

Seyyed Yousef Mousazade Mousavi



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s_yosuf_mosazade@yahoo.com

Education:

PHD: Power Engineering 2012-2016(expected)

IUST (Iran University of Science and Technology), Tehran,Iran.

Excellent Center of Automation and Power,

Grade Point Average: 17.52/20

MS: Power Engineering 2010-2012

AUT (Amirkabir University Technology), Tehran,Iran.

Excellent Center of Power Engineering,

Grade Point Average: 18.01/20, Thesis Grade: 20/20

BS: Electical Engineering, Power Engineering 2006-2010

Mazandaran University, Babol, Iran.

Grade Point Average: 18.02/20, Thesis Grade: 20/20

(**1st Rank** among all the students of Power Engineering)

Diploma: Mathematics and Physics, 2002-06

Babul Public Exemplary schools: 19.69/20 (Honored)

Honors and Awards:

- **1st Rank** among all the students of the Power Engineering of Mazandaran University
- Qualified for *Final* round of Electrical Engineering Olympiads in Iran, 2010

- Honored student at High School
- Awarded as 2nd recipient of best paper award for the paper entitle: New High Frequency Switching Method of Cascaded Multilevel Inverter in PV Application

Academic Projects:

- PhD project, under supervision of Dr. Jalilian “Control of Distributed Generation and energy storage interfacing inverters in microgrids considering unbalance and nonlinear loads
- MSc Project, under supervision of Dr.S.H.Fathi “Grid Integration of PV system through Multilevel Converter with Power Share Balancing among the PV Modules and MPPT Strategy”, (Grade: 20/20)
- BSc Project, under supervision of Dr.A.R.Sheykhholeslami “Harmonics Sources and its Effects on Power System and Simulation of a Shunt Active Filter”, 2010.(Grade: 20/20)

Industrial Projects:

- Iranian Power electronics roadmap an vision Niroo research Institute (NRI)
- Power quality monitoring and management using AMI, Iranian Efficiency Of Energy (SABA)

Selected Graduated Courses:

Power Quality (17.75/20)	Distributed Generation (19.2/20)	Power System Dynamics (19/20)
Distributed Network (18.6/20)	HVDC (16.7/20)	Power Electronics Application (18/20)
Power Electronics (16.75/20)	Renewable Energy (17.75/20)	Drive(17.5/20)

Selected Curricular Projects:

- “DC/DC Converters in Fuel Cell Application, Simulation and Comparison of their different Configuration”, project of distributed energy course. (grade :5/5)
- “The Effects of Plug in Hybrid Electrical Vehicle on Load Profile of Distributed System”, Project of Distributed Network Course.
- ~~“Simulation of PV and Perturb and Observe (P & O) Maximum Power Point Tracking Algorithm”, Project of Power Electronics Application Course.~~
- "Power Quality in Micro Grids", Projects of Dynamic Course.
- " Speed Control of a Brushless DC Motor with 120 Degree methods", project of Drive course.

Research Interests:

- Power Electronics
- Power Quality
- Renewable Energy
- Micro and smart Grids

- Plug in Hybrid Electrical Vehicle
- Control of Power Electric Converter/Inverter
- Switching methods of Inverters
- Electrical substation

