Hadi Razmi

Associate Professor
Department of Electrical Engineering
East Tehran Branch
Islamic Azad University
Tehran, Iran
Date of Birth: 24/08/1980

E-mail: razmi.hadi@gmail.com
Phone Number: +98-912-216-1584
Author ORCID ID: 0000-0003-3528-0164
Scopus Author ID: 22956625700
ResearcherID: AAV-4084-2021
Google Scholar Profile Link:
https://scholar.google.com/citations?hl=en&user=7zHxLRoAAAAJ

EDUCATION

Ph.D in Control Engineering (September 2012)
Science and Research Branch, Islamic Azad University, Tehran, Iran
Total GPA: 17.75 out of 20
Thesis: Artificial intelligence for steady state voltage stability assessment with AVR voltage constraints
Supervisor 1: Professor Heidar Ali Shayanfar
Supervisor 2: Professor Mohammad Teshnehlab
Advisor: Professor Karim Abbaszadeh

M.Sc. in Control Engineering (December 2006)
University of Tabriz, Tabriz, Iran
Total GPA: 17.74 out of 20
Thesis: Dynamic voltage stability assessment of IEEE 30 bus power system using neural networks
Supervisor: Dr. Mohammad-Taghi Vakil-Baghmisheh
Advisor: Professor Seyed Hossein Hosseini

B.Sc. in Electrical Engineering (August 2004)
Saveh Branch, Islamic Azad University, Saveh, Iran
Total GPA: 17.32 out of 20

ACADEMIC AND EXECUTIVE POSITIONS

Associate Professor (since August 2021)
Department of Electrical Engineering, East Tehran Branch, Islamic Azad University, Tehran, Iran

Assistant Professor (August 2012 - August 2021)
Department of Electrical Engineering, East Tehran Branch, Islamic Azad University, Tehran, Iran

Lecturer (February 2008 - August 2012)
Department of Electrical Engineering, East Tehran Branch, Islamic Azad University, Tehran, Iran

Lecturer (September 2015 - June 2018)
Department of Electrical Engineering, North Tehran Branch, Islamic Azad University, Tehran, Iran

Lecturer (January 2017 - June 2018)
Department of Electrical Engineering, South Tehran Branch, Islamic Azad University, Tehran, Iran

Head of Electrical Engineering Group (July 2009 - July 2010)
Department of Electrical Engineering, East Tehran Branch, Islamic Azad University, Tehran, Iran

Head of Electrical Engineering Group (September 2020 - January 2022)
Department of Electrical Engineering, East Tehran Branch, Islamic Azad University, Tehran, Iran

Vice-Dean for Research (June 2017 - April 2019)
East Tehran Branch, Islamic Azad University, Tehran, Iran

Vice President for Research (January 2022 - April 2023)
East Tehran Branch, Islamic Azad University, Tehran, Iran

Education Courses

M.Sc.
Modern control, Digital control, Optimal control, Multivariable control, Adaptive control, Robust control, Nonlinear control, Artificial neural networks, Fuzzy logic, Probabilistic processes

Ph.D
Predictive control, System identification, Power system reliability, Robotics, Wavelets, Advanced engineering mathemathics

Teaching

Undergraduate Courses
Linear control systems, Modern control, Digital control, Electrical circuits I and II, Logic circuits, Engineering mathematics

Graduate Courses
Optimal control, Multivariable control, Operation of power systems, Application of intelligent optimization methods in the power systems analysis and control

Research Interests

Optimization, Artificial intelligence, Sliding mode control, Power system analysis and control, Robot control and dynamics, Unmanned aerial vehicles (UAVs) control and dynamics

