Curriculum Vitae:

SHAHRIAR ABBASI

Assistant Professor in Electrical Power Engineering (Electrical Power Systems)

PERSONAL INFORMATION:

Birth: 21 August 1985

Gender: Male

Postal Address: Electrical Engineering Department, Faculty of Engineering, Razi University, Kermanshah, Iran, Zip code: 67 14 41 49 71

Phone: +98 916 98 48 928

Email: shahriarabasi@gmail.com

RESEARCH INTERESTS:

Stochastic power systems planning and optimization, Optimization methods and algorithms, Uncertainty modeling, Renewable generation, Voltage stability analysis, Reactive power planning.

SKILLS / PROGRAMMING:

Optimization, Algorithms, Programming, Teaching, MATLAB, GAMS, LaTeX, and some educational software.

LANGUAGE:

English, Persian.

EDUCATION:

Ph.D., Electrical Engineering, Razi University, Kermanshah, Iran (September 2013 – February 2018), GPA: 94.5 / 100 via 15 credits

Graduate Courses: Power System Planning (91.3 / 100), Computer Aided Circuits and Networks Design (90 / 100), Study of Transients in Power Systems (92.5 / 100), Stochastic Analysis of Power Systems (88.75 / 100), Distributed Generations (90 / 100)

Thesis: Transmission Network Expansion Planning Considering Uncertainties of Load and Wind Power Generation Using Pareto Optimization (97.5 / 100) **Supervisor:** Dr. Hamdi Abdi

M.Sc., Electrical Engineering, Shahid Rajaee University, Tehran, Iran (September 2008 - July 2011), GPA: 80.2 / 100 via 35 credits

Thesis: Diagnosis of Voltage Collapse Proximity Based on Local Measurements

Supervisor: Dr. Farid Karbalaei

B.Sc., Electrical Engineering, Shahid Rajaee University, Tehran, Iran (September 2003 - February 2008), GPA: 73 / 100 via 151 credits
Thesis: Harmonic Modeling of Power Transformers
Supervisor: Dr. Reza Ghandehari

RESEARCH AND WORK EXPERIENCE:

- Six months (June 2017 - November 2017) research visit at the **ZERO LAB**, a laboratory in **Polytechnic of Bari, Bari, Italy** for studies on stochastic planning and optimization of electrical power systems.
- As an **Industrial Automation Intern** at Ministry of Energy**,** Water and wastewater southwest of Tehran, Iran (June 2007 -September 2007)
- Member of **Young researchers and elite club,** Iran
- Member of **Iranian Construction Engineers Organization,** Province of Kermanshah, Iran
- Teaching of several courses at undergraduate levels, including Power System Analysis, Electrical Machines, and Industrial Automation.

PUBLICATION:

Journal Papers:

1. Farid Karbalaei, Mohammad Ahmadi Nezhadpashaki, **Shahriar Abbasi**, "Optimal Placement and Sizing of Distributed Generation with Small Signal Stability Constraint Sustainable Energy, Sustainable Energy, Grids and Networks 23 (2020): 100380.
2. **Shahriar Abbasi**, Hamdi Abdi, Sergio Bruno, and Massimo La Scala, Transmission network expansion planning considering load correlation using unscented transformation, International Journal of Electrical Power & Energy Systems 103, 12-20, 2018.
3. **Shahriar Abbasi**, Hamdi Abdi, Multi-objective TEP problem based on ACOPF considering load and wind power generation uncertainties, International Transactions on Electrical Energy Systems 27(6), 2017
4. **Shahriar Abasi**, Hamdi Abdi, Return on Investment in Transmission Network Expansion Planning Considering Wind Generation Uncertainties Applying Non-dominated Sorting Genetic Algorithm', Journal of Operation and Automation in Power Engineering, 6(1), 89-100, 2018.
5. Farid Karbalaei, **Shahriar Abasi**, L-index based contingency filtering for voltage stability constrained reactive power planning, Turk J Elec Eng & Comp Sci, 26, (2018), 3156-3167
6. Hamdi Abdi, Shahriar Abbasi, Mohammad Moradi, Analyzing the stochastic behavior of ferroresonance initiation regarding initial conditions and system parameters, International Journal of Electrical Power & Energy Systems 83, 134-139, 2016
7. Farid Karbalaei, **Shahriar Abasi**, A Abedinzade, M Kaviani, A New Method for Considering Distribution Systems in Voltage Stability Studies, Journal of Iranian Association of Electrical and Electronics Engineers (JIAEEE), 12 (3), 2015