Publication

- [1]- S. Y. Mousazadeh, A.R. Jalilian, M. savaghebi, J. M. Guererro, "Coordinated Control of Multifunctional Inverters for Voltage Support and Harmonic Compensation In a Grid-Connected Microgrid" *Electric Power System Research*, Feb 2018.
- [2]- S.Y Musazadeh Mousavi , A. Jalilian, M. Savaghebi and Josep Guerrero "Autonomous Control of Current and Voltage Controlled DG Interface Inverters for Reactive Power Sharing and Harmonics Compensation in Islanded Microgrids" accepted at *IEEE Power Electronics Transaction*.
- [3]- Mousazadeh Mousavi, S.Y.; Jalilian, A.; Savaghebi, M.; Guerrero, J.M. Flexible Compensation of Voltage and Current Unbalance and Harmonics in Microgrids. *Energies* 2017, 10, 1568 .
- [4]- S.Y Musazadeh Mousavi, M. Zabihi Laharami, A. Niknam Kumle, and Seyed Hamid Fathi " Application of ABC algorithm for Selective Harmonic Elimination Switching Pattern of Cascade Multi-Level Inverter with Unequal DC Sources", Accepted at *International Transactions on Electrical Energy Systems Wiley*.
- [5]- Golestan, Saeed, Mousazadeh, S.Y, Josep Guerrero ; Juan Vasquez "A Critical Examination of Frequency-Fixed Second-Order Generalized Integrator-Based Phase-Locked Loops." *IEEE Transactions on Power Electronics* (2017).
- [6]- S.Y Musazadeh Mousavi , A. Jalilian, M. Savaghebi and Josep ,” Power Quality Compensation and Power Management of a Multi-Functional Interfacing Inverter for PV and Battery Energy Storage System” revised at *International Transactions on Electrical Energy Systems Wiley*.
- [7]-Mosazadeh, S. Y.; Fathi, S. H.; Hajizadeh, M.; Sheykholeslami, A, " Adaptive hysteresis band controlled grid connected PV system with active filter function ", *IEEE Power Engineering and Renewable Energy (ICPERE)*, 2012 International Conference on 3-5 July 2012, Bally, Indonesia.
- [8]- Mosazadeh, S. Y.; Fathi, S. H.; Radmanesh, H." New high frequency switching method of cascaded multilevel inverters in PV application ", *IEEE Power Engineering and Renewable Energy (ICPERE)*, 2012 International Conference on 3-5 July 2012, Bally, Indonesia(Selected Paper)
- [9]- Radmanesh, Hamid; Fathi, Hamid; Mosazade, S. Y; Hosseinian,Hossein; , "Harmonics analysis in autotransformers ferroresonance circuit," 20th Iranian Conference on Electrical Engineering (ICEE), 2012, Vol., no., pp.354-357, 15-17 May 2012.
- [10]-. Mosazadeh, S. Y.; Fathi, S. H.; Radmanesh, H." An overview of high frequency switching patterns of cascaded multilevel inverters suitable for PV applications and proposing a modified method " *t Indian Journal of Science and technology*.
- [11]- H. Radmanesh1, S. S. Heidari Yazdi, S.Y. Mosazadeh and G. B. Gharehpetian" Studying Voltage Stability in Power System Considering Load Dynamics" *Indian Journal of Science and Technology*, Vol 6(11), 5487–5494, November 2013.

[12]- S.Y Musazadeh Mousavi, M. Zabihi Laharami, A. Niknam Kumle, and Seyed Hamid Fathi " Selective Harmonic Elimination Switching Pattern for Cascade Multi-level Inverter Using Hybrid of ANFIS and ABC Algorithm" in progress.

[17]-S.Y. Mousazadeh, A. Beirami, A. Jalilian, M.. Savaghebi and Josep M. Guerrero " Control of a Multi-Functinal Inverter for Grid Integration of PV and Battery Energy Storage System" IEEE SDEMPED conference , Portugal.

[18]- S.Y. Mousazadeh, A. Jalilian,"Voltage Unbalnce Compensation by a Grid-Connected Inverter Using Virtual Impedance and Admittance Control Loops", accepted for oral presentation on 9th annual international Power Electronics, Drive Systems, and Technologies Conference (PEDSTC), 2018.

Computer and Programming Skills:

- Mathematic and Engineering Software: MATLAB, Simulink, ORCAD, PSPICE, PSCAD, Code Composer, Quartos , Homer
- Familiar with Digital Signal Processor (DSP) (up to 50 hours workshop)
- FPGA (up to 50 hours workshop)
- Programming Languages: C/C++ and Assembly.
- Microsoft Office (Excel, Word, PowerPoint)

Language:

- English: Fluent
- Persian: mother tongue
- Arabic: familiar

Teaching:

- Power electronics Lab , Iran University of Science and technology (IUST)
- Principle of electrical engineering I and II , Iran University of Science and technology (IUST)
- Principle of electrical engineering Lab, Iran University of Science and technology (IUST)
- Electrical Machine, Azad university, Pardis Branch
- Electrical substation, , Azad university, Pardis Branch
- Electrical circuit, Azad university, Pardis Branch
- Electrical circuit Lab, Azad university, Pardis Branch
- Transformer Lab, Azad University, Pardis Branch.
- Supervision and Co-supervision of six Ms and five Bs. Student at Islamic Azad University of Miyaneh and Pardis.

Personal information:

- Nationality: Iranian
- Date of Birth: December, 27, 1987.
- Place of birth: Mazandaran, Iran