Academic Awards and Honors

- Distinguished researcher, East Tehran Branch, Islamic Azad University, 2020
- Corresponding author of the top paper, East Tehran Branch, Islamic Azad University, 2019
- Distinguished researcher, East Tehran Branch, Islamic Azad University, 2018
- Corresponding author of the top paper, East Tehran Branch, Islamic Azad University, 2018
- Corresponding author of the top paper, East Tehran Branch, Islamic Azad University, 2017
- First rank among graduated M.Sc. students, Control Engineering Group, University of Tabriz, 2006
- First rank among graduated B.Sc. students, Power Engineering Group, Saveh Branch, Islamic Azad University, 2004

Publications

[1] Hamid Rezaie, **Hadi Razmi**, Nima Safari, and Hasan Doagou-Mojarrad. Dynamic environmental economic dispatch with an enhanced-accuracy probabilistic wind cost model. *Electrical Engineering*, 104(6):4305–4319, 2022.

[2] Neda Jalali, Mohammad Tolou Askari, and **Hadi Razmi**. A novel method based on a combination of deep learning algorithm and fuzzy intelligent functions in order to classification of power quality disturbances in power systems. *Iranian Electric Industry Journal of Quality and Productivity*, 10(4):14–37, 2022.

[3] **Hadi Razmi**, Hasan Doagou-Mojarrad, and Taher Niknam. Optimal stochastic operation of CHP/WT/PV generation units. *Journal of Iranian Association of Electrical and Electronics Engineers*, 19(1):149–160, 2022.

[4] Hasan Doagou-Mojarrad, Hamid Rezaie, and **Hadi Razmi**. Probabilistic integrated framework for AC/DC transmission congestion management considering system expansion, demand response, and renewable energy sources and load uncertainties. *International Transactions on Electrical Energy Systems*, 31(12):e13168, 2021.

[5] Ali Gholami-Rahimabadi, **Hadi Razmi**, and Hasan Doagou-Mojarrad. Multiple-deme parallel genetic algorithm based on modular neural network for effective load shedding. *Soft Computing*, 25(21):13779–13794, 2021.

[6] Neda Jalali, Mohammad Tolou Askari, and **Hadi Razmi**. Improving the performance of gas turbine based on rowen model using type-2 fuzzy controller. *Journal of Applied Dynamic Systems and Control*, 4(1):34–42, 2021.

[7] Ebrahim Kiani, Hasan Doagou-Mojarrad, and **Hadi Razmi**. Multi-objective optimal power flow considering voltage stability index and emergency demand response program. *Electrical Engineering*, 102(4):2493–2508, 2020.

[8] **Hadi Razmi**, Hasan Doagou-Mojarrad, and Javad Olamaei. Comparative study of optimization algorithms for sizing of wind turbine/fuel cell/electrolyzer/hydrogen tank in the hybrid stand-alone power system. *Signal Processing and Renewable Energy*, 4(3):81–94, 2020.

[9] Neda Jalali, **Hadi Razmi**, and Hasan Doagou-Mojarrad. Optimized fuzzy self-tuning PID controller design based on tribe-de optimization algorithm and rule weight adjustment method for load frequency control of interconnected multi-area power systems. *Applied Soft Computing*, 93:106424, 2020.

[10] **Hadi Razmi** and Sima Afshinfar. Neural network-based adaptive sliding mode control design for position and attitude control of a quadrotor UAV. *Aerospace Science and Technology*, 91:12–27, 2019.

[11] **Hadi Razmi** and Hasan Doagou-Mojarrad. Comparative assessment of two different modes multi-objective optimal power management of micro-grid: grid-connected and stand-alone. *IET Renewable Power Generation*, 13(6):802–815, 2019.

[12] Babak Nazarparvar, Afshin Afshin Osouli, Moin Ghasemi, and **Hadi Razmi**. Providing energy management optimization solutions focusing on the cooling production system in the big market of iran (iran mall). In *The 9th International Energy Smart Grid Conference (SGC2019)*. Scientific Association of Smart Energy Network of Iran - Faculty of Electrical Engineering, Sharif University of Technology, 2019.

