. R. Haghifam, G. Chicco, and **M. Parsa-Moghaddam**, "Modelling the operation strategies of storages and hydro resources in adequacy analysis of power systems in presence of wind farms," *IET Renewable Power Generation*, vol. 10, no. 8, pp. 1059–1068, 2016.
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- [9] M. Yazdani-Damavandi, **M. P. Moghaddam**, M. R. Haghifam, M. Shafie-Khah, and J. P. S. Catalão, "Modeling operational behavior of plug-in electric vehicles' parking lot in multienergy systems," *IEEE Transactions on Smart Grid*, vol. 7, pp. 124–135, 2016
- [10] M. Shafie-Khah, **M. P. Moghaddam**, and M. K. Sheikh-El-Eslami, "Ex-ante evaluation and optimal mitigation of market power in electricity markets including renewable energy resources," *IET Generation, Transmission and Distribution*, vol. 10, pp. 1842–1852, 2016.
- [11] H. A. Aalami, **M. P. Moghaddam**, and G. R. Yousefi, "Evaluation of nonlinear models for time-based rates demand response programs," *Int. J. Electr. Power Energy Syst.*, vol. 65, pp. 282–290, 2015.
- [12] M.-H. Shariatkah, M.-R. Haghifam, M. Parsa-Moghaddam, and P. Siano, "Modeling the reliability of multi-carrier energy systems considering dynamic behavior of thermal loads," *Energy Build.*, vol. 103, pp. 375–383, 2015.
- [13] M. Shafie-Khah, **M. P. Moghaddam**, M. K. Sheikh-El-Eslami, and J. P. S. Catalão, "Optimised performance of a plug-in electric vehicle aggregator in energy and reserve markets," *Energy Conversion and Management*, vol. 97, pp. 393–408, 2015.

- [14] M. Shafie-Khah, E. Heydarian-Forushani, M. E. H. Golshan, **M. P. Moghaddam**, M. K. Sheikh-El-Eslami, and J. P. S. Catalão, "Strategic offering for a price-maker wind power producer in oligopoly markets considering demand response exchange," *IEEE Transactions on Industrial Informatics*, vol. 11, pp. 1542-1553, 2015.
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- [18] M. Shafie-Khah, **M. P. Moghaddam**, M. K. Sheikh-El-Eslami, and J. P. S. Catalão, "Fast and accurate solution for the SCUC problem in large-scale power systems using adapted binary programming and enhanced dual neural network," *Energy Conversion and Management*, vol. 78, pp. 477-485, 2014.
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- [25] Sheikhi Fini, **M. Parsa Moghaddam**, and M. K. Sheikh-El-Eslami, "An investigation on the impacts of regulatory support schemes on distributed energy resource expansion planning," *Renewable Energy*, vol. 53, pp. 339-349, 2013.
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interactions between market regulations and behavior of plug-in electric vehicle aggregators in a virtual power market environment," *Energy*, vol. 40, pp. 139-150, 2012.

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✓ Conference Papers:

- [1] **M. P. Moghaddam**, M. Moradijooz, and M. R. Haghifam, "Integrated planning of distribution system and gridable parking lots," in *Asia-Pacific Power and Energy Engineering Conference, APPEEC, 2016*.
- [2] **M. P. Moghaddam**, S. Bahramara, M. Y. Damavandi, and M. R. Haghifam, "Distribution company and microgrids behaviour in energy and reserve equilibrium," in *Asia-Pacific Power and Energy Engineering Conference, APPEEC, 2016*.
- [3] Z. Hashemi, A. Ramezani, and **M. P. Moghaddam**, "Energy hub management by using decentralized robust model predictive control," in *2016 4th International Conference on Control, Instrumentation, and Automation, ICCIA 2016, 2016*, pp. 105-110.
- [4] S. Fini, S. Bahramara, **M. P. Moghaddam**, and M. K. Sheikh-El-Eslami, "Modelling multi-resource regulatory incentives in expansion planning problem," in *Proceedings of the 2015 IEEE Innovative Smart Grid Technologies - Asia, ISGT ASIA 2015, 2016*.
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operation of hybrid AC-DC microgrid considering Renewable Energy Resources and PHEVs," in *2015 IEEE Eindhoven PowerTech, PowerTech 2015*, 2015.

- [7] E. Heydarian-Forushani, **M. P. Moghaddam**, M. K. Sheikh-El-eslami, M. Shafie-Khah, and J. P. S. Catalão, "Investigating the effects of flexible load in the grid integration of wind power," in *Proceedings of the IEEE Power Engineering Society Transmission and Distribution Conference*, 2014.
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- [13] M. Moradijuz and **M. P. Moghaddam**, "Optimum allocation of parking lots in distribution systems for loss reduction," in *IEEE Power and Energy Society General Meeting*, 2012.
- [14] M. Moradijuz, A. Ghazanfarimeymand, **M. P. Moghaddam**, and M. R. Haghifam, "Optimum placement of distributed generation and parking lots for loss reduction in distribution networks," in *2012 Proceedings of 17th Conference on Electrical Power Distribution, EPDC 2012*, 2012.
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- [30] **M. P. Moghaddam**, P. T. Baboli, E. Alishahi, and F. Lotfifard, "Flexible load following the wind power generation," in *2010 IEEE International Energy Conference and Exhibition, EnergyCon 2010*, 2010, pp. 802-807.
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