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EDUCATION	<p>Ph.D. in Electrical Engineering, 2010 Illinois Institute of Technology, Chicago, IL, USA Dissertation title: “Optimal transmission switching in power system operation and planning”</p> <p>M.S. in Electrical Engineering, 2007 Sharif University of Technology, Tehran, Iran</p> <p>B.S. in Electrical Engineering, 2005 University of Tehran, Tehran, Iran</p>	
PROFESSIONAL EXPERIENCE	<p>Chair, Jun. 2017-May 2020 Electrical & Computer Engineering, Daniel Felix Ritchie School of Engineering & Computer Science, University of Denver, Denver, CO</p> <p>Professor, Sep. 2020- Electrical & Computer Engineering, Daniel Felix Ritchie School of Engineering & Computer Science, University of Denver, Denver, CO</p> <p>Associate Professor, Sep. 2016-Sep. 2020 Electrical & Computer Engineering, Daniel Felix Ritchie School of Engineering & Computer Science, University of Denver, Denver, CO</p> <p>Assistant Professor, Sep. 2013-Sep. 2016 Electrical & Computer Engineering, Daniel Felix Ritchie School of Engineering & Computer Science, University of Denver, Denver, CO</p> <p>Research Assistant Professor, Aug. 2012-Sep. 2013 Electrical & Computer Engineering, Cullen College of Engineering, University of Houston, Houston, TX</p> <p>Postdoctoral Research Fellow, Dec. 2010-Aug. 2012 Robert W. Galvin Center for Electricity Innovation, Illinois Institute of Technology, Chicago, IL</p>	
PROFESSIONAL SOCIETY MEMBERSHIP	<p>CIGRE Member, 2016-present</p> <p>IEEE Standard Association, 2016-present</p> <p>IEEE Senior Member, 2014-present</p> <p>IEEE Member, 2011-2014</p> <p>IEEE Eta Kappa Nu (HKN), 2009-present</p>	
TEACHING & RESEARCH INTERESTS	<p>Research Interests: Advanced technologies to modernize the power grid (artificial intelligence, blockchain, quantum computing), Climate crisis (renewable generation, sustainability), Grid of the future (smart grids, microgrids, power system economics), Smart cities</p> <p>Publications: 177 technical articles - 5870 citations, H-index of 35</p>	

Research Supervision: 27 graduate students with thesis (10 graduated M.S., 12 graduated Ph.D., 1 ongoing M.S., 4 ongoing Ph.D.), 5 postdoctoral research associates, and 2 research assistant professors.

Technical Courses Taught: Introduction to power and energy conversion systems, Control systems, Control systems lab, Electric power economy, Microgrids and advanced distribution networks, Smart city, Power system analysis, Power transmission and distribution, Power transmission and distribution lab, Electromechanical energy conversion, Energy conversion lab, Optimization, Electronics.

LEADERSHIP

Chair of the Electrical & Computer Engineering Department, Daniel Felix Ritchie School of Engineering & Computer Science, University of Denver.

Overseeing department's operations and responsible for the development and implementation of the department's academic direction, advancing the academic mission and the continuous improvement of quality for the academic experience.

Student Success

Leading the effort in reforming the undergraduate curriculum for electrical engineering, computer engineering, and mechatronics systems engineering programs. Focused on reducing the number of total credit hours, addition of more electives, project-based, and programming courses, while following the requirements by ABET and enabling students to pursue NAE Grand Challenge Scholars program. The goal is to train T-shape students, make room for new initiatives, enable study abroad, encourage internships, and make the curriculum more relevant and attractive to new students.

Graduate Education

Supported and enabled the highest number of graduates in one year within the department (14 Ph.D. and 27 M.S. students in 2018-19 academic year).

Student Enrolment

Increased the number of ECE undergraduate students from 27% (of all engineering students within the school) in 2016-17 academic year to 48% in 2018-19 academic year. Planned to pass 50% mark by the end of 2019-20.

New Programs

Led the effort in revamping the professional masters degree in Mechatronics Systems Engineering and upgrading to a Systems Engineering program. This program includes three certificates (16 credits each) that would result in a masters degree when combined. Tripled the enrolment from 30 students (in Spring 2018) to more than 90 (in Fall 2019).

Industry Connections

Revamped the department's External Advisory Board (EAB) by addition of 9 new members from tech, AI, and energy sectors. EAB helps with curriculum updates and further supports building sustainable collaborations for students' internships and full-time job opportunities.

Faculty Success

Added three new faculty members to the department, with backgrounds in Smart Cities, AI, and Systems Engineering.

Operational Excellence

Launched and completed several initiatives to help with day-to-day operation of the department, including development of a dashboard for keeping record of students, advisement, faculty service and contributions; facilitating non-thesis graduate student advising; streamlining graduate application reviews; creating an open agenda for faculty meetings.

RESEARCH PROPOSALS, GRANTS AND CONTRACTS

Extramural funding

1. Quantum Computing for Energy Applications (\$1,125,000), ComEd, 2019-2022, (PI)
2. An Energy Internet Platform for Transactive Energy and Demand Response Applications, (\$1,050,000), DOE, 2019-2021, (Co-PI)
3. Building Energy Data Key to Blockchain-Enabled Energy Management, (\$1,000,000), DOE, 2019-2021, (Co-PI)
4. Blockchain for Energy Applications (\$720,000), ComEd, 2019-2022, (PI)
5. Upgrade and Extension of the Microgrid Robust Economic Viability Assessment with Lasting Uncertainty Enclosure (MG-REVALUE) Software (\$25,000), ComEd, 2018, (PI)
6. REU Site: Summer Engineering Research Experiences in Power and Energy Systems for Smart Cities, NSF Human Resources Development (\$385,658), 2017-2020, (Co-PI)
7. Lecture Series on Smart Cities, Wells Fargo/National Renewable Energy Laboratory Innovation Incubator, (\$6,500), 2017, (PI)
8. Microgrid-Integrated Solar Storage Technology, DOE SunShot, (\$4,000,000), 2017-2019, (Co-PI)
9. Research, Development, and Testing of a Master Controller with Applications to the Bronzeville Community Microgrid System, DOE EERE, (\$1,200,000), 2014-2018, (Co-PI)
10. Collaborative Research: Proactive Recovery of Electric Power Assets for Resiliency Enhancement (PREPARE), NSF IMME, (\$250,000), 2014-2017, (PI)
11. Electric Power Analytics Consortium, CenterPoint Energy, (\$100,000), 2012-2013, (Co-PI)

University of Denver funding

1. Engaging in CIGRE Study Committee C1, University of Denver, Internationalization Grant (INTZ), (\$2,000), 2018, (PI)
2. Photovoice for Smart Cities, University of Denver, Center for Community Engagement & Service Learning (CCESL), (\$4,514), 2017-2018, (PI)
3. Machine Learning Based Power Grid Outage Prediction in Response to Extreme Events, University of Denver, Professional Research Opportunities for Faculty (PROF), (\$20,000), 2017-2019, (PI)
4. Viability Assessment of Solar Deployment in DU Campus, University of Denver, Partnership in Scholarship, (\$900), 2013, (Advisor)

AWARDS AND
HONORS

Top Principal Investigator, 2019

Recognized in the 2019 DU Research and Scholarship Annual Report as the top PI based on research productivity and expenditure.

Faculty Career Champion, 2017, 2018, 2019

This event recognizes Faculty Career Champions from across campus who have been nominated by students as someone who has made a difference by going above and beyond in support of student internship, career, and continuing education goals.

Best Associate Editor Award, 2019

Journal of Modern Power Systems and Clean Energy.

University of Denver Distinguished Scholar Award, 2018

This award is to recognize unusually significant and meritorious achievement in professional scholarship, as evidenced by publications and their enhancing effect on classroom teaching.

Research, Scholarship, and Creative Work Faculty Recognition, 2016, 2017

Sponsored by the Office of the Provost, this event recognizes the most outstanding researchers, scholars, and creative artists on the University of Denver's faculty.

DU News Spotlight, 2017

Featured in University of Denver Newsroom

Article: DU on the Forefront of Smart City Research, January 2017

<http://news.du.edu/du-on-the-forefront-of-smart-city-research/>

Scholar of the Year Award, 2016

Ritchie School of Engineering and Computer Science, University of Denver

Newsletter Spotlight, 2016

Featured in University of Denver Research and Scholarship Matters, Winter 2016, University of Denver

Article: Team Science with the Department of Energy

Newsletter Spotlight, 2014

Featured in Ritchie School of Engineering and Computer Science 2014 Newsletter, University of Denver

Article: Spotlight on Research

Newsletter Spotlight, 2013

Featured in Cullen College of Engineering Parameters Magazine, University of Houston

Article: The Brains Behind the Smart Grid

Highest Standard of Academic Achievement, 2010

Graduate Studies, Illinois Institute of Technology

Best Paper Award, 2007

Conference on Restructured Power Systems, Tehran, Iran

Highest Standard of Academic Achievement, 2005

Undergraduate studies, University of Tehran, Iran

a. Refereed publications

The list includes 177 publications (70 journal papers, 95 conference papers, 8 abstracts, and 4 editorial/op-eds). Citations are 5870 and H-index is 35 as of July 2020 (data from Google Scholar).

