Curriculum Vitae

ALI YAZDIAN VARJANI
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https://www.scopus.com/hirsch/author.uri?accessor=authorProfile&auidList=6504375406

Objective:

Seeking a responsible career opportunity in Education and Industry that will best utilize my past professional and educational experiences, and where making a significant contribution to the success of my employer will gain me career advancement opportunities.

Academic Qualifications:

PhD in Electrical Engineering

School of Electrical, Computer and & Telecommunication Engineering University of Wollongong, Australia. 1995-1998.

Thesis Title:, "*Harmonic Control Techniques for Inverters and Adaptive Active Power Filters*",

Master of Engineering (Honors). in Electrical Engineering

School of Electrical, Computer and & Telecommunication Engineering, University of Wollongong, Australia. 1993-1994.

Thesis Title:, "*Artificial Neural Network Application in Power System Load Forecasting*",

Bachelor of Science in Electrical Engineering.

Department of Electrical and Computer Engineering, Sharif University of Technology, Teheran, Iran, 1984-1989,

Thesis Title:, "*Digital Simulation of Self-Controlled Synchronous Machine Fed by VSI and CSI*",

Work and Research Experience:

Jul 1999 - Now	Tarbiat Modares University, Faculty of Electrical and Computer Engineering, Assistant Professor *www.modares.ac.ir/~yazdian*
Jul 2010 – Dec 2016	Managing Editor of Modares Journal of Electrical Engineering (MJEE)*, mjee.modares.ac.ir*
Apr 2015 – Dec 2017	Tehran Traffic Control Company, *Board Member trafficcontrol.tehran.ir*
Jul 2015 – July 2018	Information Technology Organization of Iran, *Board Member, www.ito.gov.ir*
Mar 2013 - Jul 2015	Kharazmi IT development Inc. Director of Planning and Development Dept., Senior Advisor, *www.kharazmico.com*.
Jul 2008 - Sep 2010	Tarbiat Modares University, Dean of Faculty of Electrical and Computer Engineering.
Jul 2002 - Sep 2004	Iran Telecom Research Centre, Head of Planning and Management Dept., Senior Advisor and Board Member.
Jul 2001 - Oct 2005	Tarbiat Modares University, Faculty Engineering, Head of Power Group
Jul 1999 - Mar 2001	"Scientific Network of Iran Project", Iranian Research Organization for science and Technology (IROST). Senior Advisor and Technical Manager of Project.
Sep 1995- Sep 1996	University of Wollongong Union, Board of Management, https://ro.uow.edu.au/uowunion/
Jul 1995- Dec 1998	University of Wollongong, Electrical and Computer Engineering Dept., Teaching Assistant in: Circuit Theory, Electronics,
Nov 1994- Apr 1995	Broken Hill Proprietary (BHP Billiton). Engineering, Wollongong, Metallic Coating Line, Supervisory System Programming.
Dec 1991 - Oct 1992	Iran Electric Organization (Tavanir), Ministry of Energy, Teheran, Senior Engineer, "400 and 230 KV Power Transformers Standard project",
Apr 1990 - Sep 1991	Ministry of Energy, Technical Bureau for Power, Teheran, Expert Engineer, Standard & Substation Groups, "CT and CVT Standard Project",
Mar 1989 - Mar 1990	Electric Power Research Center, Teheran, Senior Computer and Electrical Engineer, "Migrating Electromagnetic Transient Program, EMTP, from Mainframe to PC: Line and Cable Constant", projects.
*May 1986-April. 1987***:**	Sharif Academic Center for Education, Culture and Research, Teheran, Research Assistant, "Design and implementation Z80 based microcontroller for CNC Machine", project.

Selected Consulting Research Projects:

Sept 2020-2021: "Codification of Smart Government Development Strategies", Ministry of Information & Communication Technology, *www.ito.gov.ir*.

Sept 2012-2014: "National ICT Index Monitoring System, Information Technology Organization of Iran, Ministry of Information & Communication Technology, *www.ito.gov.ir*.

Sept 2013-Now: "Establishment and Operation of Industrial Cyber Physical (IOT). Lab, Tarbiat Modares University, Vice-Presidency for Science, Technology, *en.isti.ir*

Sept 2008-2009: "Establishment and Operation of Computer Emergency Response Team for Spam", (TMUCERT). for Tarbiat Modares University, Iran Telecom Research Center (ITRC), *www.irancsirt.ir*.

