

# HERESH SEYEDI

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## PROFILE STATEMENT

As an experienced engineer and faculty member, my profile reflects a strong industrial and academic performance. More than 6 years of industrial experience in the most popular power engineering consultants of the nation, 14.5 years of academic profession in one of the top-ten universities of the country which involved teaching, research, practical and managerial endeavors have led to outstanding achievements that should be discussed in separate sections of this document. Being involved with the design of numerous important substations to enhance the stability and reliability of the power network, appropriate placement of three new power plants which had a significant impact on the stability of the system, proposing practical solutions to the protection and short circuit capacity issues in the network, having published 70 peer-reviewed journal papers, 32 conference papers, 5 books and book chapters, 5 industry-sponsored projects, having established the digital protection laboratory in the university of Tabriz, re-activating the high voltage laboratory and more than 2300 citations to my publications by other researchers in my field of expertise are some examples of the achievements of my twenty-year experience. My objective for the future is to get more and more involved in the industrial activities in order that my skills and experiences help to resolve the actual problems of the industry, even more than before.

## SKILLS

- Experienced in working with power system studies software programs such as Digsilent power factory, PSCAD-EMTDC, EMTP and CYME-PSAF
- Experienced in developing codes in Python, MATLAB and DPL environments
- Experienced in the power flow, short circuit, transient stability, voltage stability and switching transient analyses of electric power systems
- Familiar with excitation system models for power system stability studies (IEEE Std. 421.5 – 2016)
- Familiar with simulation of power electronic circuits in PSCAD-EMTDC
- Protective relays setting and coordination calculations
- Protective relays functional configuration and setting
- Working with the Omicron relay test set to evaluate the performance of protective relays
- Design of substation HV single line diagram
- Design of substation protection single line diagram
- Performing high voltage power frequency test for HV devices
- Performing high voltage impulse test for HV devices
- Performing partial discharge measurement test for HV devices
- Working with the Schering bridge circuit to determine capacitance and dielectric loss factor ( $\tan \delta$ ) of HV insulators

- Testing the insulating oils to evaluate dielectric strength
- Experience in provision of tender's documents and determining the technical specifications for high voltage circuit breakers, instrument transformers and surge arresters
- Familiar with the LVAC, LVDC and layout plans of HV substations
- Expert in teaching undergraduate and graduate courses in electrical engineering
- Supervision of undergraduate and graduate students research activities
- Teaching various undergrad and graduate courses in the field of electrical engineering with focus on power systems
- Strong understanding of applied mathematics, physics and fundamental concepts of electrical engineering
- Professional in conducting cutting-edge research works in the field of electric power systems with focus on protective relaying, traditional power system protection and micro-grid protection
- Proficient in Microsoft office programs including Word, Power point, Excel and Visio
- Familiar with AutoCAD
- Interested in teamwork and ability to engage with group activities
- Open to criticism and new ideas
- Easily adaptable to different situations and environments
- Committed to respect the diversities of people's ideas, insights, characters, races, cultures and physical characteristics

## EDUCATION AND TRAINING

09/2008	PhD: Electrical Engineering University of Tehran – Tehran - Iran
09/2003	MSc: Electrical engineering - Power systems University of Tehran – Tehran - Iran
09/2001	BSc: Electrical Engineering - Power University of Tehran – Tehran - Iran

## WORK HISTORY

09/2008 to Current	Positions: Full Professor (2020 to current), Associate Professor (2013 to 2020), Assistant Professor (2008 to 2013) University of Tabriz – Tabriz, Iran As a faculty member, in one of the top-ten universities of the country, my career involved teaching several undergrad and graduate courses, conducting cutting-edge research works in the field of power systems and supervising the undergrad and graduate students' theses and dissertations. Outstanding achievements of this experience includes: <ul style="list-style-type: none"> <li>• Published 70 peer-reviewed journal papers in prestigious international journals</li> </ul>
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- Published 32 conference papers
- Authored 5 books and book chapters
- Supervised 12 PhD students, 50 MSc students and 2 post-doc researchers
- More than 2300 citations to my research works, by other researchers across the globe
- Established the digital protection laboratory, with sponsorship of Azarbajejan Regional Electric Company, which is equipped with protection system simulator, relay test set and two multifunctional digital relays
- Conducted 5 industry-funded projects for the power utilities in Iran, in which I proposed innovative approaches to alleviate different technical problems, including excessive short circuit currents and protective relaying issues, in the associated utilities

