Hossein Gholizadeh Narm, Ph.D.
Associate professor and Researcher
Shahrood University of Technology, Shahrood, Iran

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EDUCATION

Doctorate: **Apr. 2009**

Major: Electrical Engineering, Control

Dep. Engineering, Ferdowsi University of Mashhad, Mashhad, Iran (Accredited by World Education Services (**WES**))

Supervisor: Dr. Asad Azemi, **Pennsylvania State University**, University of Maryland Eastern Shore

Co-advisor: Dr. Masoud Karimi-Ghartemani, Sharif University of Technology**, Mississippi State University**.

- **Dissertation:** Synchronization of heart pacemaker cells and evaluation of distance from blocking arrhythmia for a healthy heart

Master of Science: **Sep. 1999**

Major: Electrical Engineering, Power

Dep. Electrical and Computer Engineering, Isfahan University of Technology, Isfahan, Iran

Thesis: Current-Type Series Active Filter for Eliminating Electric Network Harmonics

Bachelor of Science: **Sep. 1996**

Major: Electrical Engineering, Electronics

Dep. Engineering, Ferdowsi University of Mashhad, Mashhad, Iran

Title: Design and fabrication of a high efficiency class E amplifier

WORK EXPERIENCE

Associate Professor **Sep. 2024 - Present**
Faculty of Electrical Engineering,
Shahrood University of Technology, Shahrood, Iran

Research Assistant **Jan. 2024 – Dec. 2024**
ePOWER Lab, Dep. Electrical and Computer Engineering,
Queen's University, Kingston, Canada.
Supervisor: Dr. Suzan Eren

Research Assistant **Apr. 2024 – Dec. 2024**
Department of Electrical and computer Engineering**,**
Royal Military College (RMC).
Supervisor: Dr. Hasan Mehrjerdi

Senior Researcher: **Jan. 2024 – March 2024**
Department of Electrical and computer Engineering,
Royal Military College (RMC).
Supervisor: Dr. Hasan Mehrjerdi

Visiting Professor **Jan. 2022 – Dec. 2023**
ePOWER Lab, Dep. Electrical and Computer Engineering,
Queen's University, Kingston, Canada.
Supervisor: Dr. Suzan Eren

Visiting Professor **Nov. 2018 – Aug. 2019**
Dep. Electrical and Computer Engineering,
University of Alberta, Edmonton, Canada.
Supervisor: Dr. Ali Khajeddin

Associate Professor **Sep. 2019 – Dec. 2021**
Faculty of Electrical Engineering,
Shahrood University of Technology, Shahrood, Iran

Assistant/Associate Professor **Sep. 2009 – Oct. 2018**
Faculty of Electrical Engineering,
Shahrood University of Technology, Shahrood, Iran

MANAGERIAL RECORDS

Director of Research Affairs, Shahrood University of Technology **Nov. 2019-2022**
- Oversee of all scientific journal publications at the university and budget allocations
- Secretary of the University Research Council
- Oversee the allocation of funds for professors.

Head of Student Research Institute, Shahrood University of Technology **2015-2017**
- Oversee of students' research
- Manage the allocation of funds to students

Director of Student Scientific Associations, Shahrood University of Technology **2013-Oct. 2018**
- Holding elections and forming student scientific associations
- Supervision of 19 student scientific associations
- Macro planning of student budget
- Supervision of student competitions

RESEARCH ACTIVITIES

Research interest

Renewable Energy
- Photovoltaic and MPPT
- Wind Turbine

AI/ML in Power Electronic Converters
- Fault detection/prediction
- Intelligent control

DC Micro-Grid
- Network Control/Consensus Control
- Cybersecurity control, Cyber Attack, Identification, Diagnosis and Mitigation

Battery Charger
- Fast/Ultra-fast Chargers
- Cell Balancing
- Battery Management System (BMS)

Projects and Grants

Researcher: *Long Short-Term Memory-Based Deep Recurrent Neural Network Model for Demand Forecasting*, Royal Military College (RMC), Kingston, ON., Canada, 2024.
- Developing the long short-term memory-based deep recurrent neural network model,
- Forecasting the demand requirements of EVsand FCEVs.

