

Hany Mohamed Hasanien

Curriculum Vitae

1. PERSONAL DATA:

a) Address:

Electrical Power and Machines Department

Faculty of Engineering

Ain Shams University

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1 El-Sarayyat St., Abdo Basha, Abbasia, Cairo 11517,

Egypt

b) Education:

DEGREE	PLACE	DATES	COMMENTS
Joint Research	Kitami Institute of Technology, Kitami, Japan.	June 2008-2011	Renewable energy systems and control of electric drives. Advisors: Prof. Junji Tamura
PhD Electrical Engineering	Ain Shams University, Cairo, Egypt	July 2007	Thesis: Speed control of axial laminations switched reluctance motor Advisors: Prof. Mohamed A. Badr
M.Sc. Electrical Power and Machines Engineering	Ain Shams University, Cairo, Egypt	July 2004	Thesis: Performance enhancement of switched reluctance motor Advisors: Prof. Mohamed A. Badr Overall average: 95%
B.Sc. Electrical Power and Machines Engineering	Ain Shams University, Cairo, Egypt	July 1999	Thesis: Power system planning for a new developing area Advisors: Prof. Soliman El Debiky Overall average: 98%

c) Employment:

POSITION	PLACE	DATES	COMMENTS
Professor (Scientific Distinguish Promotion)	Ain Shams University, Faculty of Engineering, Electrical Power and Machines Dept. Cairo, Egypt	May 2017-Till present	Instructor of several Electrical Engineering undergraduate and graduate courses. Research: Renewable energy systems, energy storage systems, smart grid, power systems control and dynamics
Courtesy Professor	Department of Electrical and Computer Engineering, Florida International University, Miami, USA	1 Feb. 2023-1 Feb. 2025	Renewable energy systems, energy storages, power systems, and electric drives.
Associate Professor	King Saud University, College of Engineering, Electrical Engineering Dept., Riyadh, SA.	20 Sept. 2011- May 2015	Instructor of several Electrical Engineering undergraduate and graduate courses. Research: Renewable energy systems, energy storage systems, smart grid, power systems control and dynamics
Associate Professor	1) Ain Shams University, Electrical Power and Machines Dept. Cairo, Egypt 2) Part timer at British University in Egypt 3) Part timer at Arab Academy for Science and Technology and Maritime Transport, Cairo, Egypt	July 2012- May 2017	Instructor of several Electrical Engineering undergraduate and graduate courses. Supervisor of undergraduate and graduate research assistants, and several teaching assistants. Research: Renewable energy systems, energy storage systems, smart grid, power systems control and dynamics
Assistant Professor	1) Ain Shams University, Electrical Power and Machines Dept. Cairo, Egypt 2) Part timer at British University in Egypt 3) Part timer at Arab Academy for Science and Technology and Maritime Transport, Cairo, Egypt	July 2007- June 2012	Instructor of several Electrical Engineering undergraduate and graduate courses. Supervisor of undergraduate and graduate research assistants, and several teaching assistants. Research: Renewable energy systems, energy storage systems, smart grid, power systems control and dynamics
Teaching Assistant	Ain Shams University, Electrical Power and Machines Dept.	July 2004- June 2007	Teach tutorials and labs for different electrical engineering courses.

	Cairo, Egypt		
Demonstrator	Ain Shams University, Electrical Power and Machines Dept. Cairo, Egypt	July 1999- June 2004	Teach tutorials and labs for different electrical engineering courses.

2. RESEARCH:

a) Area of Interest:

- i) Renewable energy systems.
- ii) Power systems control and dynamics.
- iii) Energy storage devices.
- iv) Distributed generation and smart grids operation and control.
- v) Modern control techniques.
- vi) Electric Drives.

b) Research Projects

- [1] Ibrahim Alsaleh, Hany M. Hasanien, Abdallah Alassaf, “Multi-agent Model-free Reinforcement Learning for Demand Response in PV-rich Power Systems”, University of Hail, Hail, Saudi Arabia, Project no. RG-23 171, June 2023-June 2025.
- [2] Abdulaziz Alkuhayli, Hany M. Hasanien, Abdulrahman Alshamaa, “Design and Control of an Isolated/connected Hybrid Renewable Energy System”, The National Plan for Sciences & Technology, King Saud University, Riyadh, Saudi Arabia, Project no. 13-ENE1157-02, Project budget: 600,000 SR. Jan. 2022-December 2024.
- [3] Ibrahim Alsaidan, Hany M. Hasanien, Muhaned Alarraj, Abrar Saleh Hammad, “Proton Exchange Membrane Fuel Cell Steady State Modelling Using Metaheuristic Optimization Algorithms”, Deanship of Scientific Research, Qassim University, Qassim, Saudi Arabia, Project no. (١٠٣٠٣-qec-٢٠٢٠-١-٣-I), Project budget: 114,000 SR, during the academic year ١٤٤١ AH / ٢٠٢٠ AD", September 2020-September 2021.
- [4] Mohamed H. Qais, Hany M. Hasanien, Adnan Nouh, and Saad Alghuwainem, “Performance improvement of grid-connected renewable energy systems”, Deanship of Scientific Research, King Saud University, Riyadh, S.A. RGP-1440-049. Dec. 2018- September 2019.
- [5] Mohamed H. Qais, Hany M. Hasanien, Adnan Nouh, and Saad Alghuwainem, “Performance improvement of grid-connected renewable energy systems”, Deanship of Scientific Research, King Saud University, Riyadh, S.A. RGP-1440-049. September 2019-March 2020.
- [6] Mohamed H. Qais, Hany M. Hasanien, Adnan Nouh, and Saad Alghuwainem, “Performance improvement of grid-connected renewable energy systems”,

- Deanship of Scientific Research, King Saud University, Riyadh, S.A. RGP-1440-049. March 2020-March 2021.
- [7] Hany M. Hasanien, “Design optimization of PID controller in automatic voltage regulator system using Taguchi combined genetic algorithm method”, The Deanship of Scientific Research, Research Center, College of Engineering, King Saud University, 1 June 2012-1 April 2013.
- [8] Hany M. Hasanien and Syed Q. Ali, “Wind generator stability improvement by adaptive neural network controlled superconducting magnetic energy storage”, Sustainable Energy Technology (SET), King Saud University, S.A. SP12/A1/010. 15 Jan. 2012-15 July 2012.
- [9] Hany M. Hasanien, Syed Q. Ali, and Essam A. Al-Ammar “Transient stability enhancement of DFIG based Wind farm using advanced controllers”, Saudi Aramco Chair of Electrical Power, King Saud University, S.A. 1 Jan. 2012-30 Oct. 2012.
- [10] Hany M. Hasanien, “Speed control of grid-connected switched reluctance generator driven by variable speed wind turbine using adaptive neural network controller”, The Deanship of Scientific Research, Research Center, College of Engineering, King Saud University, 1 October 2011-1 October 2012.

c) Publications:

1) Books: 3

- [1] Hany M. Hasanien and Sayed Abbas Atia, “Control Systems and Applications”, Upgrading of Industrial Secondary School, Ministry of Education, Egypt, April 2010.
- [2] Hany M. Hasanien, S. M. Muyeen, and Junji Tamura, “Switched Reluctance Machine”, Praise Worthy Prize Press, Napoli, Italy, ISBN 978-88-96329-02-3, Feb. 2010.
- [3] Hany M. Hasanien, “Digital Control Lab.”, Electrical and Communications Dept., British University in Egypt, April 2009.