12/2011 to 12/2017

Positions: Dean, Faculty of ECE, (09/2015 to 12/2017),

Associate Dean for research affairs, Faculty of ECE, (12/2011 to 09/2015)

University of Tabriz – Tabriz, Iran

In addition to the educational, industrial and research duties of a faculty member, I served as the dean of faculty for 2 years and the associate dean for 4 years. Outstanding achievements of this experience includes:

- Increased the number of graduate programs by 90 percent, to enhance the research areas covered by the researchers in the faculty
- Hired new faculty members to increase the number of members from 30 to 53
- Supported the faculty members to establish new research laboratories and helping them to equip the laboratories with the required hardware and software facilities
- Scheduled and executed several national and international conferences, scientific events, seminars and lectures, to enhance the collaboration of our scientists with their national and international colleagues

10/2008 to 09/2017

Position: Director of high voltage laboratory, Faculty of ECE

University of Tabriz – Tabriz, Iran

As the director of laboratory, my duties included supervising the devices in the laboratory to identify possible defects, specifying the daily needs and conducting the tests, including AC test, impulse test, partial discharge measurement, Schering bridge and dielectric test of oil, for the students. Major achievements of this experience are listed as the following:

- When I was appointed for this position, the laboratory was not active. It was being used as a warehouse. I set up all the existing devices and re-activated the laboratory.
- I negotiated with the Azarbajejan Regional Electric Company to help us equip the laboratory with the partial discharge measuring device. As a result, the laboratory is now equipped with this important device.

02/2002 to 09/2008

Position: Power system engineer

Moshanir power engineering consultants – Tehran, Iran

My duties included proposing technical specifications for different high voltage devices in substations, including HV circuit breakers, instrument transformers and surge arresters; supervision of high voltage tests to evaluate their conformity to the relevant IEC standards; designing HV and protection single line diagrams and performing power system studies including power flow, short circuit, transient stability, voltage stability and switching transient studies. Major achievements of this experience are listed as the following:

- Our designed HV substations were brought in service and improved the stability and reliability of the Iran interconnected power grid.
- I conducted power system studies to determine appropriate places for the new power plants. These power plants were successfully installed in the network and increased the stability and reliability of the network.
- My recommendations, as the result of my switching transient studies, helped to reduce the switching transient overvoltages on several transmission lines of the system, by which the short circuit events and deterioration and aging of components has been decreased.

05/2007 to 10/2007

Position: Visiting scholar

University of Waterloo - Ontario, Canada

In this relatively short period, my duties included conducting a research project in the field of power system dynamics and stability which was successfully completed.

## **INDUSTRIAL PROJECTS FOR MOSHANIR POWER ENGINEERING CONSULTANTS**

My activities in more than 6 years of work for the company, may be summarised as the following:

- Determination of technical specifications, HV and protection single line diagrams, and supervision of HV tests for several substations
- Five power system studies projects including load flow, short circuit and transient stability studies for the transmission system of Iran
- Three power system studies projects in the field of power plant placement for the power system of Iran
- Six power system transient studies projects in the field of switching transients of 400 kV transmission lines

## **RESEARCH**

My research activities have resulted in 102 journal and conference papers, 5 books/book chapters and 5 industry-funded research projects. Researchers across the world have cited my publications more than 2300 times and my H-index is 28. My areas of research interest include:

- Power system protection in the presence of renewable energy sources
- Microgrid and multi-microgrid protection
- Transmission system protection
- System protection schemes
- Power system dynamics and stability

My significant scientific highlights which makes difference in my field of expertise are listed as below:

- Advanced optimal under-frequency protection of microgrids and multi-microgrids
- Incorporation of voltage information into the under-frequency load shedding protection schemes
- Application of Wavelet transform and other signal processing techniques in the protection of transmission lines, generators and transformers
- Advanced transmission line distance protection schemes in the presence of inverter-interfaced renewable power sources
- Incorporation of security constraints into the optimal operation of power systems in the presence of energy hubs

## INDUSTRY-FUNDED PROJECTS

I have conducted the following projects for different industries, as a faculty member of the university of Tabriz. These projects aim to solve different stability, short circuit capacity and protection issues of the associated networks:

Title	Company	Software	Date
• Application of series capacitors to the transmission system of Iran	Niroo Research Institute	Digsilent power factory	2020
• Analysis of short circuit current limitation methods applicable to the network of Azarbajejan Regional Electric Company	Azarbajejan Regional Electric Company	Digsilent power factory	2016
• Analyzing the reasons of impressionability of the power network of Sungun Copper Complex from the upstream 230 kV system	Sungun Copper Complex Company	PSCAD-EMTDC	2014
• Analysis of short circuit current limitation methods and practical recommendations applicable to the transmission and sub-transmission	Gharb Regional Electric Company	PTI	2013

networks of Gharb Regional  
Electric Company

- Analysis of the problems associated with the protection of hybrid transmission lines and proposing new methods to overcome those problems Azarbayejan Regional Electric Company MATLAB Simulink 2020

## PEER-REVIEWED JOURNAL PAPERS

My research activities have led to 70 journal papers in prestigious journals such as IEEE Transactions on Power Delivery, IET Generation Transmission and Distribution, IEEE Systems Journal, International Journal of Electrical Power and Energy Systems, Electric Power Systems Research and many other international journals.

- | No. | Title   |
|-----|---|
| 1   | N.K. Yaseen, <b>H. Seyedi</b> , M. Abapour, Transmission line protection using local information in the presence of inverter-interfaced renewable energy sources. (Published online) <a href="https://doi.org/10.1049/gtd2.12797">https://doi.org/10.1049/gtd2.12797</a><br>IET Generation, Transmission & Distribution, 2023 |
| 2   | S. Dolatabadi, <b>H. Seyedi</b> , S. Tohidi, " A new method for loss of excitation protection of synchronous generators in the presence of static synchronous compensator based on the discrete wavelet transform",<br>Electric Power Systems Research (ELSEVIER) Vol. 209, 2022  |
| 3   | V. Chakeri, <b>H. Seyedi</b> , M. Tarafdar Hagh " A New Approach to Transmission Line Pilot Protection in the Presence of Inverter-Interfaced Distributed Generators",<br>IEEE Systems Journal 15 (4), 2021   |
| 4   | S. M. Sajjadi Kalajahi, <b>H. Seyedi</b> , S. Tohidi, B. Mohammadi-Ivatloo, " Decentralized risk-based security-constrained optimal power flow in interconnected multi-carrier microgrids ",<br>IET Generation, Transmission & Distribution, 2022   |
| 5   | K. Saberi-Beglar, K. Zare, <b>H. Seyedi</b> , M. Marzband, S. Nojavan, "Risk-embedded scheduling of a CCHP integrated with electric vehicle parking lot in a residential energy hub considering flexible thermal and electrical loads",<br>Applied Energy, 2023   |
| 6   | M. Alipour, <b>H. Seyedi</b> , " Probabilistic Load Shedding Scheme for Power System Voltage Stability Enhancement Using Discrete Group Search Optimization Algorithm",<br>Electric Power Components and Systems (Taylor & Francis) Published online, 2022  |
| 7   | P. Pourghasem, <b>H. Seyedi</b> , K. Zare, " A new optimal under-voltage load shedding scheme for voltage collapse prevention in a multi-microgrid system ",  |