Researcher: *Operational Planning Framework for Distribution Grids,* Royal Military College (RMC), Kingston, ON., Canada, 2024.

- Development of operational planning framework,
- Considering high-penetration of Hydrogen-electric-mobility sector.

Researcher: *Regenerating Braking System for Freight Train*, Queen's University, Kingston, ON., Canada, 2023

- Feasibility Study,
- Design a new control strategy,
- Optimization of speed profile for maximum energy harvesting.

Researcher: *A Comprehensive Similarity Study of Battery Chargers from Several Manufacturer,* University of Alberta, Edmonton, AL., Canada, 2019.

- Static and Dynamic Signal Analysis,
- Reverse Engineering,
- Component Identification.

PI: *Optimal Switch Placement in Real Distribution Network,* Shahrood University of Technology, Shahrood, Iran, 2018.

- Data Collection,
- System Modeling,
- Optimization,
- Economic Analysis.

Co-PI: *Modification the control system of a UPS to deal with nonlinear loads*, University of Alberta, Edmonton, AL., Canada, 2019.

Peer-Reviewed Journal Papers

1. **Gholizadeh Narm H**., Eren, S., Karimi Ghartemani, M., "Fast and Precise Output Voltage Control of the Buck Converter without Increasing the System's Order", IEEE Transaction on Industrial application, vol. 72, no. 2, 2025.
2. Liu Z., Ebrahimi J., **Gholizadeh Narm H.**, Eren S., "Smart Search Implemented H-Infinity Control Design for DAB Converter in DC Microgrid", IEEE Journal of Emerging and Selected Topics in Power Electronics, vol. 12, no. 2, pp. 1906-1920, April 2024.
3. Amerian, M., **Gholizadeh Narm, H.,** Hajizadeh, A., Eren, S., "Robust Distributed Control of DC Microgrids Considering Heterogeneous Communication Delays", IEEE Systems Journal, vol. 18, no. 1, pp. 462-473, March 2024.
4. Mahdavi M., Banejad M., **Gholizadeh Narm H.**, Aminzadeh H., "Consensus based distributed secondary control for current sharing and voltage restoration considering local loads and constant power loads in dc microgrids", International Journal of Modelling and Simulation, pp.1-23, 2024.
5. Esmaeili A., **Gholizadeh Narm H.**, "Direct charge transfer between arbitrary lithium polymer cells based on a new control strategy", Energy Sci Eng., vol. 12, pp. 215-229, Jan. 2024.
6. Tahani V., Zarif M. H., **Gholizadeh Narm H.**, "A new stable scheme against false data injection attacks in distributed control microgrid", IET Cyber-Physical Systems: Theory & Applications, vol. 9, pp. 27-40, March 2024.
7. Kheyri R., **Gholizadeh Narm H.,** Babaei E., "Compact three-phase multilevel inverter with boosting capability for low-power three-phase induction motor drive", International Journal of Circuit Theory and Applications, vol. 52, pp. 658-673, 2024.
8. **Gholizadeh Narm H.**, Eren, S., Karimi Ghartemani, M., "A Robust Controller with Integrated Plant Dynamics for Constant Power Loads in DC Microgrid", IEEE, Transaction on Power Electronics, pp. 4419 – 4429, vol. 38, No. 4, 2023.

