Milad Hoseinpour

Curriculum Vitae July 15, 2023 miladpourv.github.io
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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, CIRED, 2023.
- Accuracy Amplification in Differentially Private Logistic Regression: A Pre-Training Aprroach 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, CIRED, 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, CIRED, 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

Course: Reliability Evaluation of Power Systems

Instructor: Prof. Mahmoud-Reza Haghifam

• Teaching Assistant at Tarbiat Modares University

Course: Reliability Evaluation of Power Systems

Instructor: Prof. Mahmoud-Reza Haghifam

• Teaching Assistant at Babol Noshirvani University of Technology

Course: Principles of Electric Machines

Instructor: Prof. Meysam Jafari

• Teaching Assistant at Babol Noshirvani University of Technology

Course: Circuit Theory

Instructor: Prof. Meysam Jafari

SKILLS

• Programming Languages: Python, R, MATLAB, C

• Tools: GIT, LAT_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 Load forecasting in distribution systems Jul. 2013 – Sep. 2013

Fall 2018 - Spring 2020

Fall 2014 - Fall 2015

Spring 2013

Spring 2012

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

• Iran Renewable Energy Association April 2018 – Sept. 2020 Collaboration for organizing seminars, webinars, and workshops

• Iranian Solar Energy Scientific Society
Technical and economical consultation team

Feb. 2019 – Nov. 2020

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.