Electric Power Systems Research (ELSEVIER) Vol. 203, 2022

- 8 M. Dadashi, K. Zare, **H. Seyedi**, M. Shafie-khah, " Coordination of wind power producers with an energy storage system for the optimal participation in wholesale electricity markets ",  
International Journal of Electrical Power & Energy Systems (ELSEVIER) Vol. 136, 2022
- 9 S. M. Sajjadi, **H. Seyedi**, K. Zare, " Under-frequency load shedding in isolated multi-microgrids",  
Sustainable Energy, Grids and Networks (ELSEVIER) Vol. 27, 2021
- 10 S. Aminzadeh, M. Tarafdar, **H. Seyedi**, " Reactive Power Coordination Between Solid Oxide Fuel Cell and Battery for Microgrid Frequency Control",  
Journal of Applied Research in Electrical Engineering 1(2), 2021
- 11 Z. Moshaver-Shoja, M. A. Mirzaei, **H. Seyedi** and K. Zare, "Sustainable energy supply of electric vehicle charging parks and hydrogen refueling stations integrated in local energy systems under a risk-averse optimization strategy",  
<https://doi.org/10.1016/j.est.2022.105633>  
Journal of Energy Storage, Volume 55, Part C, 2022,
- 12 S. AsghariGovar, **H. Seyedi**, " A Novel Transfer Matrix-Based Approach for Pilot Protection of Hybrid Transmission Lines Considering HIF Location",  
IEEE Transactions on Power Delivery 35 (4), 2020, 1749 - 1757
- 13 M. Nojavan, **H. Seyedi**, " Voltage Stability Constrained OPF in Multi-Micro-Grid Considering Demand Response Programs",  
IEEE Systems Journal 14 (4), 2020
- 14 S. Aminzadeh, M. Tarafdar Hagh, **H. Seyedi**, " Reactive power management for microgrid frequency control",  
International Journal of Electrical Power & Energy Systems (ELSEVIER), 120, 2020
- 15 B. Mohammadi-ivatloo, M. Pesaran, M. Nazari, **H. Seyedi**, " A hybrid genetic particle swarm optimization for distributed generation allocation in power distribution networks ",  
Energy (ELSEVIER) Vol. 209, 2020
- 16 S. Haghifam, M. Dadashi, K. Zare, **H. Seyedi**, " Optimal operation of smart distribution networks in the presence of demand response aggregators and microgrid owners: A multi follower Bi-Level approach",  
Sustainable Cities and Society (ELSEVIER) Vol. 55, 2020
- 17 M. Jalali, K. Zare, **H. Seyedi**, M. Alipour, F. Wang, " Distributed model for robust real-time operation of distribution systems and microgrids",  
Electric Power Systems Research (ELSEVIER) Vol. 177, 2019
- 18 V. Fathi, **H. Seyedi**, B. Mohammadi-Ivatloo, " Reconfiguration of distribution systems in the presence of distributed generation considering protective constraints and uncertainties",  
International Transactions on Electrical Energy Systems 30 (5), 2020
- 19 S. AsghariGovar, P. Pourghasem, **H. Seyedi**, "High impedance fault protection scheme for smart grids based on WPT and ELM considering evolving and cross-country faults",

- International Journal of Electrical Power & Energy Systems (ELSEVIER), 107, 2019, 412-421
- 20 M. Jadidbonab, M. J. Vahid-Pakdel, **H. Seyedi**, B. Mohammadi-ivatloo, "Stochastic assessment and enhancement of voltage stability in multi carrier energy systems considering wind power",  
International Journal of Electrical Power & Energy Systems (ELSEVIER) 106, 2019, 572-584
- 21 M. Alipour, K. Zare, **H. Seyedi**, M. Jalali, "Real-time price-based demand response model for combined heat and power systems",  
Energy (ELSEVIER), 168, 2019, 1119-1127
- 22 M. M. Taheri, **H. Seyedi**, M. Nojavan, M. Khoshbouy, B. Mohammadi-ivatloo, "High-Speed Decision Tree Based Series-Compensated Transmission Lines Protection Using Differential Phase Angle of Superimposed Current",  
IEEE Transactions on Power Delivery 33 (6), 2018, 3130-3138
- 23 M. Alipour, K. Zare, H. Zareipour, **H. Seyedi**, "Hedging Strategies for Heat and Electricity Consumers in the Presence of Real-Time Demand Response Programs",  
IEEE Transactions on Sustainable Energy, 2018
- 24 M. J. Vahid-Pakdel, **H. Seyedi**, B. Mohammadi-ivatloo, "Enhancement of power system voltage stability in multi-carrier energy systems",  
International Journal of Electrical Power & Energy Systems 99, 2018, 344-354
- 25 S. Asgharigovar, **H. Seyedi**, S. P. Dibazari, "Optimal coordination of overcurrent protection in the presence of SFCL and distributed generation",  
Turkish Journal of Electrical Engineering & Computer Sciences 26 (4), 2018, 2056-2065
- 26 M. Alipour, K. Zare, **H. Seyedi**, "A multi-follower bilevel stochastic programming approach for energy management of combined heat and power micro-grids",  
Energy (ELSEVIER) 149, 2018, 135-146
- 27 M. Jalali, K. Zare, **H. Seyedi**, "Strategic decision-making of distribution network operator with multi-microgrids considering demand response program",  
Energy (ELSEVIER) 141, 2017, 1059-1071
- 28 F. Jabari, **H. Seyedi**, S. Najafi Ravadanegh, B. Mohammadi-ivatloo, "Multi-objective optimal preventive islanding based on stochastic backward elimination strategy considering uncertainties of loads and wind farms",  
International Transactions on Electrical Energy Systems 27 (12), 2017, e2451
- 29 S. AsghariGovar, S. Heidari, **H. Seyedi**, S. Ghasemzadeh, P. Pourghasem, "Adaptive CWT-based overcurrent protection for smart distribution grids considering CT saturation and high-impedance fault",  
IET Generation, Transmission & Distribution 12 (6), 2017, 1366-1373
- 30 M. Nojavan, **H. Seyedi**, B. Mohammadi-ivatloo, "Voltage stability margin improvement using hybrid non-linear programming and modified binary particle swarm optimisation algorithm considering optimal transmission line switching",  
IET Generation, Transmission & Distribution 12 (4), 2017, 815-823
- 31 M. Nojavan, **H. Seyedi**, "Preventive voltage control scheme considering demand response, correlated wind and load uncertainties",  
Journal of Energy Management and Technology 1 (1), 2017, 43-52



