



Milad Hoseinpour

Curriculum Vitae
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 miladpourv.github.io
 milad.hoseinpour@hotmail.com

RESEARCH INTERESTS

Differential Privacy, Algorithmic Game Theory, Trustworthy Machine Learning, Bayesian Inference

EDUCATION AND RESEARCH EXPERIENCE

- **Tarbiat Modares University** Tehran, Iran
Graduate Research Assistant Sep. 2017 – Present
Host: Prof. Mahmoud-Reza Haghifam
Project: **Privacy-Preserving Market Design for Local Energy Communities**
- **Tarbiat Modares University** Tehran, Iran
M.Sc. in Electrical Engineering, Power Systems (GPA: 4.0/4.0) Sep. 2013 – Jan. 2016
Thesis: Probabilistic Decision Making for Flexibility Management in Distribution Systems
Advisor: Prof. Mahmoud-Reza Haghifam
- **Babol Noshirvani University of Technology** Babol, Iran
B.Sc. in Electrical Engineering, Power Systems (GPA: 3.77/4.0) Sep. 2009 – Sep. 2013

JOURNAL PUBLICATIONS

- Privacy-Preserving and Approximately Truthful Local Electricity Markets: A Differentially Private VCG Mechanism
Milad Hoseinpour, Mohammad Hoseinpour, Mahdi Haghifam, Mahmoud-Reza Haghifam, **IEEE Transactions on Smart Grid**, 2023.
- Prosumers' Cost Recovery in Peer-to-Peer Electricity Markets
Milad Hoseinpour, Mahmoud-Reza Haghifam, **Electric Power Systems Research**, 2022
(Revised, Under Review).
- Differentially Private Electricity Markets
Milad Hoseinpour, Mahmoud-Reza Haghifam, **Iranian Journal of Energy**, 2022.

CONFERENCE PUBLICATIONS

- A Differentially Private Data Sharing Mechanism for Smart Meters: An Approach for Longitudinal Data
Milad Hoseinpour, Mohammad Hoseinpour, Ferdinando Fioretto, Mahmoud-Reza Haghifam, 23rd Power Systems Computation Conference, **PSCC 2024**, (In Progress).
- Privacy by Design in Local Electricity Markets: A Differentially Private Gradient Method
Milad Hoseinpour, Mahmoud-Reza Haghifam, 27th International Conference on Electricity Distribution, **CIREN**, 2023.
- Accuracy Amplification in Differentially Private Logistic Regression: A Pre-Training Approach
Mohammad Hoseinpour, **Milad Hoseinpour**, Ali Aghagolzadeh, **International Conference on Computer and Knowledge Engineering**, 2023, (Under Review).
- Role of Microgrids in Distribution Networks Congestion Management
Milad Hoseinpour, Mahmoud-Reza Haghifam, 25th International Conference on Electricity Distribution, **CIREN**, 2019.

- Simultaneous Optimization of Tie Switches Placement and Reserve Capacity Margin of Sub-Transmission Substations with Considering the Conflict Between Short-Term and Long-Term Planning
Milad Hoseinpour, Mahmoud-Reza Haghifam, 24th International Conference on Electricity Distribution, **CIREN**, 2017.
- Flexible Scheduling of Active Distribution Networks for Market Participation with Considering DGs Availability
Milad Hoseinpour, Mahmoud-Reza Haghifam, Electrical Power Distribution Networks Conference, **EPDC**, 2017.
- Trade-Off Between Flexible and Economic Operation of a Microgrid Under Risk Assessment
Milad Hoseinpour, Mahmoud-Reza Haghifam, Electrical Power Distribution Networks Conference, **EPDC**, 2017.

TEACHING

- **Teaching Assistant** at Tarbiat Modares University Fall 2018 - Spring 2020
Course: Reliability Evaluation of Power Systems
Instructor: Prof. Mahmoud-Reza Haghifam
- **Teaching Assistant** at Tarbiat Modares University Fall 2014 - Fall 2015
Course: Reliability Evaluation of Power Systems
Instructor: Prof. Mahmoud-Reza Haghifam
- **Teaching Assistant** at Babol Noshirvani University of Technology Spring 2013
Course: Principles of Electric Machines
Instructor: Prof. Meysam Jafari
- **Teaching Assistant** at Babol Noshirvani University of Technology Spring 2012
Course: Circuit Theory
Instructor: Prof. Meysam Jafari

SKILLS

- **Programming Languages:** Python, R, MATLAB, C
- **Tools:** GIT, L^AT_EX

SELECTED GRADUATE COURSES

- Privacy in Statistics and Machine Learning, taught by Adam Smith and Jonathan Ullman (Online Course)
- Algorithms for Private Data Analysis, taught by Gautam Kamath (Online Course)
- Neural Networks and Deep Learning, taught by Andrew NG (Online Course)
- Game Theory, taught by Matthew O. Jackson, Kevin Leyton-Brown, Yoav Shoham (Online Course)

INDUSTRY EXPERIENCE

- **Co-Founder**, Moj Irsaye Mehr (MIM) Startup Company May 2017 – Oct. 2019
Developing an IoT based platform for residential demand response programs
- **Internship**, Sari Regional Power Distribution Company Jul. 2013 – Sep. 2013
Load forecasting in distribution systems

HONORS AND AWARDS

- Ranked 2nd out of 15 M.Sc. graduating class students in Power Systems, 2016.
- National Scholarship for the Master's degree, Iran Ministry of Education, 2013.
- Awarded as Outstanding B.Sc. Student, Babol Noshirvani University of Technology, 2013.
- Ranked 88th out of about 35,000 participants in the nationwide entrance exams for a Master's degree in Electrical Engineering, 2013.
- National Scholarship for the Bachelor's degree, Iran Ministry of Education, 2009.

SERVICE

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| • Iran Renewable Energy Association | April 2018 – Sept. 2020 |
| Collaboration for organizing seminars, webinars, and workshops | |
| • Iranian Solar Energy Scientific Society | Feb. 2019 – Nov. 2020 |
| Technical and economical consultation team | |

SELECTED PRESENTATIONS

- Privacy-preserving Electricity Markets, Tarbiat Modares University, 2022.
- Differentially Private Logistic Regression, Babol Noshirvani University of Technology, 2022.
- Platform Provider Distribution Utilities, Tarbiat Modares University, 2020.
- Distribution Networks Cost Allocation and Tariff Design, Tarbiat Modares University, 2019.
- European Electricity Grid Expansion Planning Strategies, Tarbiat Modares University, 2018.
- Operational Flexibility in Power Systems, Babol Noshirvani University of Technology, 2017.