[13] Babak Nazarparvar, Afshin Afshin Osouli, Moin Ghasemi, and **Hadi Razmi**. Providing an optimal solution for the use of emergency generators of iran's big market power plant (iran mall) with the approach of reducing the cost of electricity consumption and benefiting from the incentives of tovanir company. In *The 9th International Energy Smart Grid Conference (SGC2019)*. Scientific Association of Smart Energy Network of Iran - Faculty of Electrical Engineering, Sharif University of Technology, 2019.

[14] **Hadi Razmi**. Adaptive neural network based sliding mode altitude control for a quadrotor UAV. *Journal of Central South University*, 25(11):2654–2663, 2018.

[15] Fariborz Zaeim-Kohan, **Hadi Razmi**, and Hasan Doagou-Mojarrad. Multi-objective transmission congestion management considering demand response programs and generation rescheduling. *Applied Soft Computing*, 70:169–181, 2018.

[16] Hamid Simorgh, Hasan Doagou-Mojarrad, **Hadi Razmi**, and Gevork B Gharehpetian. Cost-based optimal siting and sizing of electric vehicle charging stations considering demand response programmes. *IET Generation, Transmission & Distribution*, 12(8):1712–1720, 2018.

[17] Sima Afshinfar, Mohammad Reza Soltanpour, and **Hadi Razmi**. Adaptive fuzzy sliding mode position and attitude control for a quadrotor uav. *Journal of Solid and Fluid Mechanics*, 7(4):159–172, 2017.

[18] Nasrin Chatrenour, **Hadi Razmi**, and Hasan Doagou-Mojarrad. Improved double integral sliding mode mppt controller based parameter estimation for a stand-alone photovoltaic system. *Energy Conversion and Management*, 139:97–109, 2017.

[19] Farhad Sharifi, Mahdi Shahparasti, and **Hadi Razmi**. Flexible and integrated voltage control in active smart networks. In *The 32th International Power System Conference (PSC2017)*. Tavanir company - Niro Research Institute, 2017.

[20] Ali-Mohammad Mahmoudi, **Hadi Razmi**, and Hasan Doagou-Mojarrad. Multi-objective energy management of isolated microgrids considering renewable energies and responsive loads. In *The first national conference of electrical engineering of Afghanistan*. Ministry of Energy and Water of Afghanistan, 2017.

[21] Seyed-Zaman Hosseini, **Hadi Razmi**, Masoud Serpak, Mahdi Rajabzadeh, and Mahdi Jazini. Using the neural network method based on the genetic algorithm to estimate the stability margin index of the power system. In *The 29th International Power System Conference (PSC2014)*. Tavanir company - Niro Research Institute, 2014.

[22] **Hadi Razmi**, Heidar Ali Shayanfar, and Mohammad Teshnehlab. Steady state voltage stability with AVR voltage constraints. *International Journal of Electrical Power & Energy Systems*, 43(1):650–659, 2012.

[23] **Hadi Razmi**, Mohammad Teshnehlab, and Heidar Ali Shayanfar. Neural network based on a genetic algorithm for power system loading margin estimation. *IET Generation, Transmission & Distribution*, 6(11):1153–1163, 2012.

[24] **Hadi Razmi** and Atabak Mashhadi Kashtiban. Nonlinear PID-based analog neural network control for a two link rigid robot manipulator and determining the maximum load carrying capacity. *International Journal of Soft Computing and Engineering*, 2(1):228–234, 2012.

[25] Atabak Mashhadi Kashtiban, **Hadi Razmi**, and Mohammad Khalegi Kozehkonan. Combined LVQ neural network and multivariate statistical method employing wavelet coefficient for EEG signal classification. In *2011 IEEE International Conference on Mechatronics*, pages 809–814. IEEE, 2011.

[26] Mohammad-Taghi Vakil-Baghmisheh and **Hadi Razmi**. Dynamic voltage stability assessment of power transmission systems using neural networks. *Energy conversion and management*, 49(1):1–7, 2008.