July 2002-Dec 2003:"Management of 4th Iran National Plan for Communication and Information Technology Development", Iran Telecom Research Center (ITRC), Project Manager.

July 2001-Dec 2002: "A Database for Electrical Research Potential of Iranian Universities and Research Institutes", Research Deputy of Tavanir Tehran, Ministry of Energy Project Manager.

July 1999-Feb 2001: "Scientific Network of Iran", Iranian Research Organization for science and Technology (IROST), Technical Manager of Project.

Courses:

February 1991:	"Computer Aided Design in Power System Distribution", UN_ESCAP Asian and Pacific Centre for Transfer of Technology, Bangalore, India, Electric Power Research Institute (One week). .
Oct-Dec 1991:	"Design and Planning of Electrical instrument of Iranshaher's Power Plant", Schkoda Firm Co. Ltd Berno, Bratislava, Prague, Czech (3 Months).
July 1992:	"Application Expert System in Power System: Prolog Programming", Electric Power Research Center, Teheran, Iran (Two Weeks). .
June 1997:	"Quality of Electricity Supply", Electricity Association of Australia (ESAA). University of Wollongong, Australia (One week). .
August 1997:	"Surge Spike and transient Risk Management, "Precision Power Pty Ltd, University of Wollongong, Australia (One week). .
January 1999:	"Advanced Java and IBM VisualAge based Programming in Education", IBM Education Dept., Sydney, Australia (4 Day). .
September 1999:	"Advanced Data Communication Network Management", Tellabs Company, Helsinki, Finland (4 week). .
February 2000:	"IP Management of Data Communication Network", RIPE, Ankara Turkey (One Week). *www.ripe.net*.
September 2005:	"Lead Auditory for Information Security Management System (ISMS)., "British Standard Institute, Tehran, IRAN. (One Week).
Dec 2017:	"Developing the ICT ecosystem to harness Internet of Things", Bangkok, Thailand. (Three days). ITU

Publications:

Book and Standards:

[1] "Current and Voltage Capacitor Transformers Standard for 63, 132, 230, and 400 KV", Technical Bureau for Power, Teheran, Ministry of Energy, Published in Persian and English. 1991.

[2] "Power Transformers Standard for 230 and 400 KV", Technical Bureau for Power, Teheran, Ministry of Energy, Published in Persian and English, 1992.

[3] Technology Management Annex, Information Technology Organization of Iran, Ministry of Communication and Information Technology 2017

Conferences Papers:

[1] A. Yazdian Varjani and P. Doulai, "Application of Neural Network in Power System Load Forecasting", Australasian Universities Power Engineering Conference, AUPEC'93, pp. 235-240, Sept. 1993.

[2] P. Doulai, A Yazdian and M. Manoharan, "24-Hour Ahead Power Systems Load Forecasting Using Conventional and Kalman Filtering Methods", *Australasian Universities Power Engineering Conference AUPEC'94*, Sept. pp-664-668, 1994.

[3] A. Yazdian and P. Doulai, "Neural Network versus Time Series method for Power System Short-term Load Forecasting*", International Power Engineering Conference, IPEC'95*, pp. 677-672, Singapore, March 1995.

[4] A. Yazdian Varjani, B. S. P. Perera, J. F. Chicharo, and M. T. Kilani, "An Equal Area Based Pulse-width and Position Switching Strategy for Full-Bridge Inverter Applications", *Australasian Universities Power Engineering Conference, AUPEC'96*, Melbourne, pp. 143-149, 1996.

[5] A. Yazdian Varjani, B. S. P. Perera, J. F. Chicharo, and M. T. Kilani, "Sliding Measurement of Power System Harmonics", *Australasian Universities Power Engineering Conference, AUPEC'96*, Melbourne, pp. 293-299, 1996.

[6] A. Yazdian Varjani, J. F. Chicharo, and B. S. P. Perera, "An Introduction to Wavelets in Power Quality Analysis", *Australasian Universities Power Engineering Conference, AUPEC'97*, Sydney, pp. 277-281, 1997.