2) Book Chapters: 4

- [1] Enas Ahmed Abd Elhay, Mohammed A. El-Hameed, Hany M Hasanien, Attia El-Fergany, “Frequency control of hybrid autonomous microgrids comprising electric vehicles aggregator based on lightning attachment procedure optimizer”, Elsevier 2024. Book ISBN 978-0-323-95054-1. pp. . 235-254, Book title ‘Advanced Frequency Regulation Strategies in Renewable-Dominated Power Systems’, 2024.
- [2] Samuel Raafat Fahim and Hany M. Hasanien, “Energy Storage Devices”, Springer Nature Switzerland AG 2023. Book ISBN 978-3-031-18996-8. pp.

407-441, Book title ‘Modernization of Electric Power Systems, Energy Efficiency and Power Quality’, June 2023.

- [3] Mina N. Amin, Mahmoud A. Soliman, Hany M. Hasanien, and Almoataz Y. Abdelaziz, “Hybrid CSA-GWO Algorithm-Based Optimal Control Strategy for Efficient Operation of Variable-Speed Wind Generators”, Springer Nature Switzerland AG 2021. Book ISBN 978-3-030-64336-2. pp. 227-245, Book title ‘Control and Operation of Grid-Connected Wind Energy Systems’, 2021.
- [4] Hany M. Hasanien, and Ahmed Aldurra, “Grid connection scheme of a variable speed wind turbine driven switched reluctance generator”, Springer Verlag, London, 2011. Book ISBN 978-1-4471-2200-5. Book title ‘Wind Energy Conversion System’.

3) Book Co-Editor: 1

- [1] Co-Editor with both of Dr. S.M. Muyeen and Dr. Ahmed Al-Durra. Book Title: Wind Farm, Publisher: InTech, ISBN: 980-953-307-562-9.

4) Books Reviewer: 5

- [1] Tarek Mosad and Akram Ismail, “Technical Drawing and Circuit Analysis”, Upgrading of Industrial Secondary School, Ministry of Education, Egypt, Feb. 2011.
- [2] Mohamed Gad and Mahmoud Orabi, “Programmable Logic Technology”, Upgrading of Industrial Secondary School, Ministry of Education, Egypt, March 2011.
- [3] Tarek Mosad and Ahmed Gouda, “Power Electronics”, Upgrading of Industrial Secondary School, Ministry of Education, Egypt, April 2011.
- [4] Salha Fathy and Nehal Saed, “Technical Training”, Upgrading of Industrial Secondary School, Ministry of Education, Egypt, April 2011.
- [5] Akram Ismail and Mohamed Ibrahim, “Electrical Installations”, Upgrading of Industrial Secondary School, Ministry of Education, Egypt, May 2011.

5) Articles Published and accepted to appear in refereed Journals: 237

- [1] Martin Calasan, Mihailo Micev, Hany M. Hasanien and Shady H. E. Abdel Aleem, “PEM Fuel Cells: Two Novel Approaches for Mathematical Modeling and Parameter Estimation”, *Energy*, vol. 290, 130130, pp. 1-18, March 2024. [ISI Journal](#)
- [2] Zhiying Wang, Yang Wang, Haoran Ji, Hany M. Hasanien, Jinli Zhao, Lei Yu, Jiafeng He, Hao Yu, Peng Li, “Distributionally Robust Planning for Data center Park Considering Operational Economy and Reliability”, *Energy*, vol. 290, 130185, pp. 1-11, March 2024. [ISI Journal](#)

- [3] Akmaral Tlenshiyeva, Marcos Tostado-Véliz, Hany M. Hasanien, Nima Khosravi, Francisco Jurado, “A Data-Driven Methodology to Design User-Friendly Tariffs in Energy Communities”, *Electric Power Systems Research*, vol. 228, 110108, pp. 1-13, March 2024. [ISI Journal](#)
- [4] Mohamed R. Elkadeem, Kotb M. Kotb, Mohamed A. Abido, Hany M. Hasanien, Eman G. Atiya, Dhafer Almakhlis, Mahmoud F. Elmorshedy, “Techno-enviro-socio-economic design and finite set model predictive current control of a grid-connected large-scale hybrid solar/wind energy system: A case study of Sokhna Industrial Zone, Egypt”, *Energy*, vol. 289, 129816, pp. 1-23, Feb. 2024. [ISI Journal](#)
- [5] Abdullah Shaheen, Ragab El-Sehiemy, Hany M. Hasanien, Ahmed Ginidi, “An Enhanced Optimizer of Social Network Search for Multi-dimension Optimal Power Flow in Electrical Power Grids”, *International Journal of Electrical Power and Energy Systems*, vol. 155, Part B, 109572, pp. 1-25, Jan. 2024. [ISI Journal](#)
- [6] Zia Ullah, Hasan Saeed Qazi, Ahmad Alferidi, Mohammed Alsolami, Badr Lami, Hany M. Hasanien, “Optimal Energy Trading in Cooperative Microgrids Considering Hybrid Renewable Energy Systems”, *Alexandria Engineering Journal*, vol. 86, pp. 23-33, January 2024. [ISI Journal](#)
- [7] Ahmed Mahdy, Hany M. Hasanien, Shady H. E. Abdel Aleem, Mujahed Al-Dhaifallah, Ahmed F. Zobaa, Ziad M. Ali, “State-of-the-Art of the most commonly adopted wave energy conversion systems”, *Ain Shams Engineering Journal*, vol. 15, no. 1, pp. 1-25, 102322, Jan. 2024. [ISI Journal](#)
- [8] Marcos Tostado-Véliz, Ahmad Rezaee Jordehi, Hany M. Hasanien, Nima Khosravi, Seyed Amir Mansouri, Francisco Jurado, “On Different Collective Storage Schemes in Energy Communities with Internal Market”, *Journal of Energy Storage*, vol. 75, 109699, pp. 1-13, January 2024. [ISI Journal](#)
- [9] Hany M. Hasanien, Ibrahim Alsaleh, Marcos Tostado-Véliz, Miao Zhang, Ayoob Alateeq, Francisco Jurado, Abdullah Alassaf, “Hybrid Particle Swarm and Sea Horse Optimization Algorithm-based Optimal Reactive Power Dispatch of Power Systems Comprising Electric Vehicles”, *Energy*, vol. 286, 129583, pp. 1-9, Jan. 2024. [ISI Journal](#)
- [10] Ziad M. Ali, Ahmed Mahdy Ahmed, Hany M. Hasanien, Shady H. E. Abdel Aleem, “Optimal design of fractional-order PID controllers for a nonlinear AWS wave energy converter using hybrid jellyfish search and particle swarm optimization”, *Fractal and Fractional*, vol. 8, no. 1, pp. 1-21, December. 2023. [ISI Journal](#)
- [11] Hany M. Hasanien, Ibrahim Alsaleh, Marcos Tostado-Véliz, Abdullah Alassaf, Ayoob Alateeq, and Francisco Jurado, “Optimal parameters estimation of lithium-ion battery in smart grid applications based on gazelle optimization algorithm”, *Energy*, vol. 285, 129509, pp. 1-19, December 2023. [ISI Journal](#)
- [12] Marcos Tostado-Véliz, Yingqi Liang, Hany M. Hasanien, Rania A. Turkey, Juan Martínez-Moreno, Francisco Jurado, “Robust optimal coordination of active distribution networks and energy communities with high penetration of