[27] **Hadi Razmi** and Mohammad-Taghi Vakil-Baghmisheh. Short-term prediction of electric load of iran's nationwide network using neural networks and fuzzy logic. In *The 20th International Power System Conference (PSC2005)*. Tavanir company - Niro Research Institute, 2005.

[28] **Hadi Razmi** and Mohammad-Taghi Vakil-Baghmisheh. Short-term prediction of iran's electric load consumption using neural networks. In *The 7th Intelligent Systems Conference (CIS2005)*. Khajeh Nasir Toosi University of Technology (KNTU), 2005.

Research Projects

1. **Hadi Razmi**, Atabak Mashhadi-Kashtiban. Designing a self-adaptive PID controller for a rigid two-link robot manipulator, *East Tehran Branch, Islamic Azad University*, 2011.

2. **Hadi Razmi**, Heydar Ali Shayanfar, Mohammad Tashnelab. Determining a corrective control strategy to improve the voltage stability of power systems, *East Tehran Branch, Islamic Azad University*, 2013.

3. **Hadi Razmi**, Masoud Serpak. Mid-term and long-term forecasting of the electrical load of Tehran's power grid and checking its voltage stability, *Tehran regional power grid, Ministry of Energy*, 2015.

4. **Hadi Razmi**, Babak Nazarparvar. Designing, building and equipping vertical flight UAV, for identifying, imaging and sending regional coordinates, *East Tehran Branch, Islamic Azad University*, 2017.

5. Hasan Doagou-Mojarrad, **Hadi Razmi**. Optimal management of Micro-grid with considering renewable energy resources, *East Tehran Branch, Islamic Azad University*, 2018.

Reviewer of scientific journals

- International Journal of Electrical Power & Energy Systems
- Control Engineering Practice
- International Journal of Industrial Electronics, Control and Optimization
- Energy Conversion and Management
- IEEE Transactions on Cybernetics
- Applied Soft Computing
- Journal of Iranian Association of Electrical and Electronics Engineers

Theses of postgraduate students

1. Abbas Ahmadzadeh, **Hadi Razmi (Supervisor)**, Hasan Doagou-Mojarrad (Advisor). Design of improved power system stabilizer using fuzzy sliding mode controller, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, In progress.

2. Meysam Masrouri, **Hadi Razmi (Supervisor)**, Hasan Doagou-Mojarrad (Advisor). Design of improved fuzzy-PID controller for load-frequency control of multi-area power systems, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, In progress.

3. Ehsan Shabani, **Hadi Razmi (Supervisor)**, Hasan Doagou-Mojarrad (Advisor). Modeling long-term demand response programs in order to ensure resource sufficiency, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, June 2023.

4. Sajad Pouladvand, **Hadi Razmi (Supervisor)**, Hasan Doagou-Mojarrad (Advisor). Fuzzy-PID controller design based on NSGA-II algorithm for load-frequency control of three area power system with generation rate limitation, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, February 2022.

5. Milad Mohammad-Bagheri, **Hadi Razmi (Supervisor)**, Hasan Doagou-Mojarrad (Advisor). Locating and determining the optimal size of distributed generation sources with the goals of reducing losses and improving the voltage stability index with the help of NSGA-II multi-objective optimization algorithm, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, February 2022.

6. Ehsan Esfandyari, **Hadi Razmi (Supervisor)**, Hasan Doagou-Mojarrad (Advisor). Locating and determining the optimal size of distribution substations using the differential evolutionary optimization algorithm and taking into account the uncertainty in the load, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, May 2021.

7. Ali Gholami-Rahimabadi, **Hadi Razmi (Supervisor)**, Hasan Doagou-Mojarrad (Advisor). Improving the voltage stability of power systems using a load shedding control strategy, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, October 2021.

8. Neda Jalali, **Hadi Razmi (Supervisor)**, Hasan Doagou-Mojarrad (Advisor). Design of load-frequency controller for uncertain interconnected multi-area power systems, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, January 2019.