[7] M. T. Kilani and A. Yazdian Varjani, "ECG Heart Estimation", *8th Iranian Conference on Electrical Engineering, (ICEE),* 2000.

[8] A. Yazdian Varjani, B. S. P. Perera, and J. F. Chicharo, "Adaptive Active Power Filtering Scheme", *14th International Power System Conference (PSC)*, 2000. (Persian).

[9] R. Keypour, H. Seifi and A. Yazdian Varjani, "A Genetic Based Algorithm for Allocation and Sizing of Active Power Filter", *14th International Power System Conference (PSC)*, 2000 (Persian).

[10] A. Yazdian Varjani, B. S. P. Perera, and J. F. Chicharo, "Adaptive Active Power Filtering Scheme", *14th International Power System Conferences (PSC),* 2000.

[11] N. Moghadam A. Yazdian and M. Hooshmand, "E-commerce and Developing Countries; Obstacles and Motivations", *First Erou-Asia Conference In Information and Communication Technology EroAsia*, Shiraz, 2002.

[12] N. Moghadam M. Hooshmand and A. Yazdian, "E-Readiness for ICT Development Iran Case Study", *IEEE 2nd International Symposium on Telecommunications IST2003,* 2003.

[13] N. Moghadam, Sheikholeslami F. Safara and A. Yazdian, "University-Industry Collaboration via Techno-Parks", *IEEE 2nd International Symposium on Telecommunications IST2003,* 2003.

[14] H. Baghgar, A. Yazdian and H. Seifi, "Constant Flow Based Fuzzy Controller for Speed Control of Induction Motor", *First Mechateronics Conference of Iran*, July, 2003.

[15] H. Baghgar, A. Yazdian and H. Seifi, "Fuzzy Controller for Speed Control of Induction", *5th Conference on Intelligent Systems (CIS 2003),* Sep. 2003.

[16] K. Fazeli, A. Yazdian, A. R. Sharafat, "Modification of IPsec packet structure to improve performance in satellite network", *the 11th Iranian Conference on Electrical Engineering, (ICEE),* Shiraz, Iran 2003

[17] A. R. Sharafat, M. Rasti, and A. Yazdian, "Neural Network Based Dynamic Anomaly Detection in Computer Networks: A Novel Training Paradigm Using Abnormal Behavior", *16th International Conference on Computer Applications in Industry and Engineering (CAINE03),* Las Vegas, November, 2003.

[18] E. Heydarnejad, A. Yazdian, F. Safara and S. Dastranj, "E-Commerce Potential in Developing Small and Medium Industry Firms", *2nd Iranian Computer Conference,* Dec 2003.

[19] E. Heydarnejad, A. Yazdian, F. Safara and S. Dastranj, "Information Technology Incubator and their Role in Developing Small and Medium Firms", *7th Iranian Universities, Industry& Government Cooperation Congress*, 2003.

[20] M. Parsa, A. Yazdian, M. Noorouzbeigi and M. Mohamadian, "Power Plant Energy Efficiency Improvement with Variable Speed Drives, Case Study: Arak Power Plant", 20th *International Power System Conference (PSC),* 2005.

[21] M. Hendijanizadeh, A. Yazdian, M. Mohamadian, "A Novel Sliding Mode Robust DC Motor Position Control System", *20th International Power System Conference (PSC)*, 2005.

[22] R. Nasirpour, A. Yazdian, M. Mohamadian, "A Robust PWM Rectifier with Reduced Input Current THD", *20th International Power System Conference (PSC)*, 2005.

[23] M.M. Darjani, and A. Yazdian Varjani. "Optimal Placement of Fault Indicators in Distribution Networks Using Genetic Algorithm", *13th Iranian Conference on Electrical and Electronics Engineering, (ICEE).* 2005.

[24] M. Zamanzadeh, T. Shahrabi, A. Yazdian, "Effect of different parameters on characterization of Calcareous deposits by pulse current technique", *7th National Congress on Surface Engineering*, Isfahan, 2006

[25] A. Akhlaghi, M. Parsa Moghadam and A. Yazdian, "The impact of wide usage of Energy Efficient Light Bulb on Power Quality in Distribution System", *5th National Energy Congers*, Iran Dec 2006. (Persian*).*

[26] M.H. Zadeh, A. Yazdian, M. Mohamadian, "Robust Position Control in DC motor by Fuzzy Sliding Mode Control", *Int Symposium on Power Electronics, Electrical Drives, Automation and Motion (SPEEDAM 2006),* pp. 1413-1418, Taormina, Italy, May 2006

[27] M. Hosseinpour, A. Yazdian and M. Mohamadian, "Maximum Power Point Tracking of Induction Generator in Variable Speed Wind Turbine", *22th International Power System Conference (PSC)*, 2007.