[†] Students directly supervised by Dr. Khodaei

[‡] Students indirectly supervised by Dr. Khodaei

Journals and transactions

1. Z. S. Hosseini[†], **A. Khodaei**, A. Paaso, "AMI-Enabled Phase Identification through a Modified Clustering Algorithm," *IEEE Transactions on Power Systems*, In press, 2020.
2. R. Eskandarpour, P. Gokhale, **A. Khodaei**, F. Chong, A. Paaso, and S. Bahramirad, "Quantum Computing for Enhancing Grid Security," *IEEE Transactions on Power Systems*, In press, 2020.
3. A. Alanazi, H. Lotfi, and **A. Khodaei**, "Market Clearing in Microgrid-Integrated Active Distribution Networks," *Electric Power Systems Research*, vol. 183, June 2020.
4. M. Alanazi, M. Mahoor[†], and **A. Khodaei**, "Co-Optimization Generation and Transmission Planning for Maximizing Large-Scale Solar PV Integration," *International Journal of Electrical Power and Energy Systems, Special Issue on Recent Advancements in Electric Power System Development Planning with High-Penetration of Renewable Energy Resources and Dynamic Loads*, vol. 118, June 2020.
5. A. Paaso, L. Zhang, D. Kushner, and **A. Khodaei**, "ComEd Grid Labs; Why the Power Sector Needs Advanced Labs," *IEEE Power and Energy Magazine*, vol. 18, no. 2, Mar. 2020.
6. M. Mahoor[†], Z. S. Hosseini[†], **A. Khodaei**, E. Paaso, D. Kushner, "State-Of-The-Art in Smart Streetlight Systems: A Review," *IET Smart Cities*, vol. 2, no. 1, pp. 24-33, 2020.
7. **A. Khodaei**, N. M. Abdullahm, M. Maigha, A. Paaso, S. Bahramirad, E. Ntakou, and R. Masiello, "Sensitivity-based locational marginal value calculations in distribution grids," *The Electricity Journal*, vol. 32, pp. 37-44, 2019.
8. M. Mahoor[†], Z. S. Hosseini[†], and **A. Khodaei**, "Least-Cost Operation of a Battery Swapping Station with Random Customer Requests," *Energy, Energy*, vol. 172, pp. 913-921, Apr. 2019.
9. Z. Li, R. Al Hassan, M. Shahidehpour, S. Bahramirad and **A. Khodaei**, "A Hierarchical Framework for Intelligent Traffic Management in Smart Cities," *IEEE Transactions on Smart Grid*, vol. 10, no. 1, Jan. 2019.
10. A. Majzooobi[†], M. Mahoor[†], and **A. Khodaei**, "Distribution Asset Management through Coordinated Microgrid Scheduling," *IET Smart Grid*, vol. 1, no. 4, Dec. 2018.

11. H. K. Nguyen[†], **A. Khodaei**, and Z. Han, "Incentive Mechanism Design for Integrated Microgrids in Peak Ramp Minimization Problem," *IEEE Transactions on Smart Grid*, vol. 9, no. 6, Nov. 2018.
12. A. Albaker[†], G. Zhao, A. Majzoobi[†], J. Zhang, and **A. Khodaei**, "Privacy-Preserving Optimal Scheduling of Integrated Microgrids," *Electric Power System Research*, vol. 163, part A, pp. 164-173, Oct. 2018.
13. Z. Hosseini[†], M. Mahoor[†], **A. Khodaei**, "AMI-Enabled Distribution Network Line Outage Identification via Multi-Label SVM," *IEEE Power Engineering Letters*, vol. 9, no. 5, pp. 5470-5472, Sep. 2018.
14. A. Kavousi-Fard, A. Zare, and **A. Khodaei**, "Effective Dynamic Scheduling of Reconfigurable Microgrids," *IEEE Transactions on Power Systems*, vol. 33, no. 5, pp. 5519-5530, Sep. 2018.
15. I. Alsaïdan[†], W. Gao, and **A. Khodaei**, "A Comprehensive Battery Energy Storage Optimal Sizing Model for Microgrid Applications," *IEEE Transactions on Power Systems*, vol. 33, no. 4, pp. 3968-3980, July 2018.
16. E. Mahboubi-Moghaddam, M. Nayeripour, J. Aghaei, and **A. Khodaei**, "Interactive Robust Model for Energy Service Providers Integrating Demand Response Programs in Wholesale Markets," *IEEE Transactions on Smart Grid*, vol. 9, no. 4, pp. 2681-2690, July 2018.
17. G. J. Lim, S. Kim, J. Cho, Y. Gong, and **A. Khodaei**, "Multi-UAV Prepositioning and Routing for Power Network Damage Assessment," *IEEE Transactions on Smart Grid*, vol. 9, no. 4, pp. 3643-3651, July 2018.
18. M. Alturki[†], **A. Khodaei**, E. A. Paaso, S. Bahramirad, "Optimization-based Distribution Grid Hosting Capacity Calculations," *Applied Energy*, vol. 219, pp. 350-360, June 2018.
19. A. Paaso, D. Kushner, S. Bahramirad, and **A. Khodaei**, "Grid Modernization Is Paving the Way for Building Smarter Cities," *IEEE Electrification Mag.*, vol. 6, no. 2, pp. 6-15, June 2018.
20. J. R. Agero and **A. Khodaei**, "Grid Modernization, DER Integration and Utility Business Models Trends and Challenges," *IEEE Power and Energy Magazine*, March-April 2018.
21. S. Parhizi[†], and **A. Khodaei**, "Market-based vs. Price-based Microgrid Optimal Scheduling," *IEEE Transactions on Smart Grid*, vol. 9, no. 2, pp. 615-623, Mar. 2018.
22. S. Pirouzi, J. Aghaei, V. Vahidinasab, T. Niknam, and **A. Khodaei**, "Robust Linear Architecture for Active/Reactive Power Scheduling of EV integrated Smart Distribution Networks," *Electric Power Systems Research*, vol. 155, pp. 8-20, Feb. 2018.
23. R. Eskandarpour[†], and **A. Khodaei**, "Leveraging Accuracy-Uncertainty Tradeoff in SVM to Achieve Highly Accurate Outage Predictions," *IEEE Power Engineering Letters*, vol. 33, no. 1, pp. 1139-1141, Jan. 2018.
24. H. K. Nguyen[†], **A. Khodaei**, and Zhu Han, "A Big Data Scale Algorithm for Optimal Scheduling of Integrated Microgrids," *IEEE Transactions on Smart Grid*, vol. 9, no. 1, pp. 274-282, Jan. 2018.

25. A. Alqurashi, A.H. Etemadi, and **A. Khodaei**, “Model Predictive Control to Two-Stage Stochastic Dynamic Economic Dispatch Problem,” *Control Engineering Practice*, vol. 69, pp. 112121, Dec. 2017.
26. M. N. Faqiry, L. Edmonds, H. Zhang, **A. Khodaei**, and H. Wu, “Transactive-Market-based Operation of Distributed Electrical Energy Storage with Grid Constraints,” *MDPI, Special Issue on Energy Storage Applications in Smart Grids*, vol. 10, no. 11, Nov. 2017.
27. I. Alsaidan[†], A. Alanazi[†], W. Gao, H. Wu, and **A. Khodaei**, “State-of-the-Art in Microgrid-Integrated Distributed Energy Storage Sizing,” *MDPI, Special Issue on Energy Storage Applications in Smart Grids*, vol. 10, no. 9, Sep. 2017.
28. Z. Li, M. Shahidehpour, S. Bahramirad, and **A. Khodaei**, “Optimizing Traffic Signal Settings in Smart Cities,” *IEEE Transactions on Smart Grid*, vol. 8, no. 5, pp. 2382-2393, Sep. 2017.
29. H. K. Nguyen[‡], H. Mohsenian-Rad, **A. Khodaei**, and Zhu Han, “Decentralized Reactive Power Compensation using Nash Bargaining Solution,” *IEEE Transactions on Smart Grid*, vol. 8, no. 4, pp. 1679–1688, Jul. 2017.
30. N. Nikmehr, S. Najafi-Ravadanegh, **A. Khodaei**, “Probabilistic Optimal Scheduling of Networked Microgrids Considering Time-Based Demand Response Programs under Uncertainty”, *Applied Energy*, vol. 198, pp. 267–279, Jul. 2017.
31. **A. Khodaei**, S. Bahramirad, E. A. Paaso, M. Avendano, “Microgrid Economic Viability Assessment An Introduction to MG-REVALUE,” *Electricity Journal*, vol. 30, no. 4, pp. 7-11, May 2017.
32. **A. Khodaei**, “Provisional Microgrid Planning,” *IEEE Transactions on Smart Grid*, vol. 8, no. 3, pp. 1096-1104, May 2017.
33. A. Majzoobi[†], and **A. Khodaei**, “Application of Microgrids in Providing Ancillary Services to the Utility Grid,” *Energy*, vol. 123, pp. 555-563, Mar. 2017.
34. H. Lotfi[†], **A. Khodaei**, “Hybrid AC/DC Microgrid Planning,” *Energy*, vol. 118, pp. 37-46, Jan. 2017.
35. H. Lotfi[†] and **A. Khodaei**, “AC vs. DC Microgrid Planning,” *IEEE Transactions on Smart Grid*, vol. 8, no. 1, pp. 296–304, Jan. 2017.
36. A. Alqurashi, A. Etemadi, and **A. Khodaei**, “Treatment of Uncertainty for Next Generation Power Systems: State-of-the-Art in Stochastic Optimization,” *Electric Power Systems Research*, vol. 141, pp. 233-245, Dec. 2016.
37. A. Majzoobi[†], **A. Khodaei**, “Application of Microgrids in Supporting Distribution Grid Flexibility,” *IEEE Transactions on Power Systems*, vol. 32, no. 5, pp. 3660–3669, Dec. 2016.
38. A. Kavousi-Fard[†], **A. Khodaei**, S. Bahramirad, “Improved Efficiency, Enhanced Reliability, and Reduced Cost: Transition from Static Microgrids to Reconfigurable Microgrids,” *Electricity Journal*, vol. 29, no. 10, pp. 22-27, Dec. 2016.
39. R. Eskandarpour[†], **A. Khodaei**, “Machine Learning based Power Grid Outage Prediction in Response to Extreme Events,” *IEEE Power Engineering Letters*, vol. 32, no. 4, pp. 3315–3316, Nov. 2016.