- renewables”, *Renewable Energy*, vol. 218, 119286, pp. 1-13, December 2023. [ISI Journal](#)
- [13] Jonghoon Kim, Hany M. Hasanien, and Roland Kobla Tagayi, “Investigation of noise suppression in experimental multi-cell battery string voltage applying various mother wavelets and decomposition levels in discrete wavelet transform for precise state-of-charge estimation”, *Journal of Energy Storage*, vol. 73, 109196, pp. 1-16, December 2023. [ISI Journal](#)
- [14] Hany M. Hasanien, Ibrahim Alsaleh, Abdullah Alassaf, and Ayoob Alateeq, “Enhanced Coati Optimization Algorithm-Based Optimal Power Flow Including Renewable Energy Uncertainties and Electric Vehicles”, *Energy*, vol. 283, 129069, pp. 1-11, November 2023. [ISI Journal](#)
- [15] Ahmed H. Yakout, Hany M. Hasanien, Rania A. Turkey, Ahmed E. B. Abu-Elanien, “Improved reinforcement learning strategy of energy storage units for frequency control of hybrid power systems”, *Journal of Energy Storage*, vol. 72, Part A, 108248, pp. 1-15, November 2023. [ISI Journal](#)
- [16] Marcos Tostado-Véliz, Hany M. Hasanien, Rania A. Turkey, Ahmad Rezaee Jordehid, Seyed Amir Mansouri and Francisco Jurado, “A fully robust home energy management model considering real time price and on-board vehicle batteries”, *Journal of Energy Storage*, vol. 72, Part B, 108531, pp. 1-14, November 2023. [ISI Journal](#)
- [17] Zia Ullah, Anis Ur Rehman, Shaorong Wang, Hany M. Hasanien, Peng Luo, Mohamed R. Elkadeem, Mohamed A. Abido, “IoT-based Monitoring and Control of Substations and Smart Grids with Renewables and Electric Vehicles Integration”, *Energy*, vol. 282, 128924, pp. 1-13, November 2023. [ISI Journal](#)
- [18] Fatma El Zahraa Magdy, Hany M. Hasanien, Waheed Sabry, Zia Ullah, Abdulaziz Alkuhayli and Ahmed H. Yakout, “Mountain Gazelle algorithm-based optimal control strategy for improving LVRT capability of grid-tied wind power stations”, *IEEE ACCESS*, vol. 11, pp. 129479-129492, November 2023. [ISI Journal](#)
- [19] Mohammed H. Qais, Hany M. Hasanien, Saad Alghuwainem, and K.H. Loo, “Propagation Search Algorithm: A Physics-Based Optimizer for Engineering Applications”, *Mathematics*, vol. 11, no. 20, 4224, pp. 1-26, October 2023. [ISI Journal](#)
- [20] Marcos Tostado-Véliz, Ahmad Rezaee Jordehi, Hany M. Hasanien, Rania A. Turkey, Francisco Jurado, “A Novel Stochastic Home Energy Management System considering Negawatt Trading”, *Sustainable Cities and Society*, vol. 97, 104757, pp. 1-14, October 2023. [ISI Journal](#)
- [21] Anis Ur Rehman, Zia Ullah, Aqib Shafiq, Hany M. Hasanien, Peng Luo, Fazal Badshah, “Load Management, Energy Economics, and Environmental Protection Nexus Considering PV-based EV Charging Stations”, *Energy*, vol. 281, 128332, pp. 1-16, October 2023. [ISI Journal](#)
- [22] Anping Lin, Dong Liu, Zhongqi Li, Hany M. Hasanien, and Yaoting Shi, “Heterogeneous differential evolution particle swarm optimization with local search”, *Complex & Intelligent System*, vol. 9, pp. 6905–6925, October 2023. [ISI Journal](#)

- [23] Nourhan A. Maged, Hany M. Hasanien, Essamudin A. Ebrahim, Marcos Tostado-Véliz, Rania A. Turkey, and Francisco Jurado, “Optimal Real-time Implementation of Fuzzy Logic Control Strategy for Performance Enhancement of Autonomous Microgrids”, *International Journal of Electrical Power and Energy Systems*, vol. 151, 109140, pp.1-31, September 2023. [ISI Journal](#)
- [24] Mohamed M. Ibrahim, Hany M. Hasanien, Hany E. Z. Farag, and Walid A. Omran, “Energy Management of Multi-Area Islanded Hybrid Microgrids: A Stochastic Approach”, *IEEE ACCESS*, vol. 11, 101409, pp. 1-16, September 2023. [ISI Journal](#)
- [25] Mohamed S. Hashish, Hany M. Hasanien, Zia Ullah, Abdulaziz Alkuhayli, and Ahmed O. Badr, “Giant Trevally Optimization Approach for Probabilistic Optimal Power Flow of Power Systems Including Renewable Energy Systems Uncertainty”, *Sustainability*, vol. 15, no. 18, 13283, pp. 1-27, September 2023. [ISI Journal](#)
- [26] Anis Ur Rehman, Aqib Shafiq, Zia Ullah, Sheeraz Iqbal, Hany M. Hasanien, “Implications of Smart Grid and Customer Involvement in Energy Management and Economics”, *Energy*, vol. 276, 127626, pp. 1-13, August 2023. [ISI Journal](#)
- [27] Ahmed M. Hussien, Hany M. Hasanien, Mohammed H. Qais, and Saad Alghuwainem, “Adaptive-Width Generalized Correntropy Diffusion Algorithm for Robust Control Strategy of Microgrid Autonomous Operation”, *IEEE ACCESS*, vol. 11, pp. 91312-91323, August 2023. [ISI Journal](#)
- [28] Mohamed A.M. Shaheen, Zia Ullah, Hany M. Hasanien, Marcos Tostado-Veliz, Haoran Ji, Mohammed H. Qais, Saad Alghuwainem, Francisco Jurado, “Enhanced transient search optimization algorithm-based optimal reactive power dispatch including electric vehicles”, *Energy*, vol. 277, 127711, pp. 1-11, August 2023. [ISI Journal](#)
- [29] Nour A. Mohamed, Hany M. Hasanien, Abdulaziz Alkuhayli, Tlenshiyeva Akmaral, Francisco Jurado, and Ahmed O. Badr, “Hybrid Particle Swarm and Gravitational Search Algorithm-Based Optimal Fractional Order PID Control Scheme for Performance Enhancement of Offshore Wind Farms”, *Sustainability*, vol. 15, no. 15, 11912, pp. 1-25, August 2023. [ISI Journal](#)
- [30] Mohamed M. Elsaied, Walid H. Abdel Hameed, Hany M. Hasanien, Marcos Tostado-Véliz, Essam A. Al-Ammar, Francisco Jurado, “Optimal sliding mode control for frequency stabilization of hybrid renewable energy systems”, *IET Renewable Power Generation*, vol. 17, no. 11, pp. 2815-2834, August 2023. [ISI Journal](#)
- [31] Hend M. Fahmy, Rania A. Sweif, Hany M. Hasanien, Mohammed Alharbi, José Luis Maldonado, and Francisco Jurado, “Hybrid State of Charge Estimation of Lithium-Ion Battery Using the Coulomb Counting Method and an Adaptive Unscented Kalman Filter”, *Energies*, vol. 16, no. 14, 5558, pp. 1-21, July 2023. [ISI Journal](#)
- [32] Rania A. Turkey, Tarek S. Abdelsalam, Hany M. Hasanien, Mohammed Alharbi, Zia Ullah, S.M. Muyeen, Amr M. Abdeen, “Adaptive Controlled Superconducting Magnetic Energy Storage Devices for Performance

