Mehran Sanjabiasasi

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🔵 https://scholar.google.com/citations?user=a5DP4A0AAAAJ

EDUCATION

Ph.D. Computer Engineering
University of Arkansas, Fayetteville, AR
Program Start Date: August 2022
Expected Graduation Time: May 2027

M.Sc. Power Electrical Engineering 2010-2013
Islamic Azad University South Tehran Branch, Tehran, Iran
Thesis Topic: " Energy Resource Management in Smart Grids Considering Plug-in Electric Vehicles"

B.Sc. Electrical Engineering 2006-2008
Islamic Azad University Bojnourd Branch, Bojnourd, Iran
Final Project: " Simulation of Permanent Magnet Synchronous Machine using MATLAB Simulink"

Associate's Degree, Electrotechnics, Electrical Installation 2002-2005
Technical and Vocational University Sari Branch (Technical College of Imam Muhammad Baqir)

RESEARCH INTERESTS

- Smart Grid and Microgrids, Electric Vehicles, Demand Response
- Power Electronics, Renewable Energies
- Power Systems and Distribution Networks
- Artificial Intelligence, Machine Learning, Optimization

PUBLICATIONS

- M. Ahanch, M. Sanjabi, R. McCann, Transmission Lines Fault Detection, Classification and Location Considering Wavelet Support Vector Machine with Harris Hawks Optimization Algorithm to Improve the SVR Training " 8th International Conference On Electrical And Electronics Engineering (ICEEE 2021), Antalya, Turkey, IEEE.

- M. Sanjabi, M. Ahanch, Y. Toghani, "Optimal allocation of distributed generators and shunt capacitors using salp swarm algorithm" 26th Iranian Conference on Electrical Engineering, May 2018 IEEE. (Presented)

- M. Sanjabi, E. Safari, K. Hosseini, "Optimal Operation of a Residential Energy Hub considering PHEV " 8th Conference on Electrical Engineers, February 2018. (Presented)

- M. Sanjabi, M. Ahanch, M. Sedghi, "A Grasshopper Optimization Algorithm to solve optimal distribution system reconfiguration and distributed generation placement problem", Knowledge-Based Engineering and Innovation (KBEI), December 2017 IEEE 4th International Conference (Presented)

- M. Ahanch, M. Sedghi, M. Sanjabi, H.A. Shayanfar, "Considering shunt and fixed series compensations in dynamic transmission network expansion planning using Real Codded Genetic Algorithm", Knowledge-Based Engineering and Innovation (KBEI), December 2017 IEEE 4th International Conference

- M. Sanjabi, M. Ahanch, M. Sedghi, "Multi-objective Economic-Environmental Optimal Operation of a Microgrid using Multi-objective Grey Wolf Optimizer algorithm" 5th Annual Clean Energy Conference (ACEC2017) February 2017, Kerman University, Iran. (Presented)

- M. Ahanch, M. Sanjabi, H.A. Shayanfar, "Incorporating Fixed Series Compensation in Dynamic Transmission Expansion Planning Considering Network Losses", International Power System Conference, October 2016.

- M. Sanjabi, M. Ahanch, Y. Toghani, "Multi-objective Optimal Power Flow Solution using Grey Wolf Optimizer", International Power System Conference, October 2016. (Presented)

- Y. Toghani, M. Ahanch, M. Sanjabi, "Generation Random Outage Model for Monthly maintenance Scheduling Based on Risk", 4th International Reliability Engineering Conference Sahand University of Technology, May, 2016.

- M. Sanjabi, M. Sedghi, S. Sedghi, "Energy Resource Management in Smart Grids Considering Electric Vehicles" 1th Iranian National Conference Electrical Engineering, Islamic Azad University Bandargaz Branch, December 2014.(Presented)

RESEARCH EXPERIENCES

- Fault detection, classification and location in transmission lines based on wavelet transform and ANN
- Multi-objective optimal scheduling of a smart building considering combined heat and power (CHP) generation and demand response program
- Optimal transformer tap setting and capacitor banks in distribution network using DIgSILENT and MATLAB
- Generation optimal scheduling considering Time of Use and Emergency Demand Response Programs in electricity market
- Short-term load forecasting of a distribution power network using Neural Networks
- Spring 2013, "Optimal Placement of FACTS Devices in Power Systems", as a course Project for Reactive Power Control.
- Spring 2013, "Power quality improvement using DPC controlled three-phase shunt active filter", as a course Project for Power Electronics.
- Winter 2012," Optimal Scheduling of a Renewable Microgrid in an isolated load area", as a course Project for Power System Operation.
- Winter 2011, "Optimal reconfiguration and DG (Distributed Generation) allocation in distribution networks", as a course Project for Electrical Distribution Networks.

COMPUTER & TECHNICAL SKILLS

Languages and Scripts
- MATLAB, SIMULINK (Optimization, Neural Network, Fuzzy Logic, Machine Learning)
- Python (Numpy, Pandas, Matplotlib, Scipy, Scikit-leran, Pandapowr)

Internet of Things (IoT)
- Arduino, Raspberry pi, Serial Communication: USART ‹SPI ‹I2C

Power Engineering Software
- DIgSILENT, MATPOWER, SimPowerSystems, PVsyst

Optimization Software /Applications
- GAMS, CVX, Evolutionary Computation

Other Software:
- MS Office, LaTeX