9. Mahdavi M., Banejad M., **Gholizadeh Narm H.**, Aminzadeh H., "Current sharing and voltage restoration based on determination of transmission line resistance considering constant power loads in direct current microgrids", International Journal of Circuit Theory and Applications, 2023, https://doi.org/10.1002/cta.3883.
10. Ghorbani-Juybari M. Z., **Gholizadeh Narm H.**, Damchi Y., Esmaeili A., "Linear LSA-NSGAII optimization: A case study in optimal switch placement in distribution network", Applied Soft Computing, vol. 148, Nov. 2023.
11. Shafiee M. R., **Gholizadeh Narm** H., Akbarzadeh Kalat A., "Chaotic and stochastic evaluation in Fluxgate magnetic sensors", Chaos, solitons and fractals, vol. 176, Nov. 2023.
12. **Gholizade-Narm H.**, Tahani V., "Active Power Decoupling for Differential Boost Inverter with Linear and Nonlinear Loads Using Inverse Model Approach", IET Journal of Engineering, pp. 583-594, 2022.
13. Izadbakhsh A., **Gholizade-Narm H.**, Deylami A., "Observer-based adaptive controller design for chaos synchronization using Bernstein-type operators", International Journal of Robust and Nonlinear Control, pp. 4318-4335, vol. 32, No. 7, 2022.
14. Arbabi Yazdi, Y., Toossian Shandiz, H., **Gholizade-Narm H.,** "Automatic Oscillations Detection and Classification of Control Loop Using Generalized Machine Learning Algorithms", Transactions of the Institute of Measurement and Control, pp. 476-491, vol. 45, No. 3, 2023.
15. Ghamari, S. M., **Gholizade-Narm H**., Mollaee, H., "Fractional-order fuzzy PID controller design on buck converter with antlion optimization algorithm", IET Control Theory & Applications, pp. 340-352, vol. 16, No. 3, 2022.
16. Arbabi Yazdi, Y., Toossian Shandiz, H., **Gholizade-Narm H.,** "Stiction detection in control valves using a support vector machine with a generalized statistical variable", ISA Transactions, pp. 407-414, vol. 126, 2022.
17. Ghorbani-Juybari M. Z., **Gholizade-Narm H.**, Damchi Y., "Optimal Recloser Placement in Distribution System Considering Maneuver points, Practical Limitations and Recloser Malfunction", International Transactions on Electrical Energy Systems, 2022.
18. Sheykhi S., **Gholizade-Narm H.**,"Providing robust-adaptive fractional-order sliding mode control in hybrid adaptive cruise control systems in the presence of model uncertainties and external disturbances", International Journal of Dynamics and Control, 2022, https://doi.org/10.1007/s40435-022-00936-2.
19. Ghamari, S. M., **Gholizade-Narm H.**, Khavari, F., "Design of a robust adaptive self-tuning regulator controller on single-phase full-bridge grid-connected inverter", International Journal of Dynamics and Control, 2022, https://doi.org/10.1007/s40435-022-00963-z.
20. Sheykhi S., **Gholizade-Narm H.**, "A New Fractional-Order Sliding Mode Controller for the Cruise Control System of Automatic Vehicles', International Journal of Vehicle Autonomous Systems, Accepted 2022.
21. Esmaeili A., **Gholizade-Narm H.**, "Robust nonlinear control of a quasi-resonant DC-DC converter with turn-on and turn-off zero current switching", IET Power Electronics, vol. 15, No. 4, pp.:325-336, 2021.
22. Mohammadhassani, F., **Gholizade-Narm H.,** "Dynamic Sliding Mode Control of Single Stage Boost Inverter with Parametric Uncertainties and Delay", Power Electronics, IET, pp. 2127-2138, vol. 16, No. 12, 2021.
23. Azami, G., **Gholizade-Narm H**. "Bandwidth management with congestion control approach and fuzzy logic", IJE TRANSACTIONS A: Basics vol. 34, No. 04, pp. 891-900, 2021.
24. **Gholizade-Narm H**., Khajehoddin, A., and Karimi-Ghartemani, M, "Reduced-Order Controllers Using Integrated Controller-Plant Dynamics Approach for Grid-Connected Inverters", IEEE Transactions on Industrial Electronics, vol. 68, No. 8, pp. 7444 – 7453, 2021.
25. Amirparast, A. **Gholizade-Narm H.," Nested** control loop design for differential boost inverter using generalized averaged model in photovoltaic applications", Energy Science Engineering, vol. 8, pp. 2734–2746, 2020.
26. Mohammadhassani, F., **Gholizade-Narm H.** "Control of a Single Stage Boost Inverter based on DSMC with Power Decoupling", International Journal of Engineering, vol. 33, No. 4, pp. 184-191, 2020.