[28] M. Dehghan, M. Mohamadian, and A. Yazdian, "Sensorless Maximum Power Point Tracking of PMSG Wind Turbine", *22th International Power System Conference (PSC),* 2007.

[29] M. Abadi, M. Mohamadian, A. Yazdian, and, "Improving DFIG Wind Turbine Flicker Using Grid Side Converter", *22th International. Power System Conference (PSC),* Tehran, Iran, 2007.

[30] J. Nourouzi, M. Mohamadian and A. Yazdian, "Evaluation of Fixed Point Digital Signal Processors in Vector Control of Induction Motors", *15th Iranian Conference on Electrical and Electronics Engineering (ICEE),* pp. 611-616, May 2007.

[31] M. Nayeripoor, A. Yazdian, M. Mohamadian, and R. Khorshidi, "Optimization of an Improved Sliding Mode Controller for Shunt Active Power Filter", *International Conference on Power Engineering, Energy and Electrical Drives,* Setubal, Portugal *(POWERENG),* pp 42-47, 2007.

[32] R. Mohammadi, N. Moghadam and A. Yazdian, "A New Algorithm for Distributed clustering information flow in Sensor Network " *12th Annual Conference of Computer Society of Iran,* 2007

[33] M. Zamanzadeh, T. Shahrabi, A. Yazdian, M. Alioff Khazraie, "Optimization of conditions for formation of calcareous deposits on catholically protected mild steel in seawater with Taguchi method", *10th Congress of Iranian metallurgical engineers*, Tehran, Iran (Persian) 2006.

[34] M. Zamanzadeh, T. Shahrabi, A. Yazdian, M. Alioff Khazraie, "Effect of frequency of pulse potential application on morphology and kinetics of calcareous deposits on catholically protected mild steel in seawater", *10th congress of Iranian metallurgical engineers,* Tehran, Iran. 2006

[35] M. Hoseinpour, R. Gharekhani, A. Yazdian and M. Mohamadian, "Hybrid Operation of Unified Power Quality Conditioner and Photovoltaic Array", *13th Power System Distribution Conf (EPDC),* Zibakenar, Iran, 2008.

[36] M. Dehghan, M. Mohamadian and A. Yazdian, "Maximum Boost Control and Current Ripple Reduction of Z-Source Inverter With Space Vector Modulation", *16th Iranian Conference on Electrical Engineering (ICEE),* May 2008, Tehran, Iran.

[37] A.H. Rajaei, M. Mohamadian and A. Yazdian, "Improving Single-Phase Induction Motor Drive, Output Voltage Using Z-Source Inverter", *16th Iranian Conference on Electrical Engineering (ICEE),* May 2008, Tehran, Iran.

[38] M. Dehghan, A. Yazdian and M. Mohamadian, "Short Circuit Current Reduction With Z-Source Inverter and Dynamic Voltage Restorer", *16th Iranian Conference on Electrical Engineering (ICEE),* May 2008, Tehran, Iran.

[39] M.H. Abardeh, A. Yazdian, "A new reference generation method for UPQC for orthogonal Voltage Vector", *23th International Power System Conference (PSC),* Tehran, Iran, Nov. 2008.

[40] M., R. Gharekhani, A. Yazdian and M. Mohamadian, "Grid Connected Photovoltaic Array Operation based on Z-Source Inverter as Active Power Filter", *14th Power System Distribution Conf*, *(EPDC),* Iran, 2009.

[41] A.S. Larijani, M. Mohamadian, A. Yazdian, M. Shahparasti, A. Amiri and, "A Novel Three-level Inverter Induction Motor Direct Torque Control System with Neutral Point Voltage Deviation Minimization", *International Conference on Electric Power and Energy Conversion Systems (EPEC),* 10-12 Nov 2009, Sharjah, UAE.