40. J. R. Agüero, **A. Khodaei**, and R. Masiello, "The Utility and Grid of the Future: Challenges, Needs, and Trends," *IEEE Power and Energy Magazine*, vol. 14, no. 5, pp. 29-37, Sep.-Oct. 2016.
41. A. Arab[†], E. Tekin, **A. Khodaei**, S. K. Khator, and Z. Han, "System Hardening and Condition-based Maintenance for Electric Power Infrastructure under Hurricane Effects," *IEEE Transactions on Reliability*, vol. 65, no. 3, pp. 1457-1470, Sep. 2016.
42. A. Kavousi-Fard[†], and **A. Khodaei**, "Efficient integration of plug-in electric vehicles via reconfigurable microgrids," *Energy*, vol. 111, pp. 653-663, Sep. 2016.
43. D. Apostolopoulou, S. Bahramirad, and **A. Khodaei**, "The Interface of Power: Moving Toward Distribution System Operators," *IEEE Power and Energy Magazine*, vol. 14, no. 3, pp. 46-51, May-June 2016.
44. S. Bahramirad, **A. Khodaei**, and R. Masiello "Distribution Markets," *IEEE Power and Energy Magazine*, pp. 102-106, Mar., 2016.
45. A. Kavousi-Fard[†], and **A. Khodaei**, "Multi-Objective Optimal Operation of Smart Reconfigurable Distribution Grids," *AIMS Energy*, vol. 4, no. 2, pp. 206-221, Feb. 2016.
46. A. Arab[†], **A. Khodaei**, S. K. Khator, and Z. Han, "Electric Power Grid Restoration Considering Disaster Economics," *IEEE Access*, vol. 4, pp. 639-649, Feb. 2016.
47. J. R. Agüero, and **A. Khodaei**, "Roadmaps for the Utility of the Future," *Electricity Journal, Special Issue on Energy Industry of the Future; Applications to Illinois*, vol. 28, no. 10, Dec. 2015.
48. **A. Khodaei**, S. Bahramirad, and M. Shahidehpour, "Microgrid Planning Under Uncertainty," *IEEE Transactions on Power Systems*, vol. 30, no. 5, pp. 2417-2425, Sep. 2015.
49. S. Parhizi[†], H. Lotfi[†], **A. Khodaei**, and S. Bahramirad, "State of the Art in Research on Microgrids: A Review," *IEEE Access*, vol. 3, pp. 890-925, July 2015.
50. **A. Khodaei**, "Provisional Microgrids," *IEEE Transactions on Smart Grid*, vol. 6, no. 3, pp. 1107-1115, May 2015.
51. A. Arab[†], **A. Khodaei**, S. K. Khator, and Z. Han, "Proactive Recovery of Electric Power Assets for Resiliency Enhancement," *IEEE Access*, vol. 3, pp. 99-109, March 2015.
52. S. Bahramirad, **A. Khodaei**, J. Svachula, J. R. Agüero, "Building Resilient Integrated Grids: One neighborhood at a time," *IEEE Electrification Magazine*, vol. 3, no. 1, pp. 48-55, 2015.
53. A. Arab[†], **A. Khodaei**, S. K. Khator, K. Ding, V. A. Emesih, and Z. Han, "Stochastic Pre-Hurricane Restoration Planning for Electric Power Systems Infrastructure," *IEEE Transactions on Smart Grid, Special Issue on Asset Management in Smart Grids*, vol. 6, no. 2, pp. 1046-1054, March 2015.
54. **A. Khodaei**, "Resiliency-Oriented Microgrid Optimal Scheduling," *IEEE Transactions on Power Systems*, vol. 5, no. 4, pp. 1584-1591, July 2014.

55. **A. Khodaei**, "Microgrid Optimal Scheduling with Multi-Period Islanding Constraints," *IEEE Transactions on Power Systems*, vol. 29, no. 3, pp. 1383-1392, May 2014.
56. **A. Khodaei**, M. Shahidehpour, and J. Choi, "Optimal Hourly Scheduling of Community-Aggregated Electricity Consumption," *Journal of Electrical Engineering and Technology*, vol. 8, no. 6, pp. 1251-1260, Nov. 2013.
57. **A. Khodaei** and M. Shahidehpour, "Microgrid-based Co-Optimization of Generation and Transmission Expansion Planning," *IEEE Transactions on Power Systems*, vol. 28, no. 2, pp. 1582-1590, May 2013.
58. S. Bahramirad, W. Reder and **A. Khodaei**, "Reliability-Constrained Optimal Sizing of Energy Storage System in a Microgrid," *IEEE Transactions on Smart Grid, Special Issue on Microgrids*, vol. 3, no. 4, pp. 2056-2062, Dec. 2012.
59. **A. Khodaei**, M. Shahidehpour, L. Wu and Z. Li, "Coordination of Short-Term Operation Constraints in Multi-Area Expansion Planning," *IEEE Transactions on Power Systems*, vol. 27, no. 4, pp. 2242-2250, Nov. 2012.
60. **A. Khodaei** and M. Shahidehpour, "Security-Constrained Transmission Switching with Voltage Constraints," *International Journal of Electric Power and Energy Systems*, vol. 35, no. 1, pp. 74-82, Feb. 2012.
61. **A. Khodaei**, M. Shahidehpour and S. Bahramirad, "SCUC with Hourly Demand Response Considering Inter-temporal Load Characteristics," *IEEE Transactions on Smart Grid*, vol. 2, no. 3, pp. 564-571, Sep. 2011.
62. F. Aminifar, M. Fotuhi-Firuzabad, M. Shahidehpour and **A. Khodaei**, "Probabilistic Multistage PMU Placement in Electric Power Systems," *IEEE Transactions on Power Delivery*, vol. 26, no. 2, pp. 841-849, Apr. 2011.
63. F. Aminifar, M. Fotuhi-Firuzabad, M. Shahidehpour and **A. Khodaei**, "Observability Enhancement by Optimal PMU Placement Considering Random Power System Outages," *Journal of Energy Systems*, vol. 2, pp. 45-65, 2011.
64. S. Kamalinia, M. Shahidehpour and **A. Khodaei**, "Security-Constrained Expansion Planning of Fast-Response Units for Wind Integration," *Electric Power System Research*, vol. 81, no. 1, pp. 107-116, Jan. 2011.
65. **A. Khodaei** and M. Shahidehpour, "Transmission Switching in Security-Constrained Unit Commitment," *IEEE Transactions on Power Systems*, vol. 25, no. 4, pp. 1937-1945, Nov. 2010.
66. **A. Khodaei**, M. Shahidehpour and S. Kamalinia, "Transmission Switching in Expansion Planning," *IEEE Transactions on Power Systems*, vol. 25, no. 3, pp. 1722-1733, Aug. 2010.
67. F. Aminifar, **A. Khodaei**, M. Fotuhi-Firuzabad, and M. Shahidehpour, "Contingency-Constrained PMU Placement in Power Networks," *IEEE Transactions on Power Systems*, vol. 25, no. 1, pp. 516-523, Feb. 2010.
68. F. Aminifar, C. Lucas, **A. Khodaei**, and M. Fotuhi-Firuzabad, "Optimal Placement of Phasor Measurement Units Using Immunity Genetic Algorithm," *IEEE Transactions on Power Delivery*, vol. 24, no. 3, pp. 1014-1020, Jul. 2009.

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70. S. H. Hosseini, **A. Khodaei**, and F. Aminifar, “A Novel Straightforward Unit Commitment Method for Large-Scale Power Systems,” *IEEE Transactions on Power Systems*, vol. 22, no. 4, pp. 2134-2143, Nov. 2007.

Conferences

71. **A. Khodaei**, Nayeem M.A., E. A. Paaso, S. Bahramirad, “Performance Analysis of Unbalanced Three-Phase Linear Distribution Power Flow Model,” *IEEE PES T&D Conference and Expo*, Chicago, Apr. 2020.
72. Z. S. Hosseini[†], **A. Khodaei**, S. Bahramirad, L. Zhang, E. A. Paaso, M. Lelic, and D. Flinn, “Levelized Cost of Energy Calculations for Microgrid-Integrated Solar-Storage Technology,” *IEEE PES T&D Conference and Expo*, Chicago, Apr. 2020.
73. R. Eskandarpour, **A. Khodaei**, L. Zhang, E. A. Paaso, S. Bahramirad, “Quantum Computing Applications in Power Systems,” *CIGRE Grid of the Future Symposium*, Atlanta, GA, Nov. 2019.
74. M. Bazrafshian, A. Majzoobi, **A. Khodaei**, N. Gurung, H. Chen, L. Zhang, M. Lelic, A. V. Guerra, “Simulated Islanding Test for a Practical Utility-Scale Microgrid,” *CIGRE Grid of the Future Symposium*, Atlanta, GA, Nov. 2019.
75. A. Majzoobi, M. Bazrafshian, **A. Khodaei**, N. Gurung, H. Chen, M. Lelic, A. V. Guerra, “Site Acceptance Test for Solar PV System of Bronzeville Community Microgrid,” *CIGRE Grid of the Future Symposium*, Atlanta, GA, Nov. 2019.
76. M. Bazrafshian, A. Majzoobi, **A. Khodaei**, N. Gurung, H. Chen, L. Zhang, M. Lelic, A. V. Guerra, “Successful Site Acceptance Tests for Microgrid-Integrated Battery Energy Storage,” *CIGRE Grid of the Future Symposium*, Atlanta, GA, Nov. 2019.
77. S. Hasan[†], A. Majzoobi, **A. Khodaei**, H. Chen, L. Zhang, “An Optimization-based Method in Determining the Capability Curve of a Microgrid,” *CIGRE Grid of the Future Symposium*, Atlanta, GA, Nov. 2019.
78. S. Hasan[†], A. Majzoobi, **A. Khodaei**, N. M. Abdullah, L. Zhang, “Optimum Reactive Power Calculation for Reducing Power System Operation Cost,” *CIGRE Grid of the Future Symposium*, Atlanta, GA, Nov. 2019.
79. M. Bazrafshian, H. Zhu, **A. Khodaei**, and N. Gatsis, “Online Demand-Response of Voltage-Dependent Loads for Corrective Grid De-Congestion,” *IEEE SmartGridComm*, Beijing, China, Oct. 2019.
80. A. Majzoobi, M. Mahoor, and **A. Khodaei**, “Microgrid Value of Ramping,” *IEEE SmartGridComm*, Beijing, China, Oct. 2019.
81. S. Parhizi, and **A. Khodaei**, “Active/Reactive Locational Pricing in Distribution Networks,” *North American Power Symposium*, Wichita, KS, Oct. 2019.
82. R. Eskandarpour[†], **A. Khodaei**, E. A. Paaso, and M. Abdullah, “Artificial Intelligence Assisted Power Grid Hardening in Response to Extreme Weather Events,” *CIGRE Grid of the Future Symposium*, Reston, VA, Oct. 2018.