- 32 M. M. Taheri, **H. Seyedi**, B. Mohammadi-ivatloo, "DT-based relaying scheme for fault classification in transmission lines using MODP",  
IET Generation, Transmission & Distribution 11 (11), 2017, 2796-2804
- 33 F. Hajbani, **H. Seyedi**, K. Zare, "Evaluation of power system robustness in order to prevent cascading outages",  
Turkish Journal of Electrical Engineering & Computer Sciences 27, 2019, 258-273
- 34 B. Khorshid, **H. Seyedi**, B. Mohammadi-ivatloo, K. Zare, S. Shargh, "Reconfiguration of distribution networks considering coordination of the protective devices",  
IET Generation, Transmission & Distribution 11 (1), 2017, 82-92
- 35 S. AsghariGovar, **H. Seyedi**, "Development of PMU-based backup wide area protection for power systems considering HIF detection",  
Turkish Journal of Electrical Engineering & Computer Sciences 25 (4), 2017, 2846-2859
- 36 M. Nojavan, **H. Seyedi**, M. Mehdinejad, "A novel scheme for current-only directional overcurrent relay",  
International Journal of Electrical Power and Energy Systems (Elsevier), Vol. 82, Nov. 2016
- 37 S. Shargh, B. Khorshid, B. Mohammadi-ivatloo, **H. Seyedi**, M. Abapour, "Probabilistic multi-objective optimal power flow considering correlated wind power and load uncertainties",  
Renewable Energy (ELSEVIER), Vol. 94, August 2016
- 38 N. Daryani, **H. Seyedi**, "Evidence Theory-Based Identification of Aging for Capacitive Voltage Transformers",  
IET Generation, Transmission and Distribution, Vol.10, No.14, July 2016
- 39 S. AsghariGovar, **H. Seyedi**, "Adaptive CWT-based transmission line differential protection scheme considering cross-country faults and CT saturation",  
IET Generation, Transmission and Distribution, Vol.10, No.9, June 2016
- 40 A. Mahari, **H. Seyedi**, "A wide area synchrophasor-based load shedding scheme to prevent voltage collapse",  
International Journal of Electrical Power and Energy Systems (Elsevier), Vol. 78, June 2016
- 41 A. Mohajeri, **H. Seyedi**, M. Sabahi, "Optimal setting of distance relays quadrilateral characteristic considering the uncertain effective parameters",  
International Journal of Electrical Power and Energy Systems (Elsevier), Vol. 73, Dec. 2015
- 42 T. Ghanizadeh, **H. Seyedi**, S. M. Hashemi, P. SoleimanNezhad, "Impedance-Differential Protection: A New Approach to Transmission-Line Pilot Protection",  
IEEE Transactions on Power Delivery, Vol.30, Iss.6, 2015
- 43 M. Alipour, S. Teimourzadeh, **H. Seyedi**, "Improved group search optimization algorithm for coordination of directional overcurrent relays",  
Swarm and Evolutionary Computation (Elsevier), Vol. 23, Aug. 2015
- 44 P. Mahdavi-pour Vahdati, **H. Seyedi**, A. Arjmandi, S. Moradi, "Synchronous Generator Stator Protection Using a Fuzzy Logic Based Voltage Controlled Overcurrent Protection Scheme",