[42] M. Shahparasti, S.M. Dehghan, A.S. Larijani, A. Yazdian and M. Mohamadian, "A Z-Source AC/DC/AC with Reduced Semiconductor Stress", *17th Iranian Conference on Electrical Engineering (ICEE),* May 2009, pp. 331-336, Tehran, Iran.

[43] A.H. Rajaei, M. Mohamadian and A. Yazdian, "Space-Vector Modulation Strategy for Single phase Induction Motor Drive System using Z-Source Inverter", *17th Iranian Conference on Electrical Engineering (ICEE),* pp. 429-434, Tehran, Iran, May 2009.

[44] H. Ghoreishy, A. Yazdian, Sh. Farhangi and M. Mohamadian, "A New Pulse and Amplitude Selective Harmonic Elimination Method For Multi-Level Inverters", *17Th Iranian Conference on Electrical Engineering (ICEE),* pp. 245-250, Tehran, Iran, May 2009.

[45] H. Zahedi, A.H. Rajaei, S.M. Dehghan, A. Yazdian and M. Mohamadian, "Nine Switch AC/AC Converter with Random Pulse Width Modulation", *17th Iranian Conference on Electrical Engineering (ICEE),* pp. 337-342, Tehran, Iran, May 2009.

[46] S.M. Dehghan, M. Mohamadian, A. Yazdian, F. Ashrafzadeh, "A novel space vector modulation for nine-switch converters", *IEEE Energy Conversion Congress and Exposition,(ECCE),* 20-24, San Jose, CA, pp. 885 – 891, Sept. 2009

[47] S.M. Dehghan, M. Mohamadian, A. Yazdian, F. Ashrafzadeh, "Dual-input dual-output z-source inverter", *IEEE Energy Conversion Congress and Exposition, (ECCE),* San Jose, CA, pp. 3668 – 3674, 2009.

[48] R. Gharakhani, M. Mohamadian, and A. Yazdian-Varjani, "Reactive power compensation using Z-source based photovoltaic system", *Power & Energy Society General Meeting,. PES '09. IEEE*, Calgary, Canada, pp. 1-7, 26-30 July 2009.

[49] S.A.A. Shahriari, M.H. Abardeh, A. Yazdian-Varjani, M. Mohamadian, "Using Fault Current Limiter to minimize effect of Thyristor Controlled Series Capacitor on over reach problem of distance protection", *Power Systems Conference and Exposition, PSCE '09. IEEE/PES*, Seattle, WA, pp. 1-6, 15-18 March 2009.

[50] M. Shahparasti, A.S. Larijani, A. Yazdian and M. Mohamadian, "Parallel Single-Phase Low Power Grid Connected Z-source Inverter", *24th Int. Power System Conference (PSC),* Tehran, Iran, Nov. 2009.

[51] M.H. Abardeh and A. Yazdian, "A new reference generation method for DSTATCOM using Adaptive Notch Filter", *17Th Iranian Conference on Electrical Engineering (ICEE),* May 2009.

[52] H. Oshkooh, M.H. Sobhiyah and A. Yazdian, "Qualitative meta-analysis of factors influencing the optimal management of virtual project based teams", *International Project Management Conference (IPMC2009),* Tehran, Nov. 2009

[53] P. Musazadeh, A. Yazdian and M. Ravanshad, "A new Model based on biological simulation for management of targeted attacks conducted via e-mail and SMS", *6th International Conference on Information and Communication Technology Management,* Tehran 2010

[54] L. Ghafurian and A. Yazdian, "Smart Agent for security supporting of the Persian Anti-Spam Text based E-learning", *6th International Conference on Information and Communication Technology Management,* Tehran, 2010

[55] A. Yazdian, "Guidelines for Development of E-Commerce Trust and Security ", *Specialized Seminar of Trust and Security in The 6th national conference on e-Commerce and e-Economy*, Tehran , 2010

[56] M. Azizi, A. Fatemi, M. Mohamadian and A. Yazdian, "A Novel Z-source Four-leg Inverter with two Independent Four-wire Outputs", *IEEE 1st Power Electronics & Drive Systems & Technologies Conference (PEDSTC),* pp. 163-168, Tehran, 2010.