- Enhancement of Wind Energy Systems”, *Ain Shams Engineering Journal*, vol. 14, no. 7, 102343, pp. 1-12, July 2023. [ISI Journal](#)
- [33] Marcos Tostado-Véliz, Hany M. Hasanien, Ahmad Rezaee Jordehi, Rania A. Turkey, Manuel Gómez-González, Francisco Jurado, “An Interval-based privacy–Aware optimization framework for electricity price setting in isolated microgrid clusters”, *Applied Energy*, vol. 340, 121041, pp. 1-14, June 2023. [ISI Journal](#)
- [34] Marcos Tostado-Véliz, Hany M. Hasanien, Ahmad Rezaee Jordehi, Rania A. Turkey, Francisco Jurado, “Risk-averse Optimal Participation of a DR-intensive Microgrid in Competitive Clusters considering Response Fatigue”, *Applied Energy*, vol. 339, 120960, pp. 1-13, June 2023. [ISI Journal](#)
- [35] Mohammed Qais, K. H. Loo, Hany M. Hasanien, and Saad Alghuwainem, “Optimal comfortable load schedule for home energy management including photovoltaic and battery systems”, *Sustainability*, vol. 15, no. 12, 9193, June 2023. [ISI Journal](#)
- [36] Ibrahim Mahmoud, Hany M. Hasanien, Rania A. Turkey, and Walid A. Omran, “Energy management system for islanded multi-microgrids using a two-stage optimization scheme based on political optimizer”, *IET Renewable Power Generation*, vol. 17, no. 7, pp. 1713-1730, May 2023. [ISI Journal](#)
- [37] Mahmoud A. El-Dabah, Ragab A. El-Sehiemy, Hany M. Hasanien, and Bahaa Saad, “Photovoltaic Model Parameters Identification Using an Innovative Optimization Algorithm”, *IET Renewable Power Generation*, vol. 17, no. 7, pp. 1783-1796, May 2023. [ISI Journal](#)
- [38] Nour A. Mohamed, Hany M. Hasanien, Essam A. Al-Ammar, Marcos Tostado-Véliz, Rania A. Turkey, Francisco Jurado, Ahmed O. Badr, “Gorilla Tropical Optimization Algorithm Solution for Performance Enhancement of Offshore Wind Farm”, *IET Generation, Transmission & Distribution*, vol. 17, no. 10, pp. 2388-2400, May 2023. [ISI Journal](#)
- [39] Hamood-Ur-Rehman, Nisar Ahmed, Hadeed Ahmed Sher, Ahmed Al-Durra, Hany M Hasanien, “Comprehensive analysis and design of a switched-inductor type low inductance-requirement DC-DC buck-boost converter for low power applications”, *IET Power Electronics*, vol. 16, no. 7, pp.1239-1254, May 2023. [ISI Journal](#)
- [40] Dina A. Zaki, Hany M. Hasanien, Mohammed Alharbi, Zia Ullah, Mariam A. Sameh, “Hybrid Driving Training and Particle Swarm Algorithm-Based Optimal Control for Performance Improvement of Microgrids”, *Energies*, vol. 16, no. 11, 4355, pp. 1-18, May 2023. [ISI Journal](#)
- [41] Hend M. Fahmy, Rania A. Sweif , Hany M. Hasanien, Marcos Tostado-Véliz, Mohammed Alharbi, and Francisco Jurado, “Parameter Identification of Lithium-ion Battery Model Based on African Vultures Optimization Algorithm”, *Mathematics*, vol. 11, no. 9, 2215, pp. 1-33, May 2023. [ISI Journal](#)
- [42] Mohamed Sobhy, Hany M. Hasanien, Almoataz Y. Abdelaziz and Mohamed Ezzat, “Manta ray foraging optimization algorithm-based load frequency control for hybrid modern power systems”, *IET Renewable Power Generation*, vol. 17, no. 6, pp. 1466-1487, April 2023. [ISI Journal](#)

- [43] George Fernandez Savari, M. Jagabar Sathik, L. Anantha Raman, Adel El-Shahat, Hany M. Hasanien, Dhafer Almakhles, Shady H.E. Abdel Aleem, Ahmed I. Omar, "Assessment of Charging Technologies, Infrastructure and Charging Station Recommendation Schemes of Electric Vehicles: A Review", *Ain Shams Engineering Journal*, vol. 14, no. 4, pp. 1-15, April 2023. [ISI Journal](#)
- [44] Marcos Tostado-Véliz, Hany M. Hasanien, Rania A. Turkey, Yasser O. Assolami, David Vera, Francisco Jurado, "Optimal Home Energy Management including Batteries and Heterogenous Uncertainties", *Journal of Energy Storage*, vol 60, 106646, pp. 1-13, April 2023. [ISI Journal](#)
- [45] Mihailo Micev, Martin Čalasan, Milovan Radulović, Shady H. E. Abdel Aleem, Hany M. Hasanien, Ahmed F. Zobaa, "Artificial Neural Network-Based Nonlinear Black-Box Modeling of Synchronous Generators", *IEEE Transactions on Industrial Informatics*, vol. 19, no. 3, pp. 1-12, March 2023. [ISI Journal](#)
- [46] Andrew J. Riad, Hany M. Hasanien, Rania A. Turkey, Ahmed Yakout, "Identifying the PEM Fuel Cell Parameters Using Artificial Rabbits Optimization Algorithm", *Sustainability*, vol. 15, no. 6, 5009, pp. 1-25, March 2023. [ISI Journal](#)
- [47] Amr Saleh, Hany M. Hasanien, Rania A. Turkey, Balgynbek Turdybek, Mohammed Alharbi, Francisco Jurado, and Walid A. Omran, "Optimal Model Predictive Control for Virtual Inertia Control of Autonomous Microgrids", *Sustainability*, vol. 15, no. 5, 4625, pp. 1-17, March 2023. [ISI Journal](#)
- [48] Zia Ullah, Shaorong Wang, Guan Wu, Hany M. Hasanien, Anis Ur Rehman, Rania A. Turkey, Mohamed R. Elkadeem, "Optimal Scheduling and Techno-Economic Analysis of Electric Vehicles by Implementing Solar-Based Grid-Tied Charging Station", *Energy*, vol. 267, 126560, pp. 1-15, March 2023. [ISI Journal](#)
- [49] Ziad M. Ali, Martin Calasan, Shady H. E. Abdel Aleem, and Hany M. Hasanien, "On the exact analytical formulas of leakage current-based supercapacitor model operating in industrial applications", *Energies*, vol. 16, no. 4, pp. 1-22, Feb. 2023. [ISI Journal](#)
- [50] Martin Čalasan, Shady H. E. Abdel Aleem, Hany M. Hasanien, Zuhair M. Alaas, and Ziad M. Ali, "An innovative approach for mathematical modeling and parameter estimation of PEM fuel cells based on iterative Lambert W function", *Energy*, vol. 264, 126165, pp. 1-15, February 2023. [ISI Journal](#)
- [51] Marcos Tostado-Véliz, Hany M. Hasanien, Salah Kamel, Rania A. Turkey, Francisco Jurado and M. R. Elkadeem, "Multiobjective home energy management systems in nearly-zero energy buildings under uncertainties considering vehicle-to-home: A novel lexicographic-based stochastic-information gap decision theory approach", *Electric Power Systems Research*, vol. 214, 108946, pp. 1-13, January 2023. [ISI Journal](#)
- [52] Ahmed M.Taher, Hany M. Hasanien, Shady H. E. Abdel Aleem, Marcos Tostado-Véliz, Martin Čalasan, Rania A. Turkey, and Francisco Jurado, "Optimal Model Predictive Control of Energy Storage Devices for Frequency