- International Transactions on Electrical Energy Systems, Vol.5, No.2, Feb. 2015
- 45 M. Yasinzadeh, **H. Seyedi**, "Fake measurement identification in power system substations based on correlation between data and distance of the evidence", IET Generation, Transmission and Distribution, Vol.9, No.5, April 2015
- 46 A. Mahari, **H. Seyedi**, "High impedance fault protection in transmission lines using a WPT-based algorithm", International Journal of Electrical Power and Energy Systems (Elsevier), Vol. 67, May 2015
- 47 F. Jabbari, **H. Seyedi**, S. Najafi, "Large-scale power system controlled islanding based on Backward Elimination Method and Primary Maximum Expansion Areas considering static voltage stability", International Journal of Electrical Power and Energy Systems (Elsevier), Vol. 67, May 2015
- 48 F. Jabbari, **H. Seyedi**, S. Najafi, "Online aggregation of coherent generators based on electrical parameters of synchronous generators", International Journal of Smart Electrical Engineering, Vol. 4, March 2015
- 49 M. Alipour, **H. Seyedi**, "Enhancement of power system voltage stability using new centralized Adaptive Load Shedding Method", International Journal of Smart Electrical Engineering, Vol. 3, Sep. 2014
- 50 **H. Seyedi**, S. Teimourzadeh, P. S. Nezhad, "Adaptive Zero Sequence Compensation Algorithm for Double Circuit Transmission Line Protection", IET Generation, Transmission and Distribution, Vol.8, No.6, June 2014
- 51 A. Mokari, **H. Seyedi**, S. Abapoor, B. Mohammadi, S. Ghasemzadeh, "Modified Centralized ROCOF Based Load Shedding Scheme in an Islanded Distribution Network", International Journal of Electrical Power and Energy Systems (Elsevier), Vol. 62, May 2014
- 52 T. Ghanizadeh, **H. Seyedi**, S. M. Hashemi, "Protection of Transmission Lines Using Fault Component Integrated Power", IET Generation, Transmission and Distribution, Vol.8, No.12, Dec. 2014
- 53 S. M. Hashemi, M. Tarafdar Hagh, **H. Seyedi**, "A high-speed relaying scheme for protection of transmission lines in the presence of TCSC", IET Generation, Transmission and Distribution, Vol.8, No.12, Dec. 2014
- 54 A. Mokari, **H. Seyedi**, B. Mohammadi, S. Ghasemzadeh, "An Improved Under Frequency Load Shedding Scheme in Distribution Networks with Distributed Generation", Journal of Operation and Automation in Power Engineering, Vol.2, No.1, 2014
- 55 S. Nojavan, H. Ghesmati, K. Zare, **H. Seyedi**, "Large Consumer Electricity Acquisition Considering Time-of-Use Rates Demand Response Programs", Arabian Journal for Science and Engineering, Vol.12, No.39, Dec. 2014
- 56 S. M. Hashemi, M. Tarafdar Hagh, **H. Seyedi**, "A Novel Backup Distance Protection Scheme for Series-Compensated Transmission Lines", IEEE Transactions on Power Delivery, Vol.29, Iss.2, 2014

- 57 S. M. Hashemi, M. Tarafdar Hagh, **H. Seyedi**, "Transmission Line Protection: A Directional Comparison Scheme using the Average of Superimposed Components", IEEE Transactions on Power Delivery, Vol.28, Iss.2, 2013
- 58 A. Mahari, **H. Seyedi**, "An Analytic Approach for Optimal Coordination of Overcurrent Relays", IET Generation, Transmission and Distribution, Vol.7, Iss.7, July 2013
- 59 A. Mahari, **H. Seyedi**, "Optimal PMU placement for power system observability using BICA, considering measurement redundancy", Electric Power Systems Research (Elsevier), Vol.103, Elsevier, 2013
- 60 **H. Seyedi**, S. Tanhaei, "New Controlled Switching Approach for Limitation of Transmission Line Switching Overvoltages", IET Generation, Transmission and Distribution, Vol.7, Iss.3, 2013
- 61 **H. Seyedi**, L. Behroozi, "New Distance Relay Compensation Algorithm for Double Circuit Transmission Line Protection" IET Generation, Transmission and Distribution, Vol.5, Iss. 10, 2011, pp. 1011-1018
- 62 **H. Seyedi**, M. Sanaye Pasand, "A New Time-Domain Based Power System Frequency Estimation Algorithm" European Transactions on Electrical Power, 2012, pp. 433-448
- 63 **H. Seyedi**, M. Sanaye Pasand, "New Centralised Adaptive Load-Shedding Algorithms to Mitigate Power System Blackouts" IET Generation, Transmission and Distribution, Vol. 3, No. 1, 2009, pp. 99–114
- 64 **H. Seyedi**, M. Sanaye-Pasand, "Design of New Load Shedding Special Protection Schemes for a Double Area Power System" American Journal of Applied Sciences , Vol. 6, No. 2, pp. 317-327, Feb. 2009
- 65 M. Sanaye-Pasand, **H. Seyedi**, "Centralized Adaptive Load Shedding Methods To Enhance Power System Voltage Stability Margins" IEEJ Transactions on Electrical and Electronic Engineering, Vol. 3, No. 6, November 2008
- 66 **H. Seyedi**, Z. Abam, S. Golabi, "Comprehensive Analysis of the Impacts of Different Parameters on Transmission Line Switching Overvoltages", International Review on Modelling and Simulations, Vol.5, No.5, October 2012, pp. 2174-2182
- 67 **H. Seyedi**, B. Tabei, "Appropriate Placement of Fault Current Limiting Reactors in Different HV Substation Arrangements", Circuits and Systems, Vol.3, July 2012, pp. 252-262
- 68 M. Nojavan, **H. Seyedi**, B. Mohammadi-ivatloo, (*In Persian Language*) "Evaluation of voltage stability prevention approaches considering power loss, uncertainty of correlated wind turbines and load variations", Tabriz Journal of Electrical Engineering, Vol.47, No.1, 2017
- 69 V. Fathi, **H. Seyedi**, I. Babaei, (*In Persian Language*) "Improvement of Distance relays performance in short transmission lines protection", Tabriz Journal of Electrical Engineering, Vol.43, No.2, 2013