[57] H. Ghoreishy, A. Yazdian, Sh. Farhangi and M. Mohamadian, "Reducing Common-Mode Voltage and Power Dissipation in Cascaded Multilevel Inverters with Flexible dc Sources", *IEEE 1st Power Electronics & Drive Systems & Technologies Conference (PEDSTC),* pp. 175-179, Tehran, 2010

[58] M. Fatemi, M. Azizi, K. Rahmani, M. Mohamadian, A. Yazdian, "A Novel Reduced Switch Count Multilevel AC/AC Converter", *19Th Iranian Conference on Electrical Engineering (ICEE),* 2011.

[59] S. Shahriari, M. Abapour, A. Yazdian and M. Haghifam, "Minimizing the Impact of Distributed Generation on Distribution Protection System by Solid State Fault Current Limiter", *IEEE PES Transmission and Distribution Conference and Exposition*, 2010

[60] H. Zahedi, M. Hosseinpour, A. Yazdian and M. Mohamadian, "Induction Generator control of Variable Speed Wind Turbine system using 9 switch inverter", *First Iranian Conference on Renewable Energies and Distributed Generation, ICREDG*, 2010

[61] S.M. Dehghan, M. Mohamadian, and A. Yazdian, "Current Control of Nine-Switch Inverter Using Integrated Current Sensors", *International Power Engineering and Optimization Conference (PEOCO),* Shah Alam, Malaysia, 2010.

[62] S.M. Dehghan, M. Mohamadian, A.H. Rajaei and A. Yazdian, "Full Modeling a Series HEV Based on BZS-NSI", *IEEE 2ⁿᵈ Power Electronic & Drive Systems & Technologies Conference (PEDSTC),* 2011

[63] Heydari, M., A. Yazdian Varjani, and M. Mohamadian. "A novel three-phase to three-phase AC/AC converter using six IGBTs." *IEEE 2ⁿᵈ Electric Power and Energy Conversion Systems (EPECS),* pp. 1-7. 2011.

[64] Heydari, M., A. Yazdian Varjani, M. Mohamadian, and A. Fatemi. "A novel dual-output six-switch three-phase inverter." *37ᵗʰ Annual Conference on IEEE Industrial Electronics Society (IECON),* pp. 1109-1114, 2011.

[65] Heydari, M., A. Fatemi, A. Yazdian Varjani, and M. Mohamadian. "A novel reduced switch count single-phase to three-phase AC/AC converter." *37ᵗʰ Annual Conference on IEEE Industrial Electronics Society (IECON),* pp. 1120-1125, 2011.

[66] A. Fatemi, M. Azizi, M. Shahparasti, M. Mohamadian, and A. Yazdian. "A generalized algorithm for switch reduction in multi-output single-phase inverters: With/without Z-source impedance network", *2ⁿᵈ IEEE Power Electronics, Drive Systems and Technologies Conference (PEDSTC),* pp. 292-298, 2011.

[67] M. Azizi, A. Fatemi, M. Mohamadian, and A. Yazdian, "A novel fault-tolerant four-leg AC/AC converter capable of compensating unbalanced source/load", *IEEE 2ⁿᵈ Power Electronic & Drive Systems & Technologies Conference (PEDSTC),* pp. 540-545, 2011.

[68] A. Fatemi, M. Azizi, M. Shahparasti, M. Mohamadian, and A. Yazdian, "A novel single-phase six-switch AC/AC converter for UPS applications", *IEEE 2ⁿᵈ Power Electronic & Drive Systems & Technologies Conference (PEDSTC),* pp. 408-414, 2011.

[69] M. R.Hajimoradi, A. Yazdian, and H. Mokhtari, "Double stage switch mode AC voltage regulator", *IEEE 2ⁿᵈ Power Electronic & Drive Systems & Technologies Conference (PEDSTC),* pp. 187-192, 2011.

[70] S.M. Dehghan, M. Mohamadian, A.H. Rajaei, and A. Yazdian, "Full modeling a series HEV based on BZS-NSI", *IEEE 2ⁿᵈ Power Electronic & Drive Systems & Technologies Conference (PEDSTC),* pp. 439-444, 2011.