- Stability of Modern Power Systems”, *Journal of Energy Storage*, vol. 57, 106310, pp. 1-14, January 2023. [ISI Journal](#)
- [53] Ahmed Mahdy, Hany M. Hasanien, Rania A. Turkey, and Shady H. E. Abdel Aleem, “Modeling and optimal operation of hybrid wave energy and PV system feeding supercharging stations based on golden jackal optimal control strategy”, *Energy*, vol. 263, 125932, pp. 1-19, January 2023. [ISI Journal](#)
- [54] Mahmoud A. El-Dabah, Ragab A. El-Sehiemy, Hany M. Hasanien, and Bahaa Saad, “Photovoltaic Model Parameters Identification Using Northern Goshawk Optimization Algorithm”, *Energy*, vol. 262, Part B, 125522, pp. 1-18, Jan. 2023. [ISI Journal](#)
- [55] Mohamed S. Hashish, Hany M. Hasanien, Haoran Ji, Abdulaziz Alkuhayli, Mohammed Alharbi, Tlenshiyeva Akmaral, Rania A. Turkey, Francisco Jurado, and Ahmed O. Badr, “Monte Carlo Simulation and a Clustering Technique for Solving the Probabilistic Optimal Power Flow Problem for Hybrid Renewable Energy Systems”, *Sustainability*, vol 15, no. 1, pp. 1-26, January 2023. [ISI Journal](#)
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- [2] Ghazi A. Ghazi, Essam A. Al-Ammar, Hany M. Hasanien and Rania A. Turkey, “Transient Search Optimization Based Fuzzy-PI Controller for MPPT of Standalone PV System”, *The 23rd International Middle East Power Systems Conference, MEPCON 2022*, pp. 1-5, 13-15 December 2022, Cairo, Egypt.
- [3] Mina Amin, Hany M. Hasanien, and Almoataz Abdelaziz, “A review of different control topologies of PMSG based wind energy conversion systems”, *The 23rd International Middle East Power Systems Conference, MEPCON 2022*, pp. 1-7, 13-15 December 2022, Cairo, Egypt.
- [4] Mohamed Ibrahim, Walid Omran and Hany Hasanien, “Optimal Day-Ahead Dispatch in Isolated AC/DC Microgrids Using Hunger Game Search

- Algorithm”, *The 23rd International Middle East Power Systems Conference, MEPCON 2022*, pp. 1-7, 13-15 December 2022, Cairo, Egypt.
- [5] Kamran Awan, Mohammed A. Elgendy, Dehong Huo, Kabita Adhikari, Hany M. Hasanien, “Impact of the Photovoltaic Array Configuration on its Performance under Partial Shading Conditions”, *The 57th International Universities Power Engineering Conference (UPEC 2022)*, 30th August– 2nd September 2022, Istanbul, Turkey.
- [6] Ibrahim Mahmoud, Walid Omran and Hany Hasanien, “Day-Ahead Scheduling for Grid Connected Multi-Microgrids Via Hierarchical Energy Management Strategy”, *IEEE International Middle East Power Systems Conference (MEPCON)*, pp. 58-64, 14-16 December 2021, Assiut, Egypt.
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- [8] O. E. Sayed Morsy, A. N. Abd Elghaffar, A. M. Eltamaly, H. M. Hasanien, Y. Sayed Mohamed and A. -H. Ahmed, “Integration of DPMUs with the Distribution Network at Portion Nodes for Voltage Control”, *International Conference on Decision Aid Sciences and Application (DASA)*, 2021, pp. 842-846, 7-8 Dec. 2021, Sakheer, Bahrain.
- [9] Abeer S. Omar, Walid H. A. El-Hameed and Hany M. Hasanien, “Optimization of Controller Parameters for Grid Photovoltaic System at Faulty Network Using Emperor Penguin Optimizer”, *9th International Conference on Renewable Power Generation, RPG 2021*, 1-2 March 2021, pp. 179-185, Dublin, Ireland.
- [10] N. K. Dankadai, M. A. Elgendy, S. P. McDonald, D. J. Atkinson, and H. M. Hasanien, “Model-Based Sensorless Torque Control of SRM Drive Using Single Current Sensor”, *10th International Conference on Power Electronics, Machines and Drives, PEMD 2020*, 2021, 15-17 December 2020, pp. 960-965, Nottingham, UK.
- [11] Nancy Azazy, Walid Helmy and Hany M. Hasanien, “Optimal Control of Geothermal Power Plant by using PI Controller based on Genetic Algorithm”, *15th IEEE International Conference on Computer Engineering and Systems (ICCES 2020)*, pp. 1-6, 15-16 December 2020, Cairo, Egypt.
- [12] Ahmed S. Menesy, Hamdy M. Sultan, Salah Kamel, Rania A. Turky, Hany M. Hasanien, and Ahmed Al-Durra, “Optimal Values of Unknown Parameters of Polymer Electrolyte Membrane Fuel Cells Using Improved Chaotic Electromagnetic Field Optimization”, *IEEE Industry Applications Society Annual Meeting 2020*, Detroit, Michigan, USA, 11-15 October, 2020.
- [13] Mohamed A.M. Shaheen, Hany M. Hasanien, S.F. Mekhamer and Hossam E.A. Talaat, “Optimal power flow of power networks with penetration of renewable energy sources by Harris Hawks optimization method”, *IEEE 2nd International Conference on Smart Power and Internet Energy Systems (SPIES)*, pp. 537-542, 15-18 September 2020, Bangkok, Thailand.