83. A. Alanazi[†], and **A. Khodaei**, “Impact of Grid Reconfiguration in Distribution Market Clearing and Settlement,” *CIGRE Grid of the Future Symposium*, Reston, VA, Oct. 2018.
84. A. Albaker[†], **A. Khodaei**, A. R. Malekpour, and E. A. Paaso, “Spinning Reserve Based Topology Control in Holonic Distribution Grids,” *CIGRE Grid of the Future Symposium*, Reston, VA, Oct. 2018.
85. M. Alturki[†], **A. Khodaei**, and E. A. Paaso, “A Fast Hosting Capacity Calculation Method for Large Distribution Grids,” *CIGRE Grid of the Future Symposium*, Reston, VA, Oct. 2018.
86. Z. S. Hosseini[†], **A. Khodaei**, E. A. Paaso, M. S. Hossan, and D. Lelic, “Dynamic Solar Hosting Capacity Calculations in Microgrids,” *CIGRE Grid of the Future Symposium*, Reston, VA, Oct. 2018.
87. A. Abiri-Jahromi, A. Majzoubi[†], **A. Khodaei**, L. Zhang, E. A. Paaso, S. Bahramirad, M. Lelic, and D. Flinn, “Battery Energy Storage Requirements for Mitigating PV Output Fluctuations,” *IEEE PES Innovative Smart Grid Technologies Conference Europe*, Sarajevo, Bosnia and Herzegovina, Oct. 2018.
88. A. Albaker[†] and **A. Khodaei**, “Optimal Scheduling of Integrated Microgrids in Holonic Distribution Grids,” *North American Power Symposium*, Fargo, ND, Sep. 2018.
89. M. Alturki[†] and **A. Khodaei**, “Increasing Distribution Grid Hosting Capacity through Optimal Network Reconfiguration,” *North American Power Symposium*, Fargo, ND, Sep. 2018.
90. A. Alanazi[†], H. Lotfi[†] and **A. Khodaei**, “Optimal Energy Storage Sizing and Siting in Hybrid AC/DC Microgrids,” *North American Power Symposium*, Fargo, ND, Sep. 2018.
91. Z. S. Hosseini[†], M. Mahoor[†] and **A. Khodaei**, “Battery Swapping Station as an Energy Storage for Capturing Distribution-Integrated Solar Variability”, *North American Power Symposium*, Fargo, ND, Sep. 2018 [**Best paper award**].
92. I. Alsaidan[†], W. Gao, and **A. Khodaei**, “Distribution Network Expansion through Optimally Sized and Placed Distributed Energy Storage,” *IEEE PES Transmission and Distribution Conference and Exposition*, Denver, CO, Apr. 2018.
93. M. Alanazi[†], M. Mahoor[†], and **A. Khodaei**, “Day-Ahead Solar Forecasting Based on Multi-level Solar Measurements,” *IEEE PES Transmission and Distribution Conference and Exposition*, Denver, CO, Apr. 2018.
94. A. Albaker[†], and **A. Khodaei**, “Communicative Scheduling of Integrated Microgrids,” *IEEE PES Transmission and Distribution Conference and Exposition*, Denver, CO, Apr. 2018.
95. M. Mahoor[†], and **A. Khodaei**, “Data Fusion and Machine Learning Integration for Transformer Loss of Life Estimation,” *IEEE PES Transmission and Distribution Conference and Exposition*, Denver, CO, Apr. 2018.
96. M. Alturki[†], and **A. Khodaei**, “Marginal Hosting Capacity Calculation for Electric Vehicle Integration in Active Distribution Networks,” *IEEE PES Transmission and Distribution Conference and Exposition*, Denver, CO, Apr. 2018.

97. A. Majzoobi[†], M. Mahoor[†], and **A. Khodaei**, “Distribution Market as a Ramping Aggregator for Grid Flexibility Support,” *IEEE PES Transmission and Distribution Conference and Exposition*, Denver, CO, Apr. 2018.
98. A. Alanazi[†], **A. Khodaei**, M. Chamana, and D. Kushner, “Wind Generation Curtailment Reduction based on Uncertain Forecasts,” *CIGRE Grid of the Future Symposium*, Cleveland, OH, Oct. 2017.
99. I. Alsaidan[†], W. Gao, **A. Khodaei**, E. A. Paaso, and S. Bahramirad, “Coordinated Battery Energy Storage Sizing for Photovoltaic Ramp Rate Control,” *CIGRE Grid of the Future Symposium*, Cleveland, OH, Oct. 2017.
100. A. Albaker[†], **A. Khodaei**, and L. Zhang, “Design and Operation of Provisional Microgrids,” *CIGRE Grid of the Future Symposium*, Cleveland, OH, Oct. 2017.
101. M. Mahoor[†], Z. S. Hosseini[†], **A. Khodaei**, and D. Kushner, “Electric Vehicle Battery Swapping Station,” *CIGRE Grid of the Future Symposium*, Cleveland, OH, Oct. 2017.
102. M. Alturki[†], **A. Khodaei**, E. A. Paaso, and S. Bahramirad, “Hosting Capacity Optimization Using Linearized AC Power Flow Analysis,” *CIGRE Grid of the Future Symposium*, Cleveland, OH, Oct. 2017.
103. M. Alanazi[†], **A. Khodaei**, E. A. Paaso, and S. Bahramirad, “Investigating the Voltage Fluctuation Caused by Solar PV Generation Variability in Distribution Grids,” *CIGRE Grid of the Future Symposium*, Cleveland, OH, Oct. 2017.
104. R. Eskandarpour[†], **A. Khodaei**, and A. Arab, “Load Curtailment Estimation in Response to Extreme Events,” *CIGRE Grid of the Future Symposium*, Cleveland, OH, Oct. 2017.
105. A. Majzoobi[†], M. Mahoor[†] and **A. Khodaei**, “Microgrid Value of Ramping,” *IEEE International Conference on Smart Grid Communications*, Dresden, Germany, Oct. 2017.
106. H. Lotfi[†] and **A. Khodaei**, “Co-Optimization Generation and Distribution Planning in Microgrids,” *IEEE International Conference on Smart Grid Communications*, Dresden, Germany, Oct. 2017.
107. M. Mahoor[†], A. Majzoobi[†], Z. Hosseini[†] and **A. Khodaei**, “Leveraging Sensory Data in Estimating Transformer Lifetime,” *North American Power Symposium*, Morgantown, WV, Sep. 2017.
108. M. Alanazi[†], M. Mahoor[†] and **A. Khodaei**, “Two-Stage Hybrid Day-Ahead Solar Forecasting,” *North American Power Symposium*, Morgantown, WV, Sep. 2017.
109. A. Albaker[†] and **A. Khodaei**, “Valuation of Microgrid Unused Capacity in Islanded Operation,” *North American Power Symposium*, Morgantown, WV, Sep. 2017.
110. I. Alsaidan[†], W. Gao and **A. Khodaei**, “Optimal Design of Battery Energy Storage in Stand-alone Brownfield Microgrids,” *North American Power Symposium*, Morgantown, WV, Sep. 2017.
111. R. Eskandarpour[†], **A. Khodaei** and A. Arab, “Improving Power Grid Resilience Through Predictive Outage Estimation,” *North American Power Symposium*, Morgantown, WV, Sep. 2017.

112. A. Alanazi[†], H. Lotfi[†] and **A. Khodaei**, “Coordinated AC/DC Microgrid Optimal Scheduling,” *North American Power Symposium*, Morgantown, WV, Sep. 2017.
113. M. Alturki[†] and **A. Khodaei**, “Optimal Loading Capacity in Distribution Grids,” *North American Power Symposium*, Morgantown, WV, Sep. 2017.
114. A. Alanazi[†], and **A. Khodaei**, “Optimal Battery Energy Storage Sizing for Reducing Wind Generation Curtailment,” *IEEE PES General Meeting*, Chicago, IL, Jul. 2017.
115. A. Albaker[†], and **A. Khodaei**, “Elevating Prosumers to Provisional Microgrids,” *IEEE PES General Meeting*, Chicago, IL, Jul. 2017.
116. I. Alsaidan[†], W. Gao, and **A. Khodaei**, “Battery Energy Storage Sizing for Commercial Customers,” *IEEE PES General Meeting*, Chicago, IL, Jul. 2017.
117. A. Majzoobi[†], and **A. Khodaei**, “Capturing Distribution Grid-Integrated Solar Variability and Uncertainty Using Microgrids,” *IEEE PES General Meeting*, Chicago, IL, Jul. 2017.
118. R. Eskandarpour[†], and **A. Khodaei**, “Component Outage Estimation based on Support Vector Machine,” *IEEE PES General Meeting*, Chicago, IL, Jul. 2017.
119. S. Parhizi[†], A. Majzoobi[†], and **A. Khodaei**, “Net-Zero Settlement in Distribution Markets,” *IEEE PES General Meeting*, Chicago, IL, Jul. 2017.
120. A. Majzoobi[†], M. Mahoor[†], and **A. Khodaei**, “Machine Learning Applications in Estimating Transformer Loss of Life,” *IEEE PES General Meeting*, Chicago, IL, Jul. 2017.
121. H. Lotfi[†], **A. Khodaei**, S. Bahramirad, M. Bollen, “Optimal Design of Hybrid AC/DC Microgrids,” *CIGRE Grid of the Future Symposium*, Philadelphia, PA, October 2016.
122. R. Eskandarpour[†], **A. Khodaei**, S. Bahramirad, M. Bollen, “Predicting Power Grid Component Outage In Response to Extreme Events,” *CIGRE Grid of the Future Symposium*, Philadelphia, PA, October 2016.
123. A. Majzoobi[†], **A. Khodaei**, S. Bahramirad, M. Bollen, “Capturing the Variabilities of Distribution Network Net-Load via Available Flexibility of Microgrids,” *CIGRE Grid of the Future Symposium*, Philadelphia, PA, October 2016.
124. H. Lotfi[†], A. Majzoobi[†], **A. Khodaei**, S. Bahramirad, A. Paaso, “Levelized Cost of Energy Calculation for Energy Storage Systems,” *CIGRE Grid of the Future Symposium*, Philadelphia, PA, October 2016.
125. M. Alanazi[†], **A. Khodaei**, S. Bahramirad, A. Paaso, “Investigating the Impact of Time Series Stationarization on Day-Ahead Solar Forecasting,” *CIGRE Grid of the Future Symposium*, Philadelphia, PA, October 2016.
126. H. Nguyen[‡], **A. Khodaei**, and Z. Han, “Distributed Algorithms for Peak Ramp Minimization Problem in Smart Grid” *IEEE SmartGridComm*, Sydney, Australia, Nov. 2016.
127. R. Eskandarpour[†], **A. Khodaei**, J. Lin, “Event-Driven Security-Constrained Unit Commitment with Component Outage Estimation Based on Machine Learning Method,” *North American Power Symposium*, Denver, CO, September 2016.