9. Nayere Tajari, **Hadi Razmi (Supervisor)**, Mohammad Mansour Riahi-Kashani (Advisor). Designing an adaptive constrained predictive controller for the boiler unit of a gas refinery, *North Tehran Branch, Islamic Azad University, Tehran, Iran*, January 2019.

10. Lida Harasami, **Hadi Razmi (Supervisor)**, Abbas Rasaienia (Advisor). Sliding model control of the kite generator system as a power generator, *North Tehran Branch, Islamic Azad University, Tehran, Iran*, February 2019.

11. Somayyeh Kayedi, **Hadi Razmi (Supervisor)**, Mansoor Riyahi-Kashani (Advisor). Robust controller design using linear matrix inequalities for four-tank system, *North Tehran Branch, Islamic Azad University, Tehran, Iran*, February 2019.

12. Negin Irani-Bonab, **Hadi Razmi (Supervisor)**, Amirhoshang Mazinan (Advisor). Control and optimization of fuel consumption in hybrid cars using machine learning algorithm and fuzzy logic, *South Tehran Branch, Islamic Azad University, Tehran, Iran*, August 2019.

13. Kosar Ghezavati, **Hadi Razmi (Supervisor)**, Hasan Doagou-Mojarrad (Advisor). Voltage stability monitoring of power systems using the method of artificial neural networks, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, November 2018.

14. Nouroddin Babapour, **Hadi Razmi (Supervisor)**, Hasan Doagou-Mojarrad (Advisor). Probabilistic congestion management in transmission systems considering wind farms, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, November 2018.

15. Hajar Amiri, **Hadi Razmi (Supervisor)**, Hasan Doagou-Mojarrad (Advisor). Optimum exploitation of possibilities of combined heat and power, wind and solar power plants, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, January 2018.

16. Rasul Talabi Mazrae-Shahi, **Hadi Razmi (Supervisor)**, Hasan Doagou-Mojarrad (Advisor). Placement of phasor measurement units with the help of multi-objective optimization algorithms, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, January 2018.

17. Behzad Mohseni, **Hadi Razmi (Supervisor)**, Hasan Doagou-Mojarrad (Advisor). Generation planning in microgrid network based on photovoltaic and wind resources considering uncertainty and reliability, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, September 2018.

18. Ali-Mohammad Mahmoudi, **Hadi Razmi (Supervisor)**, Hasan Doagou-Mojarrad (Advisor). Optimal performance of microgrids with simultaneous scheduling of electric vehicles and responsive loads, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, September 2018.

19. Abdul-Reza Javanmard, **Hadi Razmi (Supervisor)**, Hasan Doagou-Mojarrad (Advisor). Optimum placement of the capacitor with the approach of improving the voltage stability margin index, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, September 2018.

20. Farid Nikpasand, **Hadi Razmi (Supervisor)**, Hasan Doagou-Mojarrad (Advisor). Optimum management of microgrid generation and reservation possibilities, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, September 2018.

21. Maryam Farashi, **Hadi Razmi (Supervisor)**, s Rasaeinia (Advisor). Designing a predictive controller based on a neural network model for a non-linear continuous stirred tank reactor, *North Tehran Branch, Islamic Azad University, Tehran, Iran*, February 2018.

22. Tayyebeh Golshaian, **Hadi Razmi (Supervisor)**, Abbas Rasaienia (Advisor). Designing a robust adaptive load-frequency control strategy for multi-area interconnected power systems, *North Tehran Branch, Islamic Azad University, Tehran, Iran*, February 2018.

23. Reza Vahedi, **Hadi Razmi (Supervisor)**, Hasan Doagou-Mojarrad (Advisor). Environmental economic load dispatch taking into account the risk caused by the presence of wind power plant and the use of energy storage and demand side management, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, September 2017.

24. Mohammad Maleki, **Hadi Razmi (Supervisor)**, Hasan Doagou-Mojarrad (Advisor). Determining the appropriate size and location of renewable energy sources and electric vehicle charging stations using multi-objective optimization algorithms, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, October 2017.

