Mahdi HEIDARI

Curriculum Vitae

University of Zabol, Zabol, Iran
(+98)915-144-9103
(+98)54-32220303
m.heidari@uoz.ac.ir
mahdiheidari10@gmail.com

Education:

2006-2008 **MSc Electrical Power Engineering**, Shahid Chamran University of Ahvaz, Ahvaz, Iran. GPA: 17.18 Out of 20.
Thesis: Design and Simulation of Multilevel STATCOM based on Cascaded Multilevel Converter.
Thesis grade: 19.75 out of 20
Advisor: Assoc. Prof. Abdonnabi Kovsarian. (akovsarian@yahoo.com).

2001-2005 **BSc Electrical Engineering in Electronics,** University of Sistan and Baluchestan, Zahedan, Iran. GPA: 15.52 Out of 20.
Thesis: Design of Wireless Network in University of Sistan and Baluchestan.
Thesis grade: 18 out of 20
Advisor: Dr. Mansureh S. Moghaddam. (shahraki@hamoon.usb.ac.ir)

Research Interests:

- Renewable Energy
- FACTS Devices
- Power Electronics
- Electrical Drives

Honors and Awards:

2006 Ranked **300th** among more than 5,000 participants in the nationwide university entrance exam for MSc degree

2001 Ranked **1358th** among more than 250,000 participants in the nationwide university entrance exam for BSc degree

Professional Experiences:

2017 - Present Head of department, Department of Electrical Engineering, University of Zabol, Zabol, Iran.

2009 - Present Faculty member, University of Zabol, Zabol, Iran.

9-10 Jan. 2015 IT committee manager, The First National Conference on Renewable Energy and Sustainable Development, University of Zabol, Iran.

2006-2009 Teaching several courses including Industrial Electronics, Electrical Machinery, Electronics, Electrical Circuits, Electrical Machinery

Laboratory, Electric Power Distribution Systems, and Protection at several Universities in Iran.

2004 Teaching Assistant, University of Sistan and Baluchestan, Iran, Electrical Machinery, Dr. Mahmood Oukati Sadegh.

Relevant Courses:

- Power System Operation (17/20)
- Reliability (16.5/20)
- Reactive Power Control in Power Systems (15/20)
- Neural Networks (18.5/20)
- Modern Control (13.75/20)
- Power Electronics (15.7/20)
- Drive Systems (17.5/20)
- Comprehensive Theory of Electrical Machinery (16.5/20)

Selected Journal Papers:

2018 **M. Heidari**, "Design the Optimal Number of Components in a Grid-Connected Hybrid Power Generation System," *INTERNATIONAL JOURNAL OF RENEWABLE ENERGY RESEARCH,* vol. 8, pp. 357-364, 2018.

2018 **M. Heidari**, A. Kovsarian, and S. G. Seifossadat, "POWER QUALITY IMPROVEMENT WITH CASCADED MULTILEVEL CONVERTER BASED STATCOM," *IIUM ENGINEERING JOURNAL,* vol. 19, pp. 91-103, 2018.

2018 **M. Heidari**, "Maximum Wind Energy Extraction by Using Neural Network Estimation and Predictive Control of Boost Converter," *International Journal of Industrial Electronics, Control and Optimization,* vol. 1, no. 2, pp. 115-120, 2018. (DOI: 10.22111/ieco.2018.23973.1008)

2017 **M.heidari**, and SH. Shahraki, "Reactive Power Control with Fuzzy Controller Based STATCOM," *Elixir Elec. Eng.,* pp. 49008-49012, 2017.

2016 **M. Heidari**, "Improving efficiency of photovoltaic system by using neural network MPPT and predictive control of converter," *International Journal of Renewable Energy Research (IJRER),* vol. 6, pp. 1524-1529, 2016.

2015 **M. Heidari**, "Improving the power quality of wind power plants through modifying the instantaneous active and reactive power theory," *Int. J. Renew. Energy Res,* vol. 5, pp. 2338-10858, 2015.

2011 **M. Heidari**, A. Kovsarian, and S. Seifossadat, "Detailed Analysis of Cascaded Multilevel Converter Based STATCOM," *International Review on Modelling and Simulations,* vol. 4, no. 2, pp. 507-516, 2011.

Selected Conference Papers:

2017 **M. Heidari**, and F. Keshavarzi, "Building Management System - Case Study: University of Zabol," *the 3rd Conference on Electrical and computer Engineering technology,* Iran, 2017. (in Persian)

2017 **M. Heidari**, and F. Khaiati, "Design and Optimization of Independent Hybrid Power Generetion System for SISTAN Region in Iran," *The 4th International Conference on the Findings of Modern Science and Technology With a Focus on Science in the Service of Development,* Iran, 2017. (in Persian)

2017 **M. Heidari**, and M. Mishkar, "Optimal Design of Independent Photovoltaic System for SISTAN Region in Iran," *The 4th International Conference on the Findings of Modern Science and Technology With a Focus on Science in the Service of Development,* Iran, 2017. (in Persian)

2017 **M. Heidari**, and M. Poodineh, "Assessing the Potential for Solar Energy Production in SISTAN Region in Iran and Design of 1 MW Grid-connected Photovoltaic Power Plant by Using PV System, Ret Screen, and Sunny Design Softwares," *1st Conference on Participles of Electrical and Computer Engineering,* Iran, 2017. (in Persian)

2015 **M. Heidari**, and F. Keikha, "A framework for enhancing the overall desire for renewable energy through the use of social media," *The First National Conference on Renewable Energy and Sustainable Development,* Iran, 2015. (in Persian)

2005 **M. Heidari**, and A. Saraninejad, "The Security of Wireless Networks," *13th Iranian Student Conference on Electrical Engineering,* Iran, 2005. (in Persian)

Work Experiences:

2018 **Installation of Electrical Machinery Laboratory**, University of Zabol, Zabol, Iran.

2018 **Installation of Control Systems Laboratory**, University of Zabol, Zabol, Iran.

2013 - Present **Electrical Installation Engineer**, Iran Construction Engineering Organization, Iran.

Software Skills:

Programming MATLAB

Analytical SIMULINK, PSIM, PSPICE, PSCAD, PVSYST, SUNNY DESIGN, HOMER, ELECTRICAL AUTOCAD

References:

Abdonnabi KOVSARIAN, *(akovsarian@yahoo.com).*
Associate Professor, Department of Electrical Engineering, Shahid Chamran University of Ahvaz, Ahvaz, Iran

S. Ghodratollah SEIFOSSADAT, *(seifossadat@yahoo.com).*
Professor, Department of Electrical Engineering, Shahid Chamran University of Ahvaz, Ahvaz, Iran

Mahmood OUKATI SADEGH, *(oukati@hotmail.com).*
Assistant Professor, Department of Electrical Engineering, University of Sistan and Baluchestan, Zahedan, Iran