27. Pouralizadeh Moghaddam, F., **Gholizade-Narm, H.**, "Modelling and Compensation of Uncertain Time-delays in Networked Control Systems with Plant Uncertainty Using an Improved Robust Model Predictive Control Method", International Journal of Engineering, vol. 33, No. 6, pp. 1134-1141, 2020.
28. Pouralizadeh Moghaddam, F., **Gholizade-Narm, H.**, "Development of RMPC Algorithm for Compensation of Uncertain Time-Delay and Disturbance in NCS", Control and Optimization in Applied Mathematics, vol. 4, No. 1, pp. 65-81, 2020.
29. Azami, G., **Gholizade-Narm H**. "Supervisory control design for congestion control and bandwidth management", International Journal of Systems, Control and Communications, vol. 12, No. 1, pp. 46-59, 2021.
30. Norouzi, N, **Gholizade-Narm H**.," Direct power control of an under-damped grid connected boost inverter", International Journal of Industrial Electronics, Control and Optimization, vol. 2, No. 1, pp. 17-24, 2019.
31. **Gholizade-Narm** H., "A Novel Control Strategy for a Single-Phase Grid-Connected Power Injection System", International Journal of Engineering, vol. 27, No. 12, pp 1843-1852, 2014.
32. Hamidi, S. S., **Gholizade-Narm H**.,"Power Injection of Renewable Energy Sources Using Modified Model Predictive Control", Energy Equipment and Systems, vol 4, No. 2, pp. 215-224, 2016.
33. **Gholizade-Narm** H., Charkhgard M., "Lithium-ion Battery State of Charge Estimation Based on Square Root Unscented Kalman filter", IET power electronic, vol. 6 Issue 9, pp. 1833-1841, 2013.
34. **Gholizade-Narm H**., Noori, A., "Control the Population of Free Viruses in Nonlinear Uncertain HIV System Using Q-Learning", Int. J. Machine Learning and Cybernetics, vol. 9, No. 7, pp. 1169-1179, 2018.
35. Asadi, M., **Gholizade-Narm, H**, "Way-Point Tracking of a Container Ship by Adaptive Stochastic Sliding Mode Control and Recursive Filters", Research and Application in Mechanical Engineering, vol. 2, No. 3, pp. 67-73, 2013.
36. **Gholizade-Narm** H., Hassannia A., and Azarfar A., "Chaos Detection and Control in a Typical Power System", Chinese Physics B, vol. 22, No. 1, pp. 1-5, 2013.
37. **Gholizade-Narm** H., "A New State Observer for Two Coupled Van der Pol Oscillators", International Journal of Control, Automation, and Systems, vol. 9, No. 2, pp. 1-5, 2011.
38. Khodadadzadeh, M., **Gholizade-Narm H**.,"Improvement of chaotic secure communication scheme based on steganographic method and multimodal dynamic maps", International Journal of Systems, Control and Communications, vol. 6, No. 4, 2015.
39. **Gholizade-Narm** H., Shafiee M. R., "Using Repetitive Fuzzy Method for Chaotic Time Series Prediction", Journal of Intelligent and Fuzzy Systems, vol 28, pp. 1937-1946, 2015.
40. Shafiee M. R., **Gholizade-Narm** H., "A Novel Fuzzy Based Method for Heart Rate Variability Prediction", International Journal of Engineering, vol. 27, No. 7, pp 1041-1050, 2014.
41. **Gholizade-Narm** H., Azemi A., Khademi M., Karimi-Ghartemani M., "Synchronization of Two Coupled Pacemaker Cells Based on the Phase Response Curve", Biomedical Signal Processing and Control, vol. 4, No. 1, 57-66, 2009.
42. **Gholizade-Narm** H. Khademi M., Azemi A., "Phase Synchronization and Synchronization Frequency of Two Bi-Directionally Coupled Van der Pol Oscillators", Journal of Intelligent Automation Systems, Accepted, 2014.
43. **Gholizade-Narm** H. Azemi A., Khademi M., "Phase Synchronization and Synchronization Frequency of Two Coupled van der Pol Oscillators with Delayed Coupling", Chinese Physics B, vol. 22, No. 7, 2013.
44. **Gholizade-Narm** H., Azemi A, Khademi M., Karimi-Ghartemani M., "An index for evaluating distance of a healthy heart from Sino-Atrial blocking arrhythmia", J. Biomedical Science and Engineering, vol. 3, pp. 308-316, 2010.
45. **Gholizade-Narm** H., Azemi A., Khademi M., Karimi-Ghartemani M., " A State Observer and a Synchronization Method for Heart Pacemakers", Journal of Applied Sciences, vol. 8, No. 18, pp. 3175-3182, 2008.