128. A. Majzoobi[†], and **A. Khodaei**, “Leveraging Microgrids for Capturing Uncertain Distribution Network Net Load Ramping,” *North American Power Symposium*, Denver, CO, September 2016.
129. M. Alanazi[†], and **A. Khodaei**, “Day-Ahead Solar Forecasting Using Time Series Stationarization and Feed-Forward Neural Network,” *North American Power Symposium*, Denver, CO, September 2016.
130. I. Alsaidan[†], **A. Khodaei**, and W. Gao, “Determination of Optimal Size and Depth of Discharge for Battery Energy Storage in Standalone Microgrids,” *North American Power Symposium*, Denver, CO, September 2016.
131. A. Alanazi[†], H. Babazadeh, and **A. Khodaei**, “Power Fluctuation Reduction in Wind Turbine Generator Systems,” *North American Power Symposium*, Denver, CO, September 2016.
132. R. Eskandarpour[†], H. Lotfi[†], and **A. Khodaei**, “Optimal Microgrid Placement for Enhancing Power System Resilience in Response to Weather Events,” *North American Power Symposium*, Denver, CO, September 2016.
133. D. Alder[†], **A. Khodaei**, and W. Gao, “Standard Measurement of Carbon Footprints,” *North American Power Symposium*, Denver, CO, September 2016.
134. D. Alder[†], W. Gao, and **A. Khodaei**, “Energy Return on Investment,” *North American Power Symposium*, Denver, CO, September 2016.
135. R. Eskandarpour[†], G. Edwards, and **A. Khodaei**, “Resilience-Constrained Unit Commitment Considering the Impact of Microgrids,” *North American Power Symposium*, Denver, CO, September 2016.
136. R. Eskandarpour[†], J. Lin, and **A. Khodaei**, “Event-Driven Security-Constrained Unit Commitment,” *IEEE PES Innovative Smart Grid Technologies Conference*, Minneapolis, MN, Sep. 2016.
137. H. Lotfi[†] and **A. Khodaei**, “Static Hybrid AC/DC Microgrid Planning,” *IEEE PES Innovative Smart Grid Technologies Conference*, Minneapolis, MN, Sep. 2016.
138. A. Majzoobi[†] and **A. Khodaei**, “Application of Microgrids in Addressing Distribution Network Net-Load Ramping,” *IEEE PES Innovative Smart Grid Technologies Conference*, Minneapolis, MN, Sep. 2016.
139. S. Parhizi[†] and **A. Khodaei**, “Interdependency of Transmission and Distribution Pricing,” *IEEE PES Innovative Smart Grid Technologies Conference*, Minneapolis, MN, Sep. 2016.
140. H. Lotfi[†] and **A. Khodaei**, “Levelized Cost of Energy Calculations for Microgrids,” *IEEE PES General Meeting*, Boston, MA, Jul. 2016.
141. I. Alsaisan[†], W. Gao and **A. Khodaei**, “Determination of Battery Energy Storage Technology and Size for Standalone Microgrids,” *IEEE PES General Meeting*, Boston, MA, Jul. 2016.
142. S. Parhizi[†], **A. Khodaei**, and S. Bahramirad “Distribution Market Clearing and Settlement,” *IEEE PES General Meeting*, Boston, MA, Jul. 2016.
143. I. Alsaidan[†], **A. Khodaei**, and W. Gao, “Distributed Energy Storage Sizing for Microgrid Applications,” *IEEE PES Transmission and Distribution Conference*, Dallas, TX, May 2016.

144. S. Parhizi[†] and **A. Khodaei**, “Investigating the Necessity of Distribution Markets in Accommodating High Penetration Microgrids,” *IEEE PES Transmission and Distribution Conference*, Dallas, TX, May 2016.
145. M. Alanazi[†], A. Alanazi[†], and **A. Khodaei**, “Long-Term Solar Generation Forecasting,” *IEEE PES Transmission and Distribution Conference*, Dallas, TX, May 2016.
146. H. Lotfi[†] and **A. Khodaei**, “An Efficient Preprocessing Approach for Uncertainty Consideration in Microgrids,” *IEEE PES Transmission and Distribution Conference*, Dallas, TX, May 2016.
147. A. Alanazi[†], M. Alanazi[†], and **A. Khodaei**, “Managing the Microgrid Net Load Variability,” *IEEE PES Transmission and Distribution Conference*, Dallas, TX, May 2016.
148. A. Arab[‡], **A. Khodaei**, S. K. Khator, and Z. Han, “Transmission Network Restoration Considering AC Power Flow Constraints,” *IEEE SmartGridComm*, Miami, FL, Nov. 2015.
149. S. Parhizi[†] and **A. Khodaei**, “Market-based Microgrid Optimal Scheduling,” *IEEE SmartGridComm*, Miami, FL, Nov. 2015.
150. M. Bollen, S. Bahramirad, **A. Khodaei**, J. Meyer, R. Langella, J. P. Hasler, F. Zavoda, J. Liu, X. Boyu, “Volt-Var Control and Power Quality,” *CIGRE/CIRED*, Lyon, France, Jun. 2015.
151. A. Arab[‡], E. Tekin, **A. Khodaei**, S. K. Khator, and Z. Han, “Dynamic Maintenance Scheduling for Power Systems Incorporating Hurricane Effects,” *IEEE SmartGridComm*, Venice, Italy, Nov. 2014.
152. S. Bahramirad, M. Bollen, **A. Khodaei**, G. Clark, J. Svachula, G. Simard, “Smart Distribution Application Guide IEEE Project P1854,” *CIGRE*, Paris, France, Aug., 2014.
153. M. Bollen, S. Bahramirad, and **A. Khodaei**, “Is there a Place for Power Quality in the Smart Grid,” *International Conference on Harmonics and Quality of Power*, Bucharest, Romania, May 2014.
154. S. Bahramirad, M. Bollen, and **A. Khodaei**, “Smart Distribution Applications Some Contributions to P1854,” *International Conference on Renewable Energies and Power Quality*, Cordoba, Spain, Apr. 2014.
155. A. Arab[‡], **A. Khodaei**, Z. Han, and S. Khator, “Optimal Restoration Planning for Smart Grid under Natural Disaster,” *UT Energy Forum Texas Energy Research Challenge*, Austin, Feb., 2014.
156. L. Liu[‡], **A. Khodaei**, W. Yin and Z. Han, “A Distribute Parallel Approach for Big Data Scale Optimal Power Flow with Security Constraints,” *IEEE SmartGridComm*, Vancouver, Canada, Oct. 2013.
157. A. Arab[‡], **A. Khodaei**, S. K. Khator, K. Ding and Z. Han, “Post-Hurricane Transmission Network Outage Management,” *IEEE Great Lakes Symposium on Smart Grid and the New Energy Economy*, Chicago, IL, Sep. 2013.
158. S. Bahramirad, **A. Khodaei** and J. McClanahan, “Application of Real-Time Monitoring in Efficient Operation of Distributed Static Compensators,” *IEEE PES General Meeting*, Vancouver, Canada, Jul. 2013.

159. **A. Khodaei** and M. Shahidehpour, "Optimal Operation of a Community-based Microgrid," *IEEE PES Innovative Smart Grid Technologies*, Australia, Nov. 2011.
160. F. Aminifar, M. Fotuhi-Firuzabad, **A. Khodaei**, and S. O. Faried, "Optimal Placement of Unified Power Flow Controllers (UPFCs) Using Mixed-Integer Non-Linear Programming (MINLP) Method," *IEEE PES General Meeting*, Calgary, Canada, Jul. 2009.
161. F. Aminifar, M. Fotuhi-Firuzabad, R. Nasiri and **A. Khodaei**, "Effect of Interline Power Flow Controller on Interconnected Power Systems Adequacy," *IEEE International Power and Energy Conference*, Johor, Malaysia, Dec. 2008.
162. **A. Khodaei**, F. Aminifar, and R. Nasiri, "FTR Bidding Strategy in a Joint Market for Obligations and Options," *North American Power Symposium*, Calgary, Canada, Sep. 2008.
163. **A. Khodaei**, F. Aminifar, A. M. Ranjbar, and M. Fotuhi-Firuzabad, "Marginal Pricing in the Electricity Markets," *Conference on Restructured Power Systems*, Tehran, Iran, Oct. 2007 [**Best paper award**].
164. M. Fotuhi-Firuzabad, F. Aminifar, and **A. Khodaei**, "Reliability Evaluation of Interconnected Power Systems Incorporating Interline Power Flow Controller (IPFC)," *International Joint Conference on Knowledge Management for Composite Materials*, Dusseldorf, Germany, Jul. 2007.
165. F. Aminifar and **A. Khodaei**, "A Novel Unit Commitment Approach Considering Transmission Constraints," *Iranian Conference of Electrical Engineering*, Tehran, Iran, May 2007.