25. Shahriar Shakuri, **Hadi Razmi (Supervisor)**, Abbas Rasaienia (Advisor). Design of an improved sliding mode controller and determination of the maximum load carrying capacity for a flexible mechanical arm, *North Tehran Branch, Islamic Azad University, Tehran, Iran*, August 2017.

26. Rahim Khatibi, **Hadi Razmi (Supervisor)**, Abbas Rasaienia (Advisor). Designing an adaptive robust controller for a quadcopter, *North Tehran Branch, Islamic Azad University, Tehran, Iran*, August 2017.Abba

27. Alireza Khorram-Esfahani, **Hadi Razmi (Supervisor)**, Amirhoshang Mazinan (Advisor). Designing an adaptive sliding mode controller and determining the maximum load carrying capacity of a rigid two-link robot manipulator, *South Tehran Branch, Islamic Azad University, Tehran, Iran*, August 2017.

28. Alireza Aliabadi, **Hadi Razmi (Supervisor)**, Hasan Doagou-Mojarrad (Advisor). Determining the appropriate size of an isolated power system using the particle swarm optimization method, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, September 2016.

29. Fariborz Zaeim-Kohan, **Hadi Razmi (Supervisor)**, Hasan Doagou-Mojarrad (Advisor). Multi-objective congestion management using demand response programs and flexible AC transmission systems, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, October 2016.

30. Nasrin Chatrnoor, **Hadi Razmi (Supervisor)**, Hasan Doagou-Mojarrad (Advisor). Design of second-order sliding mode controller to track the maximum power point in a photovoltaic system, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, October 2016.

31. Hasan Bakhshi, **Hadi Razmi (Supervisor)**. Optimal placement of multiple UPFCs in order to increase the voltage stability of the power system in emergency conditions, *Damghan Branch, Islamic Azad University, Damghan, Iran*, October 2016.

32. Hoda Taheri, **Hadi Razmi (Supervisor)**. Flexible demand response program for participating in the electricity market in the restructured environment, *Damghan Branch, Islamic Azad University, Damghan, Iran*, October 2016.

33. Hojjat Mahdipour, **Hadi Razmi (Supervisor)**. Rearranging and minimizing losses of distribution networks using particle swarm optimization method, *Damghan Branch, Islamic Azad University, Damghan, Iran*, February 2016.

34. Mohammad-Amin Mohsenian, **Hadi Razmi (Supervisor)**. Locating and determining the optimal size of distributed generation sources with the aim of increasing the voltage stability margin index, *Damghan Branch, Islamic Azad University, Damghan, Iran*, February 2016.

35. Salman Safarzadeh, **Hadi Razmi (Supervisor)**. Design and implementation of MPPT algorithm using Hill Climbing method with the presence of solar cell and wind turbine, *Damghan Branch, Islamic Azad University, Damghan, Iran*, February 2016.

36. Hossein Farrokhzad-Rostami, **Hadi Razmi (Supervisor)**. The role of system uncertainties in reactive power market settlement, *Damghan Branch, Islamic Azad University, Damghan, Iran*, February 2015.

37. Masoud Akbari, **Hadi Razmi (Supervisor)**. Frequency estimation in smart power systems using Kalman filter, *Damghan Branch, Islamic Azad University, Damghan, Iran*, February 2015.

38. Mustafa Motiei, **Hadi Razmi (Supervisor)**. Impact of reactive power resource on transmission expansion planning, *Damghan Branch, Islamic Azad University, Damghan, Iran*, February 2015.

39. Hasan Mahdigholi, Hasan Doagou-Mojarrad (Supervisor), **Hadi Razmi (Advisor)**. Simultaneous transmission expansion planning and reactive power generation resources considering renewable energies using an improved evolutionary algorithm, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, In progress.

