



Hossein Karimianfard

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EDUCATION

Bachelor of Science in Electrical Engineering,
Islamic Azad University, Fars Science and Research Branch, Iran
Thesis Topic: High Voltage Switch Analyzing in Power Systems

Master of Science in Electrical Engineering,
Islamic Azad University, Jahrom Branch, Fars, Iran
Thesis Topic: Improving Distribution System Performance using Network Reconfiguration Considering Distributed Generation

RESEARCH INTERESTS

- Electricity Market Operation and Optimization
- Reactive Power Management
- Transmission and Generation Planning
- Voltage Control Analysis
- Power System Operation and Optimization
- Electric Vehicle
- Energy Storage System
- Smart Grid
- Modelling and advanced control of hybrid AC/DC microgrids

TEACHING EXPERIENCE

- Power System Operation and Control (for MSc student)
- Power System Stability and Dynamics (for MSc student)
- Reactive Power Control (for MSc student)

- Distribution System (for MSc student)
- Modern Control (for MSc student)

TEACHING INTERESTS

- Mathematical Programming
- Optimization
- Modern Control
- Distributed Artificial Intelligence
- Operation
- Heuristics Algorithm
- Multi-objective Decision Making
- Advance Numerical Analysis (Matrix Algebra)
- Economic Dispatch

EDUCATION CERTIFICATES

- Electrical lineman certificate
- Power cable maintenance and repair certificate

ACTIVITIES

- Faculty, Department of ECE, Islamic Azad Univ., Jahrom
- Reviewer of:
 - IEEE Transaction on Power System
 - IEEE Systems Journal
 - Energy Conversion and Management
 - Renewable Energy
 - ENERGY
 - IET Generation, Transmission & Distribution
 - IET Renewable Power Generation
 - IEEE Access
 - IET Smart Cities
 - IET Cyber-Physical Systems: Theory & Applications
 - International Journal of Power and Energy Conversion

AWARDS

- * Top reviewers in Engineering - September 2019
- * Top reviewers in Cross-Field - September 2019

PUBLICATIONS

Publish Papers

- 1- H. Karimianfard and H. Haghghat, "Generic Resource Allocation In Distribution Grid," *IEEE Transactions on Power Systems*, Vol.34, no. 1, Jan. 2019.
- 2- H. Karimianfard and H. Haghghat, "An Initial-Point Strategy for Optimizing Distribution System Reconfiguration," *Electric Power Systems Research*, 176, Aug. 2019.
- 3- H. Haghghat, H. Karimianfard and B. Zeng, "Integrating Energy Management of Autonomous Smart Grids in Electricity Market Operation," *IEEE Transactions on Smart Grid*, vol. 11, no. 5, pp. 4044-4055, Sept. 2020.
- 4- H. Karimianfard, H. Haghghat and Bo Zeng "Co-optimization of Battery Storage Investment and Grid Expansion in Integrated Energy Systems," *IEEE system journal*.
<https://doi.org/10.1109/JSYST.2021.3130057>

Accepted papers

- 5- H. Karimianfard, M. R. Salehizadeh and Pierluigi Siano "Economic Profit Enhancement of Demand Response Aggregator through Large Scale Energy Storage System Investment," *CSEE Journal of Power and Energy Systems*.
- 6- H. Karimianfard "Multi Area Voltage Management in Distribution Grids Using Modified PSO algorithm," *Electric Power Components and Systems*.

SKILLS

Computer and Software

Popular Software

- *MS OFFICE (WORD, EXCEL, POWERPOINT)*
- *VISIO*
- *LATEX.*

General Purpose Software

- *MATLAB*
- *GAMS*
- *Julia*

Power System Packages

- *MATPOWER*
- *DigSILENT*
- *PSAT*
- *CVX*
- *CYMDIST*
- *PSCAD*

REFERENCES

- **Dr. Hossein Haghghat, Assistant Professor (PhD MIEEE)**
Islamic Azad University of Jahrom, Fars, Jahrom

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