- 70 **H. Seyedi**, M. Sanaye-Pasand, (*In Persian Language*) “Adaptive load shedding algorithms to protect power system against combinational disturbances culminating in blackout”,  
Journal of the Faculty of Engineering, University of Tehran, Vol.42, No.7, 2009

## BOOKS AND BOOK CHAPTERS

No.	Title
1	M. Nojavan, <b>H. Seyedi</b> , B. Mohammadi, “Demand Response Application in Smart Grids Operation Issues - Volume 2, Chapter 12: Demand Response Application in Smart Grids Operation Issues - Volume 2”, Book chapter, Springer, 2019
2	M. Alipour, K. Zare, <b>H. Seyedi</b> , “Joint electricity and heat optimal power flow of energy hubs”, Book chapter, Springer, 2018
3	M. Alipour, K. Zare, <b>H. Seyedi</b> , “Power flow constrained short term scheduling of CHP units”, Book chapter, Springer, 2017
4	F. Jabbari, <b>H. Seyedi</b> , S. Najafi, B. Mohammadi-ivatloo “Stochastic contingency analysis based on voltage stability assessment in islanded power system considering load uncertainty using MCS and k-PEM”, Book chapter, IGI Global, 2016
5	M.R. Feyzi, <b>H. Seyedi</b> , ( <i>In Persian Language</i> ), “Electrical and electronic measuring instruments”, University of Tabriz Publications, 2014

## TEACHING EXPERIENCE

I have the experience of teaching several undergraduate and graduate courses as listed in the following table. Satisfaction of the students with my teaching, based on the evaluations performed at the end of each semester, has always been among the highest in the faculty.

No.	Course Title	Type
1	Advanced power system protection	Graduate
2	Digital power system protection	Graduate
3	Power system dynamics	Graduate
4	Power system transients	Graduate
5	Protection and relays	Undergraduate
6	Fundamentals of power system analysis	Undergraduate
7	High voltage substations design	Undergraduate
8	Electrical measurements	Undergraduate

9	Introduction to electrical engineering	Undergraduate
10	Technical English language for electrical engineering students	Undergraduate
11	High voltage laboratory	Undergraduate

## AWARDS AND HONORS

- University of Tabriz Award for Excellence in Teaching: May 2018
- University of Tabriz Award for Excellence in Research: Dec. 2018
- Ranked 24, among more than 700000 applicants in the Iranian students' entrance exam for universities: 1997
- Exceptional reviewer for IEEE Transactions on Power Delivery: 2018
- Exceptional reviewer for IEEE Transactions on Power Delivery: 2014

## SOFTWARE SKILLS

- Digsilent power factory
- PSCAD/EMTDC
- Python
- CYME- PSAF
- MATLAB
- EMTD
- GAMS
- Microsoft office
- AUTOCAD

## LANGUAGE PROFICIENCY

- English (Fluent)
- German (B1)
- Persian (Native)
- French (A2)