[71] E. Najmi, E. Seifi, S.M. Dehghan, M. Heydari, M. Mohamadian, A. Yazdian, and G. S. Milan, "Fault Tolerant Nine Switch Inverter", *IEEE 2ⁿᵈ Power Electronic & Drive Systems & Technologies Conference (PEDSTC),* pp. 534-539, 2011.

[72] M. Heydari, A. Yazdian Varjani, M. Mohamadian, and H. Zahedi, "A novel variable-speed wind energy system using permanent-magnet synchronous generator and nine-switch AC/AC converter", *IEEE 2ⁿᵈ Power Electronic & Drive Systems & Technologies Conference (PEDSTC),* pp. 5-9, 2011.

[73] A. Fatemi, M. Azizi, K. Rahmani, M. Mohamadian, and A. Yazdian, "A novel reduced switch count multilevel AC/AC converter", *19ᵗʰ Iranian Conference on Electrical Engineering (ICEE),* pp. 1-5. IEEE, 2011.

[74] M. Azizi, A. Fatemi, M. Mohamadian, and A. Yazdian, "Novel application of dual-output four-leg converter for unified power quality conditioner", *19ᵗʰ Iranian Conference on Electrical Engineering (ICEE),* pp. 1-4. IEEE, 2011.

[75] M. Shahparasti, A. Fatemi, M. Mohamadian, and A. Yazdian, "A novel single-stage power conversion system based on T-inverter for photovoltaic system connected to single phase AC grid", *19ᵗʰ Iranian Conference on Electrical Engineering (ICEE),* pp. 1-4. IEEE, 2011.

[76] M. Daghmechi Firoozjaei and A. Yazdian, "Improving IPSec Security Weaknesses in the decryption key forgery situation", *16th Annual Conference of Computer Society of Iran,* 2011

[77] A.H. Rajaei, M. Mohamadian, and A. Yazdian, "A new high frequency grid interface system for PMSG-based wind turbine generators in low power applications", *In 38th Annual Conference on IEEE Industrial Electronics Society (IECON),* pp. 3510-3515, 2012.

[78] A. Fatemi, M. Azizi, M. Mohamadian, and A. Yazdian, "Single-phase Delta-conversion UPS", *IEEE 3rd Power Electronics and Drive Systems Technology (PEDSTC),* pp. 448-453, 2012.

[79] M. Heydari, A. Yazdian Varjani, and M. Mohamadian, "A novel variable-speed wind energy system using induction generator and six-switch AC/AC converter", *IEEE 3rd Power Electronics and Drive Systems Technology (PEDSTC),* pp. 244-250, 2012.

[80] M. Heydari, A. Yazdian, M Mohamadian, "Dual-Output Rectifier-Inverter System for Independently Supplying Two Three-Phase Loads", *Iranian Journal of Electrical and Computer Engineering (IJECE),* 2012.

[81] M. R. Hajimoradi, E. Karimi, H. Mokhtari, and A. Yazdian, "Performance improvement of a double stage switch mode AC voltage regulator", *IEEE 3rd Power Electronics and Drive Systems Technology (PEDSTC),* pp. 181-186, 2012.

[82] M. Shahparasti, A.H. Rajaei, A. Yazdian, and M. Mohamadian, "Interline unified power quality conditioner based on single stage nine switch inverter*", IEEE 3rd Power Electronics and Drive Systems Technology (PEDSTC),* pp. 319-323, 2012

[83] M. Azizi, A. Fatemi, M. Mohamadian, and A. Yazdian, "Cost-effective solution for micro-grid power quality assurance", *IEEE 3rd Power Electronics and Drive Systems Technology (PEDSTC),* pp. 150-155, 2012.

[84] A.H. Rajaei, Mehdi Azizi, M. Mohamadian, and A. Yazdian, "A New Generator-Side Converter for PMSG-based Wind Turbine Generators Using Single Phase Rectifiers for Low Power Applications", *Iran Wind Energy Conference*, October 9 & 10, 2012.

[85] A.H. Rajaei, M. Mohamadian, and A. Yazdian, "Carrier-based PWM and space vector modulation of three single phase PFC rectifier as generator-side converter of PM WECS", *IEEE Industry Applications Society Annual Meeting (IAS),* pp. 1-8, 2012.

[86] M.H. Ameri, A. Yazdian, and M. Mohamadian, "A novel algorithm for tracking maximum inductive transfer power point", *IEEE 4rd Power Electronics and Drive Systems Technology (PEDSTC),* 2013.