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- [15] A.M. Hussien, S.F. Mekhamer, and Hany M. Hasanien, "Cuttlefish Optimization Algorithm based Optimal PI Controller for Performance Enhancement of an Autonomous Operation of a DG System", *IEEE 2nd International Conference on Smart Power and Internet Energy Systems (SPIES)*, pp. 293-298, 15-18 September 2020, Bangkok, Thailand.
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- [17] Abdelhamid Abdelbaset, Mohamed Z. Shams, Hany M. Hasanien and Almoataz Youssef Abdelaziz, "Photovoltaic array reconfiguration to reduce partial shading losses using water cycle algorithm", *IEEE Electrical Power and Energy Conference (EPEC)*, pp. 1-6, 16-18 October 2019, Montreal, Canada.
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- [24] Dina A. Zaki, Hany M. Hasanien, Noha H. El-Amary, and Almoataz Y. Abdelaziz, "Tuning PI controllers for optimal microgrid operation based on artificial neural network", *IEEE Conference on Power Electronics and Renewable Energy (CPERE)*, pp. 371-378, 23-25 October, 2019, Aswan, Egypt.
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- [28] Mahmoud A. Soliman, Hany M. Hasanien and Ahmed Al-Durra, "High performance frequency converter controlled variable-speed wind generator using linear-quadratic regulator controller", *The IEEE Industry Applications Society Annual Meeting*, pp. 1-7, 29 September-3 October 2019, Baltimore, MD, USA.
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- the 53rd International Universities Power Engineering Conference, UPEC, 4-7 September 2018, pp. 1-6, Glasgow, U.K.*
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- [35] Shady M. Elgarhy, Mahmoud M. Othman, Adel Taha, and Hany M. Hasanien, “Short term load forecasting using ANN technique”, *in the proceeding of Nineteenth International Middle East Power Systems Conference, MEPCON, 19-21 December 2017, pp. 1385-1394, Cairo, Egypt.*
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- [47] Talha A. Taj, Hany M. Hasanien, and A. I. Alolah, "Improving the dynamic performance of a grid-connected wind energy conversion system using flywheel energy storage system", in *the proceeding of International Electric Machines and Drives Conference, IEMDC*, 10-13 May 2015, pp. 1545-1549, d'Alène, Idaho, USA.
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- [49] Talha A. Taj, Hany M. Hasanien, A. I. Alolah, and S. M. Muyeen, "Dynamic performance enhancement of a Grid-Connected Wind Farm Using Doubly Fed Induction Machine Based Flywheel Energy Storage System", in *the proceeding of International renewable energy congress IREC*, 24-26 March 2015, pp. 1-5, Sousse, Tunisia.
- [50] Talha A. Taj, Hany M. Hasanien, A. I. Alolah, and S. M. Muyeen, "Transient stability improvement of a grid-connected wind farm using doubly fed induction machine based flywheel energy storage system", in *the proceeding of IEEE PES Asia-Pacific Power and Energy Engineering Conference 2014 (IEEE PES APPEEC 2014)*, 7-10 December 2014, Hong Kong.
- [51] Talha Ali Khan, Adnan S. Nouh, and Hany M. Hasanien, "Speed control of hybrid stepper motor by using an adaptive neuro fuzzy inference system", in *the proceeding of International Conference of Electronics, Computers, and Artificial Intelligent, ECAI 2014*, 23-25 October 2014, Bucharest, Romania.
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- [69] Hany M. Hasanien, N.H. Saad, M.A. Mostfa, M.A. Badr “Steady state performance of axial laminations switched reluctance motor” *in proceeding of the 11th international middle east power system conference (MEPCON 2006)*, El Minia University, Egypt.
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- [71] Hany M. Hasanien, A.A. Abbas, M.A. El Sayad, M.A. Badr “ Speed regulation of switched reluctance motor using optimized harmonic injection technique” *in proceeding of the 9th international middle east power system conference (MEPCON 2003)*, Shebin El kom, Egypt.

3. TEACHING:

a) *Courses taught:*

A summary by course for the results from teaching critiques are given in the following sections.

Courses at Ain Shams University:

Course	Level
Control of Electrical Machines	Grad
Power Systems Control	Grad
Electrical Testing	Grad
Electrical Circuits	Undergrad
Power Electronics	Undergrad
Automatic Control	Undergrad
Utilization of Electrical Power	Undergrad
Digital Control	Undergrad
Measurement and Instrumentation	Undergrad
Electromagnetic field	Undergrad
Energy Conversion	Undergrad
Electrical Machines	Undergrad

Courses at King Saud University:

Course	Level
EE 631: Computer aided analysis of Electrical Machines	Grad
EE 632: Special types of Electrical Machinery	Grad
EE 633: Computational methods in Electromagnetics	Grad
EE 638: Linear Electrical Machines	Grad
EE 637: Advanced topics in drives and power electronics	Grad
EE 532: Generalized theory of Electrical Machines	Grad
EE 533: Electrical Machine dynamics	Grad
EE 430-436: Introduction to electrical machines dynamics	Undergrad
EE 432: Power electronics	Undergrad
EE 441: Power systems analysis	Undergrad
EE 435: Electric drives	Undergrad
EE 496: Graduation project 1	Undergrad
EE 497: Graduation project 2	Undergrad

b) Thesis Supervision:

In most cases, I have been the *main research supervisor*, given the status of the other professors

Summary:

Total PhD Students supervised and graduated as of March 1, 2021: 6

Total PhD Students under present supervision as of March 1, 2021: 3

Total MS Students supervised and graduated as of March 1, 2021: 16

Total MS Students under present supervision, as of March 1, 2021: 7

No.	Name	Degree	Dates	Comments
1	Sayed Madboly	PhD	July 2006-April 2010	Thesis: Investigation the dynamic response of Brushless doubly-fed induction generator used for variable speed wind energy applications Co-supervisor: Prof. M. A. Badr
2	Rania Raafat	M.Sc	May 2007-May 2010	Thesis: Equivalent models for wind farms Co-supervisor: Prof. M. A. Badr
3	Ahmed Abd Rabo	M.Sc	Oct. 2008-April 2011	Thesis: Optimal design of transverse flux linear motor Co-supervisor: Prof. Sohier. Sakr
4	Ahmed Yousry	M.Sc	May 2009-Sept. 2011	Thesis: Analysis and control of transverse flux linear motor Co-supervisor: Prof. M. A.L. Badr
5	Ibrahim Mohamed	M.Sc	Oct. 2009-Feb. 2013	Thesis: Analysis, performance and control of axial flux permanent magnet brushless machine Co-supervisor: Prof. Hamdy El gohary
6	Samuel Rafat	M.Sc	Oct. 2008-Nov. 2011	Thesis: Impact of DG Existence in the Electrical Distribution Networks Co-supervisor: Prof. M. A.L. Badr
7	Sherehan Ashraf	M.Sc	Oct. 2008-Sept. 2011	Thesis: Performance enhancement of DFIG driven by wind farm Co-supervisor: Prof. M. A.L. Badr
8	Talha Taj	M.Sc	July 2013-March 2015	Thesis: DFIG wind farms Co-supervisor: Prof. Alolah
9	Rashid Meer	M.Sc	July 2013-May 2015	Thesis: TFLMs Co-supervisor: Prof. Alolah
10	Talha Ali Khan	M.Sc	September 2013-May 2015	Thesis: Speed control of stepper motor Co-supervisor: Prof. Adnan Nouh
11	Dina Ahmed Zaki Rostom	Ph.D	Oct. 2015-June 2020	Thesis: Provisory microgrid performance for flexible power system operation using new techniques Co-supervisor: Prof. Almoataz Y. Abdelaziz
12	Mohamed Magdy Mahmoud	M.Sc	Nov. 2015-October 2018	Thesis: Transient stability improvement of a grid-connected DFIG-based wind farm Co-supervisor: Prof. Huessin Faried