8. Farid Karbalaei, **Shahriar Abasi**, Quick and Accurate Computation of Voltage Stability Margin, Journal of Electrical Engineering & Technology 11 (1), 1-8, 2016

9. Ali Bozorg omid, Farid Karbalaei, **Shahriar Abasi**, Selection of Critical Contingencies in Voltage Stability Constrained Reactive Power Planning (RPP), Tabriz Journal of Electrical Engineeing (TJEE) (in Persian) 44 (2), 43-50, 2014

10. Farid Karbalaei, **Shahriar Abasi**, Hossein Saberi, Quick and Accurate Computation of Voltage Stability Margin Using PV Curve Approximation, Tabriz Journal of Electrical Engineeing (TJEE) (in Persian) 44 (3), 33-40, 2014

11. **Shahriar Abasi**, Farid Karbalaei, Quadratic Approximation of PV Curve Path Based on Local Phasor Measurements, in Presence of Voltage Dependent Loads, Majlesi Journal of Electrical Engineering 7 (3), 8-13, 2013

12. **Shahriar Abasi**, Farid Karbalaei, Development of BSDC index application for analysis of voltage instability in the presence of voltage dependent loads, International Review on Modelling and Simulations 4 (1) , 196-201, 2011

Presentations:

1. Farid Karbalaei, **Shahriar Abasi**, Prediction of voltage collapse in presence of voltage dependent loads by PV curve approximation, Asia-Pacific Power and Energy Engineering Conference (APPEEC2011), Wuhan University, China, March 25-28, 2011, (IEEE Index)

2. **Shahriar Abasi**, Farid Karbalaei, Diagnosis of Voltage Instability Using BSDC Index in the Presence of Voltage Dependent Loads, Asia-Pacific Power and Energy Engineering Conference (APPEEC2011), Wuhan University, China, March 25-28, 2011, (IEEE Index)

3. Farid Karbalaei, **Shahriar Abasi**, Calculation of voltage Stability margin by minimum number of power flow, The 22nd Iranian Conference on Electrical Engineering (ICEE 2014), Shahid Beheshti University, Tehran, Iran, May 20-22, 2014 (in Persian)

4. **Shahriar Abbasi**, Hamdi Abdi, Combined planning of transmission network development and reactive power TEPRPP using sensitivity analysis, The first national conference of applied researches on water and power industry (AWPC2020), Razi university, Kermanshah, Iran, 30-31 Dec. 2020 (in Persian).

5. **Shahriar Abbasi**, Hamdi Abdi, Transmission network expansion planning considering correlation of load uncertainties, The first national conference of applied researches on water and power industry (AWPC2020), Razi university, Kermanshah, Iran, 30-31 Dec. 2020 (in Persian).

Book Chapters:

1. **Shahriar Abbasi**, Hamdi Abdi, Robust Transmission Network Expansion Planning (IGDT, TOAT, Scenario Technique Criteria), In book: Robust optimal planning and operation of electrical energy systems, Publisher: Springer, DOI: 10.1007/978-3-030-04296-7.

2. Nikzad Hamid Reza, Hamdi Abdi, **Shahriar Abbasi**, Robust Unit commitment (RO, IGDT), In book: Robust optimal planning and operation of electrical energy systems, Publisher: Springer, DOI: 10.1007/978-3-030-04296-7.

