

Email: medi@dtu.dk

Mehdi Savaghebi, PhD.

Department of Engineering Technology
Technical University of Denmark (DTU)
Lautrupvang 15, DK-2750 Ballerup, Denmark



[ORCID](#)

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[Scopus](#)

Research Interests

- Power electronics in smart grids and renewable energy systems
- Microgrids and distributed energy resources
- Power quality and harmonics in electrical systems
- Protection of electrical grids
- Power-to-X

Education

PhD., Electrical Power Engineering

Iran University of Science and Technology (IUST), Tehran, IRAN, Sept. 2006-Oct. 2012
Thesis Title: “Coordinated control of distributed generators interface converters for power quality enhancement in microgrids”

MSc., Electrical Power Engineering

IUST, Tehran, IRAN, Sept. 2004- Sept. 2006
Thesis Title: “Transformer loading capability assessment based on a fuzzy thermal model”

BSc., Electrical Power Engineering

University of Tehran, Tehran, IRAN, Sept. 2000 – Sept. 2004
Final Project Title: “Electricity market monitoring in restructured power systems”
Internship: Iran Power Plant Repairs- Power Transformer Workshop, Jun. 2003 – Sept. 2003.

Professional Experiences

- Sept 2023 – Present Professor in Power Electronic-Enabled Power Systems, DTU Engineering Technology, Ballerup, Denmark.
- May 2024 – Present Head of Energy Technology and Computer Science Section, DTU Engineering Technology, Ballerup, Denmark.
- Sept 2023 – Present Internship Coordinator for BEng in Electric Energy Technology, DTU.
- Jun 2022 – April 2024 Head of Electric Energy Section, DTU Engineering Technology, Ballerup, Denmark.
- Jun 2022 – Aug 2023 Associate Professor, DTU Engineering Technology, Ballerup, Denmark.
- Sept 2018 – May 2022 Associate Professor and Founding Leader of Control and Protection in Smart Grids (CAP-SG) Team, University of Southern Denmark (SDU), Odense, Denmark.
- Dec 2020 – Apr 2021 Deputy Head of Electrical Engineering Section, SDU, Odense, Denmark.
- Nov 2017 – Aug 2018 Associate Professor, Aalborg University (AAU), Aalborg, Denmark.

- Nov 2014 – Oct 2017 Postdoc Fellow, AAU, Aalborg, Denmark.
- Sept 2007 – Oct 2014 Lecturer, Islamic Azad University, Karaj Branch (KIAU), Iran.
- Aug 2010 – Sept 2010 Visiting PhD Student, Dept. Energy Tech., AAU, Aalborg, Denmark.
- May 2010 – Jul 2010 Visiting PhD Student, Renewable Energy Lab, Universitat Politecnica de Catalunya (UPC), Barcelona, Spain.

Honors and Awards

- Listed among Top 2% Scientists Worldwide by Stanford University, Since 2020.
- Rank 444 among 350,000 participants of nationwide universities entrance exam, 2000.
- University award for Top Students, IUST, 2005.
- Second rank among 25 master's students in electrical power engineering, IUST, 2006.
- First rank among 80 participants of power engineering PhD entrance exam at IUST, 2006.

Selected Projects

- *Design and Control of Power Electronic Converters for Power-to-X Facilities*, DTU
Role: PI/Host Professor
Funded by Otto Mønsted-Visiting Professorship, 2022-2023
- *Market-driven Multi-Energy Operational Planning in Indonesia – MARGIN*
Role: PI for SDU and responsible for control integration and lab testing work package (2022).
Funded by Danida Fellowship Center, 2022 – 2025
- *Establishment of Center for Green Energy and Sector Coupling-Industrial Lighthouse*, SDU
Role: Leader of smart grid work package (2022).
Funded by The Danish Business Authority, 2022 – 2023
- *Smart Fault Prediction and Location for Distribution Grid*, SDU
Role: Leader of fault location and lab testing work packages (2021 – 2022).
Funded by Energiteknologisk Udviklings og Demonstrations Program – EUDP, 2020 – 2023
- *FPGA-Based Electrical Solver for State-of-the-Art Analysis of Microgrid Clusters*, SDU
Role: Lab Manager.
Funded by Fabrikant Mads Clausen Fund, December 2021
- *Prototyping of Advanced Transformer-less UPS Systems*, SDU
Role: Lab Manager.
Funded by Fabrikant Mads Clausen Fund, December 2020
- *Hardware-in-the-Loop Setup for State-of-the-Art Control of Power Electronic Converters*, SDU
Role: Lab Manager.
Funded by Fabrikant Mads Clausen Fund, May 2020
- *Programmable Power Supply and Grid Simulator*, SDU
Role: Lab Manager.
Funded by EnergiFyn, April 2020
- *Research Lab Establishment- Control and Protection in Smart Grids (CAP-SG)*, SDU
Role: Lab Founder.
Funded by EnergiFyn, April 2019

- *Open Virtual Neighbourhood Network to Connect IoT Infrastructures and Smart Objects – VICINITY*, AAU
Role: Participant- Active role in project application process.
Funded by Horizon 2020 Programme, 2016 – 2019
- *UPS SLC-Troy*, AAU
Role: Collaborator on control of parallel inverters.
Funded by the manufacturer of Uninterruptible Power Supply Systems (UPS) - SALICRU S.A, 2015 – 2017
- *Microgrid Technology Research and Demonstration*, AAU
Role: Coordinating Postdoc.
Funded by Energiteknologisk Udviklings og Demonstrations Program - EUDP Sino-Danish, 2014 – 2017
- *Intelligent DC Microgrid Living Lab*, AAU
Role: Collaborator on smart metering implementation.
Funded by Danish Council for Strategic Research, 2014 – 2017

Teaching Experience

- *PhD/Industrial Course-Power Quality in Microgrids*, AAU, 2015-2017, 2019, 2021.
- *MSc Course-Power Electronic Systems*, SDU, 2019-2022.
- *BEng Course- Electric Power Quality*, SDU, 2020.
- *BEng/BSc Course- Grid Integration of Renewable Energy Systems*, SDU, 2021.
- *BSc Course- Power System Modelling and Analysis*, SDU, 2021.
- *BEng Course- Renewable Energy in the Electric Power System*, DTU, 2022.
- *BEng Course- Power Electronics in Energy Systems*, DTU, 2023, 2024.
- KIAU, Karaj, Iran, 2007– 2014:
 - ✓ Smart Grid (MSc and PhD Course); Electric Power Quality (MSc Course); Reactive Power Control (MSc Course); Design of Electrical Machines (MSc Course); Electrical Motor Drives (MSc Course); Power System Analysis (BSc Course); Electrical Machines I and II (BSc Course); Industrial Electronics (BSc Course); Fundamentals of Electrical Engineering (BSc Course); Electrical Circuits Lab (BSc Course)

Summary of Scientific Publications

[Google Scholar](#)

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