46. Shakeri M. T., Sabzevari V. R., Azemi A., Khademi M., and **Gholizade** H., "Intelligent Cardiac Arrhythmia Detection Using Wavelet Network", Iranian Journal of Medical Physics, vol. 3, No. 12, 2006**.**
47. Dastgheib Z.S., Azemi A., Khademi M., Shajiee M., Arvaneh M., **Gholizadeh** H., Sabzevari V.R. "Identification of Ionic Conductances in a Reentry Model of Ventricular Myocardium Cells", Journal of Applied Sciences, vol. 9, No. 3, pp. 555-560, 2009.

UNDER REVIEW AND READY TO SUBMIT PAPERS

1. **Gholizadeh Narm H**., Eren, S., Karimi Ghartemani, M., "Design a delayed stabilized controller for a buck converter feeding constant power load, IEEE Journal of Emerging and Selected Topics in Power, under review.
2. Tude Ranjbar M., **Gholizadeh Narm H.,** Eren Z., "A Nonlinear MPPT Scheme for Solar Energy Harvesting Systems", needs resubmission to IEEE Journal of Photovoltaics.
3. Mathews P., **Gholizadeh Narm H**., Eren, S., "A Novel Control Strategy for Paralleled Three-Phase AC Motor Drives", preparing to submit to IEEE journal.

PEER-REVIEWED CONFERENCE PAPERS

1. **Gholizadeh Narm H**., Das P., Karimi Ghartemani, M., Eren, S., "Robust Optimal Control Design for a Soft-Switched AC–DC Bidirectional Converter", Accepted IECON 2024 | IECON, Chicago, USA.
2. Ghamari, S. M., **Gholizadeh Narm H**., and Khavari, F., "Robust Adaptive Controller Design for DC-DC SEPIC Converter in Photo voltaic Application," 6th International Conference on Control, Instrumentation and Automation (ICCIA), Sanandaj, Iran, 2019, pp. 1-6, 2019, doi: 10.1109/ICCIA49288.2019.9030991.
3. Mahmoodi, M, **Gholizade-Narm H**., "Real and Ractive power injection into the grid Using Optimized Direct Control approach via Nine-level Single Phase Inverter", 6th International Conference on Control, Instrumentation and Automation, 2019 (In Persian).
4. Mohammadhasani, F, **Gholizade-Narm H**., "Adaptive State Feedback Control for Single Stage Boost Inverter", 7th National and 1st International Conference on Renewable and Distributed Resources in Iran, 2019.
5. Amirparat, A., **Gholizade-Narm H**., Mohammadhasani, F, "Design of Nested Control Loop to Improve Boost Inverter Behavior and Reference Tracking", 7th National and 1st International Conference on Renewable and Distributed Resources in Iran, 2019(In Persian).
6. Norouzi, N, **Gholizade-Narm H**., Mohammadhasani, F, "Improvement of Nonminimum-Phase Boost Inverter behavior to Output desired Sinusoidal Wave", 5th Int. Conf. on Control, Instrumentation and Automation, Shiraz, Iran, 2017. (In Persian).
7. Hamidi, S. S., **Gholizade-Narm H**.,"Predictive Controller Design for a Grid-Connected PV Central Inverter", the 3rd International Conference and Exhibition on Solar Energy, 5-6 September, 2016.
8. Hamidi, S. S., **Gholizade-Narm H**.,"Micro-Inverters: The Next Generation of Photovoltaic Inverters", 2nd International Conference and Exhibition on Solar Energy (ICESE), 2015, (In Persian).
9. **Gholizade-Narm, H,** Hamidi, S. S., Mohammadi, M., "Improvement of Maximum Power Point Tracking of Photovoltaic System Using Self Tuning Regulator", Smart Grid Conference, Tehran, 2015(In Persian).
10. **Gholizade-Narm, H,** Hajizadeh, A., Alfi, A., " Stability analysis and design of a state feedback controller for DC-DC boost converter based on mean and accurate model of fuel cell", 19th Iranian Conference on Electrical Engineering, 17- 19 May 2011, Tehran. (In Persian)
11. Karshenas, H. R., **Gholizade-Narm**, H., "Series Active Filter for eliminating Network's Harmonics", 8th Iranian Conference on Electrical Engineering, Isfahan, Iran, May 2000 (In Persian).
12. Kamali,A., **Gholizade-Narm, H**, "Hinf Robust Control of SEPIC Converter in Photovoltaic Applications", 2nd International Conference and Exhibition on Solar Energy (ICESE), 2015 (In Persian).