TEACHING EXPERIENCE:

Razi University of Kermanshah:

Electrical Installations (Undergraduate Course, Spring 2017, Fall 2018, Spring 2018, Fall 2019, Spring 2019), **Electrical Machines I** (Undergraduate Course, Fall 2017, Spring 2017, Fall 2018, Spring 2018, Fall 2019, Spring 2019), **Industrial Automation** (Undergraduate Course, Fall 2017, Spring 2017, Fall 2018, Spring 2018, Fall 2019, Spring 2019), **Fundamental of Electrical Engineering** (Undergraduate Course, (Undergraduate Course, Fall 2017, Spring 2017, Fall 2018, Spring 2018, Fall 2019, Spring 2019), **Electrical Machines Lab.** (Undergraduate Course, (Undergraduate Course, Fall 2017, Spring 2017, Fall 2018, Spring 2018, , Fall 2019, Spring 2019).

Kermanshah University of Technology:

Electrical Installations (Undergraduate Course, Fall 2017), **Electrical Machines I** (Undergraduate Course, Fall 2017), **Special Electrical Machines** (Undergraduate Course, Fall 2017), **Design of Electric Transmission Lines** (Undergraduate Course, Fall 2017), **Electrical Engineering Fundamentals** (Undergraduate Course, Fall 2017).

The Islamic Azad University of Kermanshah:

Electrical Installations (Undergraduate Course, Spring 2015), **Electrical Machines II** (Undergraduate Course, Spring 2015), **Electrical Machines I** (Undergraduate Course, Fall 2015), **Special Electrical Machines** (Undergraduate Course, Fall 2015), **Electromagnetics** (Undergraduate Course, Spring 2015)

The Islamic Azad University of Khoram Abad:

Electrical Installations (Undergraduate Course, Fall 2011, Spring 2011), **Electric Circuits I** (Undergraduate Course, Fall 2011, Spring 2011), **Power System Analysis** (Undergraduate Course, Spring 2011, Fall 2012), **Electromagnetics** (Undergraduate Course, Fall 2012), **Power System Analysis** (Undergraduate Course, Spring 2012), **Electrical Machines I** (Undergraduate Course, Spring 2012)

Technical high schools in ministry of education of Iran:

From 2013 until 2019. Different courses

Referees' Contacts:

1- Dr. Massimo La Scala,

Fellow IEEE, Full Professor of Electrical Energy Systems, Department of Electrical and Information Engineering (DEI), Polytechnic University of Bari, Bari, Italy. Email: massimo.lascala@poliba.it, Tel: +39 32 93 17 32 18

2- Dr. Sergio Bruno,

Associate Professor of Electrical Energy Systems, Department of Electrical and Information Engineering (DEI), Polytechnic University of Bari, Bari, Italy. Email: sergio.bruno@poliba.it, Tel: +39 33 98 04 96 17
3- Dr. Mohsen Hayati,
Full Professor of Electrical Energy Systems, Electrical Engineering Department, Faculty of Engineering, Razi University, Kermanshah, Iran. Email: Mohsen_hayati@yahoo.com, Tel: +98 918 831 20 41
4- Dr. Hamdi Abdi,
Associate Professor of Electrical Energy Systems, Electrical Engineering Department, Faculty of Engineering, Razi University, Kermanshah, Iran. Email: Hamdiabdi@gmail.com, Tel: +98 912 278 62 68
5- Dr. Sajjad Bayati,
Assistant Professor of Electrical Energy Systems, Electrical Engineering Department, Faculty of Engineering, Razi University, Kermanshah, Iran. Email: s.bayati@gmail.com, Tel: +98 918 389 30 90
6- Dr. Farid Karbalaei,
Associate Professor of Electrical Energy Systems, Faculty of Electrical Engineering, Shahid Rajaee Teacher Training University, Tehran, Iran. Email: f_karbalaei@sru.ac.ir, Tel: +98 912 444 53 25

Best Regards,
Shahriar Abbasi,

Assistant Professor in Electrical Power Engineering (Electrical Power Systems)

Technical and Vocational University of Iran, Kermanshah Branch