				Soliman
13	Shady Mahmoud Saed	M.Sc	May 2016-today	Thesis: Optimal demand side management of smart grid using new optimization techniques Co-supervisor: Dr. Mahmoud Othman
14	Romany Girges Gorgy	M.Sc	July 2016-April 2020	Thesis: Dynamic performance improvement of automatic voltage regulator system using computation evolutionary algorithms Co-supervisor: Prof. Mohamed A.L. Badr
15	Omnia Soliman Elazab	M.Sc	July 2016-Dec. 2018	Thesis: Low voltage ride through capability improvement of grid-connected photovoltaic power plants Co-supervisor: Dr. Amr Magdy
16	Haroon Morad Gaber	M.Sc	December 2016-today	Thesis: Advanced control strategies for autonomous operation of microgrids Co-supervisor: Dr. Mohamed Hassan Soliman
17	Abdelhamid Abdelbaset Mohamed	M.Sc	February 2017-Jan. 2020	Thesis: Photovoltaic array reconfiguration for partial shading losses reduction Co-supervisor: Prof. Almoataz Yousef and Dr. Mohamed Z. Shams
18	Mina Nabil Amen	M.Sc	January 2017-September 2020	Thesis: Performance enhancement of variable speed wind energy conversion system Co-supervisor: Prof. Almoataz Yousef
19	Abeer Shaban Abdelmohsen	Ph.D	July 2016-September 2021	Thesis: Dynamic performance enhancement of a grid connected photovoltaic system using advanced control strategies Co-supervisor: Prof. Mohamed A.L. Badr
20	Mahmoud Nasrallah Mohamed	Ph.D	May 2016-withdraw	Thesis: Transient stability improvement of a grid connected brushless doubly fed reluctance generator based wind turbine Co-supervisor: Prof. Huessin Faid Soliman and Dr. Eluessin Abbas
21	Amany Hamdy	Ph.D	May 2016-today	Thesis: Optimal control of microgrid operation under different

	Abdelmoemen			conditions Co-supervisor: Prof. Mohamed A.L. Badr and Prof. Almoataz Y. Abdelaziz
22	Elham Mohamed Darwish	Ph.D	September 2016-Jan. 2018	Thesis: Reactive power control for voltage fluctuations mitigation and power loss reduction under high photovoltaic penetration in the Egyptian distribution networks Co-supervisor: Prof. Soliman Eldebikey and Prof. Ahmed Attallah
23	Eman Mohamed Eisa	Ph.D	January 2017-June 2020	Thesis: Transient stability improvement of a grid connected permanent magnet synchronous generator based wind farm Co-supervisor: Prof. Mahmoud Abdelhamid Mostafa
24	Hassan Yousef Mahmoud	Ph.D	February 2017-October 2020	Thesis: Operation and control of offshore wind farm connected to high voltage direct current transmission systems Co-supervisor: Prof. Almoataz Y. Abdelaziz and Dr. Ahmed Hassan Bisher
25	Mohamed Salama Ebrahim	Ph.D	February 2017-October 2018	Thesis: Design of MPPT controller for on-grid PV systems Co-supervisor: Prof. Adel Emarah and Prof. Ahmed M. Atallah
26	Mohamed Abdullah Shaheen	M.Sc	Jan. 2018-June 2020	Thesis: Effect of Demand Response and Energy Storage on Power System Operation Co-supervisor: Prof. Hossam Talaat and Prof. Said Fouad.
27	Ahmed Huessin Moreb	M.SC	Jan. 2018-Jan. 2021	Thesis: Enhancement of the Performance of Micro Grids Co-supervisor: Prof. Said Fouad and Dr. Said Fouad.
28	Heba khalid	PhD	Jan. 2017-today	
29	Nesma Ahmed Abdelnaby	M.SC	Jan. 2019-September 2021	Thesis: Frequency stability enhancement of power systems using optimal frequency controllers. Co-supervisor: Dr. Ahmed Yakout.

4. PROFESSIONAL ACTIVITIES:**a) Achievements and Awards**

- He was awarded the Appreciation Ain Shams University Award in Engineering Sciences for 2022.
- He was a member of the promotion committee for Associate Professors and Professors of Electrical Power Engineering in Egypt in September 2022.
- He was included in the Research Council of Ain Shams University in January 2021.
- He was awarded Superiority Egypt Award for Engineering Sciences in 2019.
- He was included in a Stanford University database (USA) for the best 2% of the scientists worldwide in 2020, 2021 and 2022.
- He was Editor in Chief of Ain Shams Engineering Journal in April 2021.
- Best IET RPG Conference paper award, first prize, China 2017.
- He was awarded Institutions Egypt Award for Invention and Innovation of Renewable Energy Systems Development in 2014.
- He was awarded Encouraging Egypt Award for Engineering Sciences in 2012.
- He is IEEE PES EGYPT Chapter Chairman, 2020-2022.
- He is an Editor of Electronics Journal, MDPI, Industrial Electronics Section, July 2020.
- He is an Editor of IET Renewable Power Generation since September 2016.
- He is a member of Energy Research Council in Academy of Scientific Research and Technology 2016.
- He is a Guest Editor of Special Issue on: Emerging Technologies for Virtual Plant and Microgrid, of IET Generation, Transmission & Distribution, 2018.
- He is an Editorial Board Member of Electric Power Components and Systems Journal since 2013.
- He is an Associate Editor of Ain Shams Engineering Journal since 2015.
- His Biography has been included in '2000 Outstanding Intellectuals of the 21st Century 2011' in International Biographical Center, Cambridge, England.
- His Biography has been included in 'Great Minds in the 21st Century' in American Biographical Institute, North Carolina, U.S.A. 2011.
- His Biography has been included in 'Marquis Who's Who' in the world for its 28th edition, 2011.

- Ain Shams University international publications award for 2010.
- Ain Shams University international publications award for 2011.
- Ain Shams University international publications award for 2012.
- Highest distinction in B.Sc., first rank with honor.
- Faculty of Engineering, Ain Shams University excellent grade award for 5 years (1994-1998).

b) Societies, Journals and Conferences:

- Member of NSP Scientific Academy, USA, May 2023.
- Organized and Co-chaired of a Special Session of title "Control Applications in Distributed Power Generation Systems" on the 40th Annual Conference of the IEEE Industrial Electronics Society, IECON 2014, 28 Oct.-1 Nov. 2014, Dallas, TX, USA.
- Member of the Technical Organizing Committee of the Sixteenth International Middle East Power Systems Conference, MEPCON 2014, 23-25 Dec. 2014, Cairo, Egypt.
- Senior Member of the IEEE 2011-present.
- Member of the IEEE 2009-2010.
- Senior Member of Power and Engineering Society (PES), 2011-present.
- Member of Power and Engineering Society (PES), 2009-2010.
- Senior Member of Industrial Electronics Society (IES), 2011.
- Technical Committee Chair of International Conference on Advances in Industrial Control, Electronics, and Computer Engineering (AICECE) 2012, Aveiro-Portugal, 13-16 July 2012.
- Member of the Technical Organizing Committee of Second Ain Shams University International Conference on Environmental Engineering, which hold in Cairo, Egypt, April 10-12 2007.
- Member of the Technical Organizing Committee of Third Ain Shams University International Conference on Environmental Engineering, which hold in Cairo, Egypt, April 14-16 2009.
- An Editor of the Third Ain Shams University International Conference on Environmental Engineering, which hold in Cairo, Egypt, April 14-16 2009.
- Member of International Association of Engineers (IAENG), 2013.