Abstracts

166. M. Mahoor[†] and **A. Khodaei**, "Dynamic Management of Smart Outdoor Lighting for Providing Flexibility," *IEEE PES General Meeting*, Chicago, IL, Jul. 2017.
167. H. Lotfi[†] and **A. Khodaei**, "Optimal Hybrid Microgrid Planning: The Integration of AC/DC Distributed Generations and Loads," *IEEE PES General Meeting*, Chicago, IL, Jul. 2017.
168. A. Majzoobi[†], M. Mahoor[†] and **A. Khodaei**, "Dynamic Approach in Estimating Transformer Lifetime," *IEEE PES General Meeting*, Chicago, IL, Jul. 2017.
169. M. Alanazi[†], M. Mahoor[†] and **A. Khodaei**, "Multilevel Day-Ahead Solar Forecasting," *IEEE PES General Meeting*, Chicago, IL, Jul. 2017.
170. A. Majzoobi[†] and **A. Khodaei**, "Application of Microgrids in Addressing Distribution Network Load Ramping," *IEEE PES Transmission and Distribution Conference and Expo.*, Dallas, TX, May 2016.
171. R. Eskandarpour[†] and **A. Khodaei**, "Resilience-Constrained Unit Commitment with Prediction of Hurricanes using Kernel Density Estimation," *IEEE PES Transmission and Distribution Conference and Expo.*, Dallas, TX, May 2016.
172. G. Zhao[†] and **A. Khodaei**, "Optimal Scheduling of Integrated Microgrids with High Resolution Islanding," *IEEE PES Transmission and Distribution Conference and Expo.*, Dallas, TX, May 2016.

173. S. Parhizi[†] and **A. Khodaei**, “Market-based Microgrid Optimal Scheduling,” *IEEE PES General Meeting*, Denver, CO, Jul. 2015.

Editorials and Op-eds

174. R. Eskandarpour, L. Zhang, **A. Khodaei**, E. Paaso, “How Quantum AI Can Transform Grid Disaster Resilience and Preparedness,” *T&D World*, Jun. 2020.
175. R. Eskandarpour, E. Paaso, L. Zhang, **A. Khodaei**, S. Bahramirad, “Opening the Doors for Quantum Computing Applications in Electric Power Grids,” *T&D World*, Jan. 2020.
176. J. R. Aguero, S. Bahramirad, **A. Khodaei**, “A Review of Trends Shaping the Grid of the Future,” *Winter 2015 e-News, Quanta Technology*, Jan. 2015.
177. S. Bahramirad, **A. Khodaei**, J. Svachula, J. R. Aguero, “Community Microgrids: A New Paradigm for Electricity Delivery,” *Electric Light and Power, Power Grid International*, vol. 19, no. 12, Dec. 2014.

c. Professional presentations

Presentations and panel participation

Paper Session IEEE SmartGridComm, Beijing, China, October 2019

Session: Demand Response Control

Presentation title: Online Demand Response of Voltage Dependent Loads for Corrective Grid Decongestion

Paper Session IEEE SmartGridComm, Beijing, China, October 2019

Session: Microgrid Control

Presentation title: Microgrid Value of Ramping

Panelist ISGT Europe, Sarajevo, Bosnia and Herzegovina, October 2018

Session: Microgrids for DER Integration Presentation title: Building Grid of the Future Development of the First U.S. Microgrid Cluster

Paper Session ISGT Europe, Sarajevo, Bosnia and Herzegovina, October 2018

Session: Battery Energy Storage Presentation title: Battery Energy Storage Requirements for Mitigating PV Output Fluctuations

Invited Talk Case Western Reserve University, Cleveland, OH, October 2018

Presentation title: Building Grid of the Future A Deep Dive into the Development of the First U.S. Microgrid Cluster

Invited Talk University of Utah, Salt Lake City, UT, June 2018

Presentation title: Building Grid of the Future A Deep Dive into the Development of the First U.S. Microgrid Cluster

Invited Talk University of Auckland, Auckland, New Zealand, June 2018

Presentation title: Microgrids

Invited Talk Black & Veatch, Denver, CO, May 2018

Presentation title: Microgrids

- Panel Session Chair** IEEE PES General Meeting, Chicago, IL, July 2017
 Session: Applications of Microgrids to Improve the Reliability, Resiliency, and Efficiency of Distribution Systems
- Paper Session** CIGRE Grid of the Future Symposium, Philadelphia, PA, October 2016
 Session: Microgrid Design and Impact on the Grid Presentation title: Capturing the Variabilities of Distribution Network Net-Load via Available Flexibility of Microgrids
- Paper Session** CIGRE Grid of the Future Symposium, Philadelphia, PA, October 2016
 Session: Microgrid Design and Impact on the Grid Presentation title: Optimal Design of Hybrid AC/DC Microgrids
- Paper Session** CIGRE Grid of the Future Symposium, Philadelphia, PA, October 2016
 Session: Advanced System Control, Modeling and Analytics Presentation title: Investigating the Impact of Time Series Stationarization on Day-Ahead Solar Forecasting
- Paper Session** CIGRE Grid of the Future Symposium, Philadelphia, PA, October 2016
 Session: System Analysis and Reliability Presentation title: Predicting Power Grid Component Outage in Response to Extreme Events
- Paper Session** CIGRE Grid of the Future Symposium, Philadelphia, PA, October 2016
 Session: Distributed Energy Resources - Energy Storage Systems Presentation title: Levelized Cost of Energy Calculation for Energy Storage Systems
- Panelist** IEEE PES Innovative Smart Grid Technology, Minneapolis, MN, September 2016
 Session: Towards a Distribution System Operator Presentation title: Distribution Market A Customers Perspective
- Paper Session** IEEE PES Innovative Smart Grid Technology, Minneapolis, MN, September 2016
 Session: Microgrids and New Trends IV Presentation title: Interdependency of Transmission and Distribution Pricing
- Paper Session** IEEE PES Innovative Smart Grid Technology, Minneapolis, MN, September 2016
 Session: Microgrids and New Trends IV Presentation title: Static Hybrid AC/DC Microgrid Planning
- Panel Session Chair** IEEE PES General Meeting, Boston, MA, July 2016
 Session: Microgrid Design Considerations
- Supersession Chair** IEEE PES Transmission and Distribution Conference, Dallas TX, May 2016
 Session: Microgrids in Utility Space
- Panelist** IEEE PES Transmission and Distribution Conference, Dallas TX, May 2016
 Session: Smart Distribution Application
 Presentation title: Distribution Market Operators
- Invited Talk** IEEE IES Denver Chapter, Golden, CO, March 2016
 Presentation title: Economic, Reliable, and Resilient Operation of Microgrids

Panelist DistribuTECH Conference and Exhibition, Orlando, FL, January 2016
 Session: Building a Controller for the Clustering Private and Utility-owned Microgrids
 Presentation title: Operation and Control of Utility Microgrids

Paper Session IEEE SmartGridComm, Miami, FL, November 2015
 Session: Power System Resiliency
 Presentation title: Transmission Network Restoration with AC Constraints

Paper Session IEEE SmartGridComm, Miami, FL, November 2015
 Session: Microgrids I
 Presentation title: Market-based Microgrid Optimal Scheduling

Panelist Electric Utility Consultants Inc., Microgrid Conference, Chicago, IL, October 2015
 Session: New Microgrid Technology Panel

Panelist IEEE PES General Meeting, Denver, CO, July 2015
 Session: Smart Distribution Working Group
 Presentation title: Microgrid Optimal Scheduling

Presenter IEEE PES General Meeting, Denver, CO, July 2015
 Session: Smart Distribution Working Group
 Presentation title: Microgrid Taskforce

Panelist IEEE Innovative Smart Grid Technologies, Washington D.C., February 2015
 Session: Smart Distribution Application
 Presentation title: Reliability and Resilience Considerations in Microgrid Scheduling

Paper Session Chair IEEE Innovative Smart Grid Technologies, Washington DC, February 2015
 Session: Distribution III

Panel Session Chair IEEE Great Lakes Symposium on Smart Grid, Chicago, IL, September 2014
 Session: Smart Grid Communications

Forum Session Chair IEEE PES Transmission and Distribution Conference, Chicago, IL, April 2014
 Session: Forum 7, Power System Dynamic Performance and Intelligent Grid
 (Selected in top 10 T&D sessions - featured in T&D World)

Panel Session Chair IEEE Great Lakes Symposium on Smart Grid, Chicago, IL, September 2013
 Session: Power System Asset Management and Aging Infrastructure

Paper Session Chair IEEE PES General Meeting, Vancouver, BC, Canada, July 2013
 Session: Power System Operation

Paper Session Chair IEEE Innovative Smart Grid Technologies, Washington D.C., February 2012
 Session: Smart Building Solutions