40. Mahdi Bahour, Hasan Doagou-Mojarrad (Supervisor), **Hadi Razmi (Advisor)**. Modeling energy resources on the distribution side in order to reduce market-oriented costs, reliability and resilience, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, In progress.

41. Davoud Valipour, Hamed Abdollahzadeh (Supervisor), **Hadi Razmi (Advisor)**. Optimal coordination of distance and directional overcurrent relays using improved Tribe-PSO algorithm, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, May 2024.

42. Saeid Azadi, Hamed Abdollahzadeh (Supervisor), **Hadi Razmi (Advisor)**. Investigating the optimal coordination of directional overcurrent relays using improved multi-objective algorithm, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, May 2024.

43. Parviz Jahanbakhsh, Hasan Doagou-Mojarrad (Supervisor), **Hadi Razmi (Advisor)**. Photovoltaic effects on five local distribution networks using solar sources with aerial imaging and simulation of distribution systems in unsteady states, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, September 2023.

44. Mostafa Arefi-Mehr, Hasan Doagou-Mojarrad (Supervisor), **Hadi Razmi (Advisor)**. Optimal allocation of distributed energy resources and DSTATCOM with improving network technical indicators, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, September 2022.

45. Alireza Ghafari, Hasan Doagou-Mojarrad (Supervisor), **Hadi Razmi (Advisor)**. Optimal allocation of distributed generation in the distribution network in order to improve technical indicators and resilience, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, September 2022.

46. Seyed Mohammad Hafezi, Hasan Doagou-Mojarrad (Supervisor), **Hadi Razmi (Advisor)**. Improving voltage stability in multiple energy carrier systems, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, February 2021.

47. Mehrdad Zarei-Nik, Hasan Doagou-Mojarrad (Supervisor), **Hadi Razmi (Advisor)**. Economic load dispatch based on cost and emission considering non-linear constraints, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, September 2021.

48. Amir Talari, Hasan Doagou-Mojarrad (Supervisor), **Hadi Razmi (Advisor)**. Optimum multi-objective operation of fossil and solar power plants considering environmental issues and voltage stability constraints, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, January 2020.

49. Hashem Ataeipour, Hasan Doagou-Mojarrad (Supervisor), **Hadi Razmi (Advisor)**. Energy management of off-grid hybrid system using evolutionary algorithm, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, October 2020.

50. Yaghoub Ranjbar, Hasan Doagou-Mojarrad (Supervisor), **Hadi Razmi (Advisor)**. Evaluation of wind energy potential for different turbine models based on wind speed data, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, January 2019.

51. Alireza Haj-Mohammad Esmaeil-Nouri, Hasan Doagou-Mojarrad (Supervisor), **Hadi Razmi (Advisor)**. State estimation in distribution systems with the approach of smart distribution networks, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, January 2019.

52. H. Mahmoudvand, Hasan Doagou-Mojarrad (Supervisor), **Hadi Razmi (Advisor)**. Smart safety system with integrated technology with computational and operational, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, May 2019.

53. Mohammad Soleimanipour, Hasan Doagou-Mojarrad (Supervisor), **Hadi Razmi (Advisor)**. Energy consumption management in smart home considering demand response programs and electric vehicles, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, August 2019.

54. Hossein Akrami, Hasan Doagou-Mojarrad (Supervisor), **Hadi Razmi (Advisor)**. Probabilistic generation and transmission expansion planning with considering renewable energy sources, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, August 2019.

55. Hossein Abed, Hasan Doagou-Mojarrad (Supervisor), **Hadi Razmi (Advisor)**. Probabilistic congestion management in transmission systems considering demand response programs, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, August 2019.

56. Ehsan Safari, Hasan Doagou-Mojarrad (Supervisor), **Hadi Razmi (Advisor)**. sitting and sizing the optimal electric vehicle charging stations by considering cost minimization , *East Tehran Branch, Islamic Azad University, Tehran, Iran*, September 2019.