[87] M. Shahparasti, M. Mohamadian, M. Amini and A. Yazdian, "A novel single loop Control structure for standalone inverter with multi loop harmonic compensation", *IEEE 4rd Power Electronics and Drive Systems Technology (PEDSTC),* 2013.

[88] H. Khaleghi and A. Yazdian, "A new improved zeta-based AC/AC converter using nine switch inverter", *IEEE 4rd Power Electronics and Drive Systems Technology (PEDSTC),* 2013.

[89] SahraNeshin S., M.H. Ameri and A. Yazdian, "A single to three-phase AC/AC cyclo-converter for inductive power transfer", *IEEE 4rd Power Electronics and Drive Systems Technology (PEDSTC),* 2013.

[90] PM Nasr, AY. Varjani, "Analysis of attacks on critical infrastructure and SCADA", *5th Iranian Pipe & Pipeline Conference*, Tehran, Iran 2013

[91] Hoda Ghoreishy, Ali Yazdian Varjani, Mustafa Mohamadian, Shahrokh Farhangi, Zhe Zhang A new selective harmonic elimination pulse-width and amplitude modulation (SHE-PWAM*). for drive applications", *39th IECON Annual Conference of the IEEE Industrial Electronics Society* pp. 234-239 2013

[92] PM Nasr, AY. Varjani, "Petri net model of insider attacks in SCADA system" *11ᵗʰ International ISC Conference on Information Security* 2014

[93] PM Nasr, AY. Varjani, "Alarm Based Modeling of SCADA System using Petri Nets *1st National Conference on Development of Civil Eng., Architecture, Electricity and Mechanical* Iran, 2014

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Membership in Professional Societies:

Secretary of IEEE IRAN Section (2019-2020)

Iran Scientific Association of Miracle of the Quran, Board Member & Treasurer (2008-2019)

Iran Power Electronics Society Board Member, (2010-Now)

Iran Computer Society Board Member, (2006-2014)

IEEE Member (4004115*).* (1999-Now)

IEEE Industry Application Society (Now)

IEEE Industrial Electronics Society (Now)

Iran National Electrical Committee (INEC)*.* (2005-Now)

Iran Electrical Engineering Association Member, (2003-Now)

Iran Society Cryptography Member (2004-Now)

IEEE Student Branch Consoler Tarbiat Modares University, (2001-2009)

Union Board of Management of the University of Wollongong (1995-1997)

Chairperson of IEEE student branch at the University of Wollongong (1994-995)

IEEE student member (1994-1999)

Computer Experience:

Texas Instrument DSP TMS320C3X programming,

Matlab, C/C++, Java, and, "FORTRAN", programming,

VAX_VMS, DOS, Mac, Windows, Linux, and Unix Operating System

Contributions:

During my PhD Study:

A new PWM switching strategy has been developed for full-bridge inverter which produces the lower total harmonic distortion and higher voltage magnitude. Also, a new adaptive structure using resonator filter-bank and frequency demodulation techniques has been proposed for online harmonic estimation and reduction in active power filters. The proposed control strategy along with partial harmonic reduction schemes reduces the power rating required for active power filter while fulfilling the harmonic standard requirements.

During my Master Study:

A new structure for neural network-based short -term load forecasting has been proposed which reduces the design complexity of the two stages, clustering and forecasting to a single stage. Further, it provides more accurate forecasting when compared with conventional methods.

Conferences:

General Chair, "4th National Conference on Miracle of the Quran", 2018

General Chair, "8th Power Systems Protection and Control Conference", (PSPC), 2014

Technical Chair, "1st National Conference on Miracle of the Quran", 2012.

General Chair, "IEEE 1st Power Electronics and Drive System Technology Conference", (PEDSTC), 2010.

General Chair, "IEEE 2nd Computer Network and Distribution System Symposium", (CNDS). 2011

Scientific Chair, "1st National Power Systems Protection and Control Conference", (PSPC), 2008

General Chair, "13th Iranian Student Conference of Electrical Engineering", (ISCEE). 2010

Research Interests:

Industrial Electronic & Drive,

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His last position at Tarbiat Modares University was the Dean of Electrical and Computer Engineering.