13. **Gholizade-Narm, H**, Khosravi, M., "Chaos and stability analysis of power systems", 7th Int. Conf. on Tech. and Phys. Problems on power engineering, Near East University, pp. 153-157, 2011.
14. Ghasemi, A., **Gholizade-Narm, H**, Rajabi-Mashhadi, M., "Optimal control of micro combined heat and power (CHP) In the deregulated environment" 29th International Power System Conference, 2014, (In Persian).
15. Pouralizadeh Moqadam, F, **Gholizade-Narm H**., "Adjust the flow rate of the cement oven cooling fan using a dynamic matrix controller", 5th Int. Conf. on Control, Instrumentation and Automation, Shiraz, Iran, 2017. (In Persian).
16. Farahbod, S., **Gholizade-Narm H**., Hadad Zarif, M., "Planning the purchase of Rijal Petrochemical Power by Mid-Term Forecast using the chaotic time series method", 24th Int. Conf. Elec. Eng., May 2016 (In Persian).
17. Mohammadi, M., **Gholizade-Narm H**.,"Passive Target Tracking Using Extended Adaptive and Cubic Kalman Filters via Neural Network Approach", Conf. Control, Instrumentation and Automation, 27-28 Jan, 2016. (In Persian).
18. Shafiee-Chafi, M. R., Naghibi, S. M., **Gholizade-Narm, H**, "Using chaos dynamic in modeling and prediction of network load", 22th Iranian electrical engineering conference, Tehran, Iran, 2014. (In Persian)
19. Mousavi M., **Gholizade-Narm, H**, Karami Mollaee A., "Designing Sliding Mode Control with Fuzzy Gain Based on Extended State Observer", 13th Conference on Iranian Fuzzy Systems, Tehran, Iran, 2013. (In Persian)
20. Asadi, M., **Gholizade-Narm, H**, "Adaptive Stochastic Sliding Mode Ship Autopilot for Way-Point Tracking", 21th Iranian electrical engineering conference, Tehran, Iran, 2013. (In Persian)
21. Shafiee-Chafi, M. R., **Gholizade-Narm, H**, "New perspective on feature extraction for the intelligent classification of cardiac arrhythmias", 20th Iranian electrical engineering conference, Tehran, Iran, 2012. (In Persian)
22. Azarfar, A., **Gholizade-Narm, H,** Toosian-Shandiz, H., "Control and synchronization of chaotic systems using fuzzy feedback linearization", Fourth International Workshop on Chaos-Fractals Theories and Applications, IEEE Computer Society, pp. 231-234, 2011.
23. **Gholizade-Narm, H,** Khaloozadeh, H., Hakimi, M., "Modification of state dependent ricatii equation estimator for nonlinear stochastic systems", Conf. Control, Instrumentation and Automation, 26-27 May, 2010. (In Persian).
24. **Gholizade-Narm**, H, Azemi, A, Sabzevari, V, khademi, N, Karimi, M, Dastgheib, Z, Arvaneh, M Shajeie, M. "Synchronization of a pair of pacemaker cells based on phase response curve", 14th Iranian Conference on Biomedical Engineering, Tehran, Iran, Feb. 2008.
25. Dastgheib, Z Azemi, A, Khademi, M, **Gholizade-Narm**, H, Sabzevari, V, Arvaneh, M, Shajiee, M."Identification of ionic conductances in a reentry model of ventricular myocardium cells", 14th Iranian Conference on Biomedical Engineering, Tehran, Iran, February 2008.
26. Arvaneh, M, Azemi, A, Pariz, N, Dastgheib, Z, Shajeie, M, **Gholizade-Narm**, H. "Prediction of Paroxysmal Atrial Fibrillation Using the PR Interval of ECG Signal", 14th Iranian Conference on Biomedical Engineering, Tehran, Iran, Feb. 2008.
27. Shajiee, M, Azemi, A, Pariz, N, Arvaneh, M, Dastgheib, Z, **Gholizade-Narm**, H. "synchronization of Heart Oscillator's (SA&AV) in order to prevent blocking arrhythmia with genetic Algorithm," National Electrical Engineering Conference (NEEC), Najafabad, Iran, March. 2008,
28. Azemi, A, Sabzevari, V, Khademi, M, **Gholizade-Narm**, H, Kiani, A, Dastgheib, Z. "Intelligent Arrhythmia Detection Classification Using ICA", 28th IEEE EMBS Annual International Conference, New York City, New York, USA, Aug 30-Sept. 3, 2006.
29. Azemi, A, Sabzevari, V., Khademi, M., **Gholizade-Narm**, H., Dastgheib, Z. "Intelligent Arrhythmia Detection Classification Using Wavelet Transformation ICA", 14th Iranian Conference on Electrical Engineering, Tehran, Iran, May 2006.
30. Sabzevari, V. R., Azemi, A., Khademi, M., **Gholizad**e-**Narm**, H., Kiani, A., Dastgheib, Z. S., "Arrhythmia Detection and Classification Using Wavelet ICA", Encyclopedia of Healthcare Information Systems with IGI Global Pub. DOI: 10.4018/978-1-59904-889-5.ch016

