# Seyyed Reza Ebrahimi Resume

# **EDUCATION**

- 2014- 2021 Ph.D. student in Electrical Engineering, Shahrood University of technology, Shahrood, Iran
- 2008-2011 M.Sc. in Electrical Engineering, Semnan University, Semnan, Iran
- 2004 2008 B.Sc. in Electrical Engineering, Mazandaran University, Babol, Iran

## **AREA OF EXPERTISE & INTERESTS**

- Zero energy building (design and operation)
- Smart homes and home energy management systems
- Design, control and condition monitoring in Smart grid/Microgrid
- Optimal design of photovoltaic power plant
- Statistical analysis of power system and microgrids
- Power system optimization

## **TEACHING EXPERIENCE**

- Graduate courses:
  - ✓ Power System Optimization (Islamic Azad University, Sari Branch and Hadaf Institute of Higher Education)
  - ✓ Power system dynamics, stability and control (Islamic Azad University, Sari Branch and Hadaf Institute of Higher Education)
  - ✓ Reactive power control (Hadaf Institute of Higher Education)
  - ✓ Power system planning (Hadaf Institute of Higher Education)
  - ✓ Smart grids (Hadaf Institute of Higher Education)
- Undergraduate courses:
  - ✓ Power System Analysis 1 and 2 (Mazandaran University of Science and Technology, Hadaf Institute of Higher Education and Islamic Azad University, Sari Branch)
  - ✓ Electric Machines 1,2 and 3 (Mazandaran University of Science and Technology, Hadaf Institute of Higher Education and Islamic Azad University, Sari Branch)
  - ✓ Special Electric Machines (Mazandaran University of Science and Technology, Hadaf Institute of Higher Education and Islamic Azad University, Sari Branch)
  - ✓ Computer Programming-MATLAB (Hadaf Institute of Higher Education)
  - ✓ Power System Analysis Laboratory (Hadaf Institute of Higher Education)
  - ✓ Electrical energy transmission (Hadaf Institute of Higher Education)
  - ✓ Circuit Analysis 1 and 2 (Mazandaran University of Science and Technology, Hadaf Institute of Higher Education and Islamic Azad University, Sari Branch)
  - ✓ Fundamental of Electrical Engineering (Mazandaran University of Medical Sciences, Hadaf Institute of Higher Education)

## **RESEARCH MENTORING EXPERIENCE**

- 2014-date: Advisor of 9 current graduate students at Hadaf institute of higher education and Islamic Azad University, Sari Branch an Shahrood university of technology
- 2014-date: Supervisor of 4 graduate students at Hadaf institute of higher education and Islamic Azad University, Sari Branch and Mazandaran Science and Research Branch
- 2011-date: Supervisor of more than 90 undergraduate students at Hadaf institute of higher education and Islamic Azad University, Sari Branch

## HONORS AND AWARDS

- Recipient of the best teacher Award (2011, Hadaf Institute of Higher Education)
- Recipient of the best teacher Award (2013, Hadaf Institute of Higher Education)
- Recipient of the best teacher Award (2016, Hadaf Institute of Higher Education)

#### PROFESSIONAL SOFTWARE SKILLS

- MATLAB (Programming and SIMULINK)
- DigSILENT Power Factory
- GAMS (General Algebraic Modeling System)
- PVsyst
- ACCA Solarius PV
- EnergyPlus
- DesignBuilder
- Climate Consultant

#### **PUBLICATIONS**

- Ebrahimi, S. R., Rahimiyan, M., Assili, M., & Hajizadeh, A. (2022). Home energy management under correlated uncertainties: A statistical analysis through Copula. Applied Energy, 305, 117753.
- Ebrahimi, S. R., Rahimiyan, M., Assili, M., & Hajizadeh, A. (2017). Load Management in a Residential Zero Energy Building Using Mixed Integer Linear Programming. 4th International Conference on Solar Energy (ICESE-2017).