c) Refereeing and reviewing for Journals and Conferences:

Regular reviewer for various journals and conferences, notably:

- IEEE Transactions on Industrial Electronics
- IEEE Transactions on Energy Conversion
- IEEE Transactions on Power Systems
- IEEE Transactions on Sustainable Energy
- IET Renewable Power Generation

- IET Generation, Transmission, Distribution
- Electric Power Components and Systems
- European Transactions on Electrical Power
- International Review of Electrical Engineering
- Electric Power Systems Research
- Energy Conversion and Management
- International Journal of Electrical Power and Energy Systems
- Ain Shams Engineering Journal.
- King Saud University Journal.
- IEEE, IEMDC, 2009.
- MEPCON 2014, 2015 and 2016.
- Future University Conference 2016.

d) Reviewer of Msc and PhD thesis:

1. N. Balaji, "Development of a novel gate drive with active protection for IGBT and estimation of the optimal thermal limits of a PSSD in power supplies", PhD thesis, Visvesvaraya Technological University, Jnana Sangama, Belgaum, India, March 2013.
2. Hassan Mohei Al-Deen Hassan Hussein, "Maximum power extraction from electric utility interfaced wind turbine system", Msc thesis, King Saud University, College of Engineering, Electrical Engineering Department, Riyadh, Saudi Arabia, April 2013.
3. Ammar Anwar Khan, "Online partial discharge detection in underground power cables", Msc thesis, King Saud University, College of Engineering, Electrical Engineering Department, Riyadh, Saudi Arabia, April 2013.
4. Mohamed Hasan Mohamed Qais, "Transient response of distance relays to power swings on series compensated transmission lines", Msc thesis, King Saud University, College of Engineering, Electrical Engineering Department, Riyadh, Saudi Arabia, January 2014.
5. Wakeel Ahmed, "Appropriate Electric Energy Conservation Measures for Grand Mosques in Riyadh City", M.Sc thesis, King Saud University, College of Engineering, Electrical Engineering Department, Riyadh, Saudi Arabia, March 2014.
6. Mohamed Hafeez Abbasi, "Control of grid-connected PV system for improved dynamic performance", M.Sc thesis, King Saud University, College of Engineering, Electrical Engineering Department, Riyadh, Saudi Arabia, May 2015.
7. Hanan Abd El Mouiz Ali, "Application of Z-source inverter for photovoltaic systems connected to grid", M.Sc thesis, Menoufia University, Faculty of Engineering, Electrical Engineering Department, Menoufia, Egypt, Jan. 2019.
8. Ingy Ali Mohamed, "Enhancement of power system stability with large scale integrated wind farms", PhD thesis, Ain Shams University, Faculty of Engineering, Electrical Power and Machines Department, Cairo, Egypt, March 2019.

9. Wael Abdel-Fattah Mohamed, “Enhancement of smart grid distribution systems and integration of electric vehicles”, PhD thesis, Ain Shams University, Faculty of Engineering, Electrical Power and Machines Department, Cairo, Egypt, October 2017.
10. Mahmoud Soliman Abd El-Moniem, “Performance of permanent magnet synchronous generator (PMSG) driven by wind turbine”, PhD thesis, Menoufia University, Faculty of Engineering, Electrical Engineering Department, Menoufia, Egypt, Dec. 2018.
11. Ahmed Mahmoud Mahmoud, “Optimal allocation of energy storage systems (ESS) for load management applications”, M.Sc thesis, Ain Shams University, Faculty of Engineering, Electrical Power and Machines Department, Cairo, Egypt, April 2018.
12. Ibrahim Abdel Nasser Ibrahim, “Impact of distributed generations (DG) on realibility of distribution system”, M.Sc thesis, Ain Shams University, Faculty of Engineering, Electrical Power and Machines Department, Cairo, Egypt, Feb. 2018.
13. Amr Khaled Khamees, “Modern approaches for optimal power flow”, M.Sc thesis, Ain Shams University, Faculty of Engineering, Electrical Power and Machines Department, Cairo, Egypt, August 2017.
14. Ahmed Samir Abbas, “Power quality enhancement in smart systems using artificial intelligence techniques”, M.Sc thesis, Menoufia University, Faculty of Engineering, Electrical Engineering Department, Menoufia, Egypt, Oct. 2018.
15. Ahmed Magdy Mosaad, “Optimal design of controller for AVR performance enhancement”, M.Sc thesis, Ain Shams University, Faculty of Engineering, Electrical Power and Machines Department, Cairo, Egypt, Nov. 2017.
16. Mohamed Ali Ali Othman, “Electric power system blackout prevention using automatic system separation”, M.Sc thesis, Ain Shams University, Faculty of Engineering, Electrical Power and Machines Department, Cairo, Egypt, Jan. 2018.
- 17.

e) Society service:

- Coordinator of Electric power group.
- Coordinator of Electric Machines group.
- Member of ABET Committee.
- Member of NCAAA committee.
- Member of Railway Engineering Committee.

f) Experience of Short Courses Training in Industry:

- Transmission line protection, Dubai Electricity and Water Association (DEWA), 22-26 April 2018, Dubai, UAE.

- Circuit breaker and switchgear, Career Development & Consultations Academy, (CDC), Cairo, Egypt.
- Power Transformer, Construction, Operation, and Maintenance, Career Development & Consultations Academy, (CDC), Cairo, Egypt.
- Electric drives: operation, control and maintenance” in INMA Kingdom Training & Development Center, Cairo, Egypt.
- Electrical power distribution systems troubleshooting” in the group training and consultation (GTC), Cairo, Egypt.
- Automatic voltage regulator operation and maintenance” in the group training and consultation (GTC), Dammam, Saudi Arabia.
- Training courses with GTC from 2012-2015 as follows:
 - Generator protection
 - Excitation control systems
 - Switchgear, circuit breaker, relay operation and maintenance
 - Distributed control system
 - Electrical system transient investigation
 - Grounding
 - Power flow analysis
 - Battery
 - Variable speed drives
 - Faults analysis
 - Distribution transformers
 - Gas turbine control system
 - Low voltage network operation, testing and maintenance
 - Overhead lines Patrolling

g) Invited Speaker and Session Chair:

- [1] Hany M. Hasanien, “Photovoltaic modeling using metaheuristic algorithms”, *the 2nd INTERNATIONAL CONGRESS ON AI AND MACHINE LEARNING*, FEBRUARY 14-15, 2022, UK.
- [2] Hany M. Hasanien, “Artificial Intelligence Application for Photovoltaic Systems”, *International Conference on Artificial Intelligence and Robotics*, April 29-30, 2022, Osaka, Japan.

- [3] Hany M. Hasanien, “Session Chair”, *International Conference of Power Electronics and Renewable Energy (CPERE)*, Feb. 19-21, 2023, Cairo, Egypt.
- [4] Hany M. Hasanien, “Session Chair”, *International Middle East Power Systems Conference (MEPCON)*, December 19-21, 2017, Cairo, Egypt.
- [5] Hany M. Hasanien, “Session Chair”, *International Middle East Power Systems Conference (MEPCON)*, December 17-19, 2019, Cairo, Egypt.
- [6] Hany M. Hasanien, “Session Chair”, *International Middle East Power Systems Conference (MEPCON)*, December 15-17, 2021, Cairo, Egypt.