TEACHING & MENTORING ACTIVITIES

COURSES

Graduate level:

- Modeling and Control of Power Electronic Converters
- Nonlinear Control
- Optimal Control
- Chaos, Theory and Control
- Stochastic Estimation and Control

Undergraduate level:

- Industrial Electronics
- Modern Control
- Linear Control Systems
- Signals and Systems
- Engineering Mathematics
- Electric Circuits (I, II)

Student Supervision

Ph.D. Supervision:

- Eight Ph.D. Students, Shahrood University of Technology

MSc. Supervision:

- 40+ MSc. Students, Shahrood University of Technology

Mentorship Activity

- Ziyong Liu, Ph.D. Student, Queen's University (2022-Present)
- Bradley Kitzul-Varshney, MSc. Student, Queen's University (2022-2023)
- Peter Matthews, MSc. Student, Queen's University (2022-Present)
- Jeremy Nguyen, MSc. Student, Queen's University (2022-Present)

Teaching Interests

- Modeling and Control of Power Electronic Converters
- Applied AI in Power Electronic Converters
- Linear/Nonlinear Control Systems

PROFESSIONAL SKILLS

Simulation Software:

- PSIM, MATLAB, SIMULINK, PSCAD, ATPDraw

Board Design Software:

- ALTIUM, PROTEL

Processors/Micro-Controllers:

- DSP, AVR/ATMEGA/ARM/ARDUINO

PROFESSIONAL ACCREDITATION

- Member of the Construction Engineering Organization (Professional Engineer, Iran)
- Permanent Member of Iranian Society of Instrument & Control Engineering