Conference/symposium participation

- Quantum Computing workshop, Chicago, IL, February 2020

- CIGRE Grid of the Future Symposium, Atlanta, GA, November 2019
- IEEE SmartGridComm, Beijing, China, October 2019
- IEEE PES General Meeting, Atlanta, GA, August 2019
- IEEE PES PowerTech, Milan, Italy, June 2019
- Electrical and Computer Engineering Department Heads Association meeting, Tucson, March 2019
- IEEE PES Innovative Smart Grid Technology, Sarajevo, Bosnia and Herzegovina, October 2018
- IEEE PES General Meeting, Portland, OR, August 2018
- Engineering, Technology and Innovation Conference, Auckland, New Zealand, June 2018
- IEEE PES Transmission and Distribution Conference, Denver, CO, April 2018
- DistribuTECH, San Antonio, January 2018
- Western Electrical and Computer Engineering Department Heads Association meeting, San Diego, November 2017
- IEEE PES Innovative Smart Grid Technology Latin America, Quito, Ecuador, September 2017
- IEEE PES General Meeting, Chicago, IL, July 2017
- IEEE PES PowerTech, Manchester, UK, June 2017
- Reinventing Electric Power Curriculum with Sustainability Focus, Minneapolis, MN, June 2017
- Smart Cities & Money, Denver, CO, February 2017
- DistribuTECH, San Diego, CA, January 2017
- IEEE PES Joint Technical Committee Meeting, New Orleans, LA, January 2017
- CIGRE Grid of the Future Symposium, Philadelphia, PA, October 2016
- IEEE PES Innovative Smart Grid Technology, Minneapolis, MN, September 2016
- CIGRE, Paris, France, August 2016
- IEEE PES General Meeting, Boston, MA, July 2016
- Green Tech Media Grid Edge Forum, San Jose, CA, June 2016
- DistribuTECH, Orlando, FL, February 2016
- IEEE SmartGridComm, Miami, FL, November 2015
- Electric Utility Consultants Inc. Microgrid Conference, Chicago, IL, October 2015
- IEEE PES General Meeting, Denver, CO, July 2015
- CIRED, Lyon, France, June 2015
- CUSP Workshop, Washington, D.C., April 2015
- IEEE PES Innovative Smart Grid Technologies, Washington, D.C., February 2015
- IEEE PES Joint Technical Committee Meeting, Anaheim, CA, January 2015
- IEEE Great Lakes Symposium on Smart Grid, Chicago, IL, September 2014
- IEEE PES General Meeting, Washington, D.C., July 2014

- IEEE PES Transmission and Distribution Conference, Chicago, IL, April 2014
- IEEE PES Innovative Smart Grid Technologies, Washington, D.C., February 2014
- IEEE Great Lakes Symposium on Smart Grid, Chicago, IL, September 2013
- IEEE PES General Meeting, Vancouver, BC, July 2013
- IEEE PES Innovative Smart Grid Technologies, Washington, D.C., February 2013
- IEEE Great Lakes Symposium on Smart Grid, Chicago, IL, September 2012
- IEEE PES Innovative Smart Grid Technologies, Washington, D.C., January 2011

d. Other professional contributions

Memberships on editorial boards

Guest Editor International Journal of Electrical Power & Energy Systems, Special Issue on Recent Advancements in Electric Power System Development Planning with High-Penetration of Renewable Energy Resources and Dynamic Loads, 2019

Guest Editor-in-Chief Modern Power Systems and Clean Energy, Special Section on Distributed Energy Networks for Enhancing the Grid Resilience, 2018

Editor ECE Department Head Association, 2018-present

Editor Modern Power Systems and Clean Energy, 2018-present

Guest Editor Multidisciplinary Digital Publishing Institute, Battery Energy Storage Applications in Smart Grid, 2017

Associate Editor IEEE Access, 2015-2020

Editor IEEE Transactions on Power Systems, 2015-2020

Editor IEEE Power Engineering Letters, 2015-2020

Guest Editor IEEE Transactions on Power Delivery, Special Issue on Protection and Real-Time Monitoring of Transmission and Distribution Systems with High Penetration of Distributed Generation and Microgrids, 2015

Guest Editor-in-Chief IEEE Transactions on Smart Grid, Special Issue on Power Grid Resilience, 2015

Guest Editor IEEE Transactions on Smart Grid, Special Issue on Asset Management in Smart Grids, 2014

Positions in conference organization committees

Technical Chair Emeritus/International Relations Liaison IEEE PES T&D Conference, Chicago, IL, April 2020

Member of Technical Program Committee International Conference on Power and Energy Systems (ICPES), Perth, Australia, December 2019

Technical Program Committee Co-Chair IEEE SmartGridComm, Beijing, China, October 2019

Member of Technical Program Committee IEEE PES Innovative Smart Grid Technologies Conference Europe, Sarajevo, Bosnia and Herzegovina, October 2018.

Member of Technical Program Committee EAI International Conference on Smart Grid Inspired Future Technologies, Auckland, New Zealand, April 2018

Member of Technical Program Committee IEEE SmartGridComm, Dresden, Germany, October 2017

Member of International Technical Committee International Conference on Power Science and Engineering, St. Petersburg, Russia, December 2017

Member of International Technical Committee IEEE PES International Conference on Innovative Smart Grid Technologies, Torino, Italy, September 2017

Member of International Program Committee Electro Information Technology Conference, Lincoln, NE, May 2017

Technical Chair IEEE PES T&D Conference, Denver, CO, April 2018

Member of Technical Program Committee International Conference on Power Science and Engineering, Venice, Italy, December 2016

Technical Co-Chair North American Power Symposium, Denver, CO, September 2016

Member of Technical Program Committee IEEE PES Innovative Smart Grid Technologies, Europe, Ljubljana, Slovenia, October 2016

Technical Co-Chair IEEE PES T&D Conference, Dallas, TX, May 2016
T&D is the largest IEEE PES conference and exposition with over 14,000 attendees and 700 exhibitors from over 60 countries. I have joined the T&D team in 2013 and committed to serve until 2018.

Member of Technical Program Committee EAI International Conference on Smart Grid Inspired Future Technologies, Liverpool, UK, May 2016

Member of Technical Program Committee IEEE Smart Grid Communication Conference, Miami, FL, November 2015

Member of Technical Planning Committee IEEE Great Lakes Symposium on Smart Grid, Chicago, IL, September 2014

Member of Technical Planning Committee IEEE PES T&D Conference, Chicago, IL, April 2014

Member of Technical Planning Committee IEEE Great Lakes Symposium on Smart Grid, Chicago, IL, September 2013

Member of Technical Program Committee IEEE Green Technologies Conference, Corpus Christi, TX, April 2014

Member of Technical Program Committee IEEE Smart Grid Communication Conference, Venice, Italy, November 2014

Member of Technical Program Committee IEEE Smart Grid Communication Conference, Vancouver, BC, Canada, October 2013

Member of Technical Program Committee IEEE Bucharest PowerTech Conference, Bucharest, Romania, July 2010

Member of Technical Program Committee IEEE PES Innovative Smart Grid Technologies, Washington, D.C. January 2010

Member of Technical Program Committee IEEE PES General Meeting, Minneapolis, MN, July 2010

Member of Technical Program Committee Middle East Power Conference, Assiut, Egypt, December 2009

Member of Technical Program Committee Conference on Restructured Power Systems, Tehran, Iran, October 2007

Member of Technical Program Committee Iranian Students Conference on Electrical Engineering, Tehran, Iran, February 2007

Positions in professional societies

Member IEEE PES Taskforce on Resilience Framework, Methods, and Metrics for Electricity Sector, 2020

Chair IEEE Microgrid Taskforce, 2014-2017

Member IEEE PES Distributed Resource Integration Working Group, 2015-present

Member IEEE PES Distribution Subcommittee, 2014-present

Member Taskforce on Reliability Impacts of Demand Response Integration, 2013-present

Member IEEE P1854 - Smart Distribution Application Guide, 2013-present

Manuscript reviewing

- Omega: The International Journal of Management Science, 2019-present
- Science and Technology for the Built Environment, 2019-present
- IEEE Transactions on Systems, Man and Cybernetics, 2019-present
- International Journal of Disaster Risk Reduction, 2019-present
- Journal of Technological Forecasting & Social Change, 2019-present
- European Journal of Operational Research, 2019-present
- IEEE Transactions on Control Systems Technology, 2018-present
- Journal of Sustainable Cities and Society, 2018-present
- Engineering Optimization, 2018-present
- Natural Hazards, 2018-present
- Energy Strategy Reviews, 2018-present
- Journal of Mathematics and Computers in Simulation, 2017-present
- IETE Journal of Research, 2017-present
- Applied Soft Computing, 2017-present
- Simulation: Transactions of the Society for Modeling and Simulation International, 2017-present
- Sustainable Energy, Grids and Networks, 2017-present
- Journal of Ambient Intelligence and Humanized Computing, 2017-present
- Journal of Energy Storage, 2017-present
- Smart Science, 2017-present
- Energy Economics, 2017-present
- Frontiers of Information Technology & Electronic Engineering, 2017-present

- Journal of Energy Science & Engineering, 2017-present
- International Journal of Hydrogen Energy, 2016-present
- IEEE Transactions on Power Electronics, 2016-present
- Journal of Energies, 2016-present
- Journal of Energy Equipment and Systems, 2016-present
- Journal of Utilities Policy, 2016-present
- Journal of Intelligent Industrial Systems, 2016-present
- Journal of Neural Computing and Applications, 2016-present
- Journal of Simulation Modelling Practice and Theory, 2016-present
- International Journal of Process Systems Engineering, 2016-present
- Engineering Journal, 2016-present
- IEEE Transactions on Automation Science and Engineering, 2016-present
- IEEE Transactions on Industrial Electronics, 2016-present
- Computers & Operations Research, 2016-present
- Journal of Sustainability, 2016-present
- International Journal of Engineering Science and Technology, 2016-present
- IEEE Transactions on Industrial Informatics, 2016-present
- IEEE Systems Journal, 2016-present
- Advances in Electrical Engineering, 2015-present
- IEEE Transactions on Energy Conversion, 2015-present
- IEEE Access, 2015-present
- Electric Power Components and Systems Journal, 2015-present
- IBM Research, 2015-present
- IEEE Transactions on Vehicular Technology, 2015-present
- Journal of Applied Energy, 2014-present
- Journal of Energy Engineering, 2014-present
- Journal of Sustainable Energy Technologies and Assessments, 2014-present
- Journal of Energy for Sustainable Development, 2014-present
- International Journal of Electrical Power and Energy Systems, 2014-present
- International Transactions on Electrical Energy Systems, 2014-present
- IET Renewable Power Generation, 2013-present
- European Transactions on Electrical Power, 2013-present
- IEEE Transactions on Smart Grid, 2011-present
- IEEE Power Engineering Letters, 2010-present
- IET Generation, Transmission and Distribution, 2009-present
- IEEE Transactions on Power Systems, 2008-present
- IEEE Transactions on Power Delivery, 2008-present