57. Hamed Mosayebzadeh, Hasan Doagou-Mojarrad (Supervisor), **Hadi Razmi (Advisor)**. Multi-objective optimal allocation of fault current limiter in power system, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, September 2019.

58. Mohammad Javadi, Hasan Doagou-Mojarrad (Supervisor), **Hadi Razmi (Advisor)**. Transmission expansion planning considering HVDC lines and wind farms, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, September 2019.

59. Amir Zahedipour, Abbas Rasaienia (Supervisor), **Hadi Razmi (Advisor)**. Development of condition-based monitoring system for wind farm of Kahak power plant, *North Tehran Branch, Islamic Azad University, Tehran, Iran*, February 2019.

60. Majid Ayoubi, Hamed Abdollahzadeh (Supervisor), **Hadi Razmi (Advisor)**. Improving the quality of power in the distribution network using the distribution static compensator (DSTATCOM) along with the battery energy storage system, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, January 2019.

61. Behzad Paki, Hasan Doagou-Mojarrad (Supervisor), **Hadi Razmi (Advisor)**. Multi-objective optimal operation thermal and wind unit considering environment problem and voltage stability constraint, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, January 2018.

62. Mohammad Jarahi, Hasan Doagou-Mojarrad (Supervisor), **Hadi Razmi (Advisor)**. A new method for locating sub-transmission and distribution substations, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, September 2018.

63. M. Maghsoudi, Hasan Doagou-Mojarrad (Supervisor), **Hadi Razmi (Advisor)**. Optimal location of TCSC devices in the distribution network with reducing losses and cost by Coco Algorithm, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, September 2018.

64. Morteza Hamzeloue-Hosseinabadi, Hasan Doagou-Mojarrad (Supervisor), **Hadi Razmi (Advisor)**. Virtual power plant planning considering distributed generation resources, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, July 2018.

65. Farhad Sharifi, Mahdi Shahparasti (Supervisor), **Hadi Razmi (Advisor)**. Flexible and integrated bus voltage control in active smart networks, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, January 2018.

66. Ebrahim Kiani, Hasan Doagou-Mojarrad (Supervisor), **Hadi Razmi (Advisor)**. Dynamic Economic Dispatch Problem Considering Demand Response Programs, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, September 2017.

67. Mohammad-Reza Mahmoudi-Alami, Hasan Doagou-Mojarrad (Supervisor), **Hadi Razmi (Advisor)**. Power system operation considering demand response programs and coordinated independent system operator, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, September 2017.

68. Hani Barzegar-Tahmtan, Hasan Doagou-Mojarrad (Supervisor), **Hadi Razmi (Advisor)**. Distribution network protection in the presence of uncertainty DG units, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, September 2017.

69. Ali Vaziripour, Hasan Doagou-Mojarrad (Supervisor), **Hadi Razmi (Advisor)**. Optimal management of electric vehicles charging using electrical substations in Tehran Metro, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, September 2017.

70. Ali Razmavar, Hasan Doagou-Mojarrad (Supervisor), **Hadi Razmi (Advisor)**. Optimal location of charging station for electric vehicles considering the information of electrical substations in Tehran Metro, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, September 2017.

71. Asma Mohammadi, Babak Nazarparvar (Supervisor), **Hadi Razmi (Advisor)**. Designing an intelligent controller for hybrid electric vehicles, *East Tehran Branch, Islamic Azad University, Tehran, Iran*, February 2017.

72. Sima Afshinfar, Mohammad-Reza Sultanpour (Supervisor), **Hadi Razmi (Advisor)**. Nonlinear robust position control design of a quadcopter, *Garmsar Branch, Islamic Azad University, Garmsar, Iran*, September 2015.

Software Skills

- MATLAB
- Simulink
- Microsoft Office
- LaTeX
- AutoCad
- ETAP
- DIgSILENT Power Factory
- Python

References

- Professor Heidar Ali Shayanfar (Iran University of Science and Technology)
- Professor Mohammad Teshnehlab (Khajeh Nasir Toosi University of Technology)