Grant or proposal reviewing

- Department of Energy, Basic Energy Sciences, 2017, 2020
- Department of Energy, Building Technology Office, 2019
- National Science Foundation, Secure and Trustworthy Cyberspace, 2019
- National Science Foundation, Electric Power, Control, and Networks, 2014, 2015
- National Science Foundation, Cyber-Innovation for Sustainability Science & Engineering, 2014
- National Science Foundation of Chile, 2014, 2016, 2017
- National Science Foundation, Electric Power and Adaptive Systems, 2013

Book reviewing

- Springer, UK, 2015
- Wiley, 2015
- CRC, 2015

Patents

- Methods and Systems for Determining Distribution Grid Hosting Capacity, Provisional application submitted, 2018
- Methods and Systems for Determining a Linear Power Flow for a Distribution Network, Provisional application submitted, 2018
- Methods and Systems for Determining Economic Viability Of A Microgrid, 2016

SERVICE ACTIVITIES

Advisement/Supervision

The list includes 27 students (12 graduated Ph.D., 4 ongoing Ph.D., 10 graduated M.S., 1 ongoing M.S.), 5 postdoctoral research associates, and 2 research assistant professors.

Postdoctoral Research Associates, and Research Assistant Professors

1. Kumar Ghosh (2020-present)
2. Ali Arab (2020-present)
3. Rozhin Eskandarpour (2019-present)
4. Alireza Majzoobi (2019)
5. Hafez Bazrafshan (2019)
6. Saeed Mohajeryami (2018)
7. Amir Abiri-Jahromi (2017)

Ph.D. Students

1. Chris Gantz (ongoing)
2. Khawla Benjuma (ongoing)
3. Zohreh Hosseini (ongoing)

4. Sam Seyfi (ongoing)
5. Sarhan Hasan (2020) Microgrid-enabled reactive power support to enhance grid economics
6. Mohsen Mahoor (2019) Aggregated DER management in advanced distribution grids
7. Abdulaziz Almalaq (2019) Distribution level load prediction using deep learning
8. Rozhin Eskandarpour (2019) Power system resilience enhancement using artificial intelligence
9. Abdulaziz Alanazi (2019) Capturing transmission and distribution connected wind energy variability
10. Mohana Alanazi (2019) Solar forecasting and integration in modern power systems
11. Hossein Lotfi (2019) Design and operation of hybrid AC/DC microgrids
12. Alireza Majzoobi (2019) Application of microgrids in supporting the utility grid
13. Mansoor Alturki (2018) Hosting capacity optimization in modern distribution grids
14. Abdullah Albaker (2018) Optimal operation of integrated microgrids
15. Ibrahim Alsaidan (2017) Optimal planning of microgrid-integrated battery energy storage
16. Sina Parhizi (2017) Design and operation of distribution markets

M.S. Thesis Students

17. Cole Caulkins (ongoing)
18. Ali Alsenan (2020) Impact of grid-forming and grid-following DERs on resilient operation of holonic grids
19. Camerron Mismash (2019) Paving the way for multidisciplinary smart campus infrastructure: Leveraging DUs unique campus for the advancement of smart campus culture
20. Abdulrahman Almazroui (2019) Enhancing hosting capacity in distribution grids using wire and non-wire solutions
21. Tripp Cashel (2017) Risk-optimized microgrid resource management
22. Chris Wellons (2017) Energy efficiency and demand response for residential applications
23. Rozhin Eskandarpour (2016) Power grid resilience in response to extreme events
24. Abdulaziz Alanazi (2015) Microgrid optimal scheduling with high penetration wind generation
25. Mohana Alanazi (2014) Solar power deployment: forecasting and planning
26. Mansoor Alturki (2014) Hosting capacity calculations in power systems
27. Khalid Alqunun (2014) Application of energy storage in power systems
28. Abdullah Albaker (2014) Impact of net metering on customers engagement

Department and School Services

- Planning Committee Member, Scrivner Institute of Public Policy, 2018-2019
- Search Committee, Provost of University of Denver, 2017-2018
- Search Committee, Junior and Senior faculty positions, Ritchie School of Engineering and Computer Science, 2017-2019
- Co-lead of the Research Clusters team, Ritchie School strategic planning, 2016
- Member of DU project X-ITE, interdisciplinary collaboration in innovation, technology, and entrepreneurship, 2016
- Search Committee, Associate Dean of the Ritchie School of Engineering and Computer Science, 2016
- Developed the thematic sequence of power and energy classes for undergraduate students, 2015

TEACHING EXPERIENCE

Courses taught at University of Denver

† Evaluations are based on students' feedback on "instructor effectiveness"

Spring 2019 ENGR 3545/4545 Electric Power Economy (evaluation: 6[†]/6)

Winter 2019 ENGR 4800 Advanced Topics: Microgrids and Advanced Distribution Networks (evaluation: 6[†]/6)

Spring 2018 ENGR 3545/4545 Electric Power Economy (evaluation: 6[†]/6)

Winter 2018 ENGR 4800 Advanced Topics: Microgrids and Advanced Distribution Networks (evaluation: 6[†]/6)

Spring 2017 ENGR 4800 Advanced Topics: Smart Cities (evaluation: 6[†]/6)

Spring 2017 ENGR 3545/4545 Electric Power Economy (evaluation: 5.4[†]/6)

Winter 2017 ENGR 4800 Advanced Topics: Microgrids and Advanced Distribution Networks (evaluation: 5.9[†]/6)

Fall 2016 ENGR 3530/4530 Introduction to Power and Energy Conversion Systems (evaluation: 5.8[†]/6)

Fall 2016 ENEE 2211 Electronics (evaluation: 5.5[†]/6)

Spring 2016 ENGR 3545/4545 Electric Power Economy (evaluation: 5.8[†]/6)

Winter 2016 ENGR 4720 Optimization (for Lockheed Martin students) (evaluation: 4.5[†]/6)

Winter 2016 ENGR 3721 Controls (evaluation: 5.2[†]/6)

Winter 2016 ENGR 3722 Control Systems Laboratory (evaluation: 5.2[†]/6)

Fall 2015 ENGR 3530/4530 Introduction to Power and Energy Conversion Systems (evaluation: 5.5[†]/6)

Spring 2015 ENGR 3545/4545 Electric Power Economy (evaluation: 5.6[†]/6)

Winter 2015 ENGR 3721 Controls (evaluation: 4.7[†]/6)

Winter 2015 ENGR 3722 Control Systems Laboratory (evaluation: 4.7[†]/6)

Fall 2014 ENGR 3530/4530 Introduction to Power and Energy Conversion Systems
(evaluation: 5.3[†]/6)

Spring 2014 ENGR 3545/4545 Electric Power Economy (evaluation: -)

Winter 2014 ENGR 3721 Controls (evaluation: 5.5[†]/6)

Winter 2014 ENGR 3722 Control Systems Laboratory (evaluation: 5.5[†]/6)

Fall 2013 ENGR 3530/4530 Introduction to Power and Energy Conversion Systems
(evaluation: 5.7[†]/6)

Courses taught at University of Houston

[‡] Evaluations are based on students' feedback on "instructor effectiveness"

Spring 2012 ECE 6378 Power System Analysis (evaluation: 4.77[‡]/5)

Spring 2012 ECE 5377/6377 Power Transmission and Distribution (evaluation: 4.57[‡]/5)

Spring 2012 ECE 5127/6127 Power Transmission and Distribution Laboratory (evaluation: 4.57[‡]/5)

Fall 2012 ECE 4363 Electromechanical Energy Conversion (evaluation: 4.35[‡]/5)

Fall 2012 ECE 4113 Energy Conversion Laboratory (evaluation: 4.35[‡]/5)

MEDIA COVERAGE

- ComEd Embraces Quantum Computing to Navigate Power Grid Disruption. March 2020.
- Xage Security and ComEd to Demonstrate New Use for Blockchain. September 2019.
- Building Energy Data Key to Blockchain-Enabled Energy Management. September 2019.
- Xage Security and ComEd to Demonstrate New Use for Blockchain. September 2019.
- ComEd partners with Xage for blockchain smart grid security. September 2019.
- Xage Security and ComEd to Demonstrate New Use for Blockchain. September 2019.
- ComEd and Xage Security show how blockchain can provide operational and security benefits. September 2019.
- Congressional Research Service Examines Blockchain in Energy Sector. August 2019.
- U.S. DOE Awards Grant to ComEd, Partners to Advance "Energy Internet". August 2019.
- US DOE Dedicates \$1.05M to Blockchain Energy Management Platform. August 2019.
- US Energy Department awards \$1.05M grant to blockchain-based energy management initiative. August 2019.
- US Department of Energy makes blockchain grant August 2019.

- U.S. Department of Energy Awards Grant for Development of Blockchain-Based Energy Platform August 2019.
- The United States Department of Energy (DOE) Granted 1.05 M to 4 Blockchain-Based Energy Management Platforms. August 2019.
- DOE Awards Grant to Advance Energy Internet. August 2019.
- Energy department awards grant to support blockchain-based “energy internet”. August 2019.
- DOE to pay ComEd to study BEM blockchain. August 2019.
- U.S. Department of Energy Provided a Grant to Develop a Blockchain Energy Distribution Management Platform. August 2019.
- \$1.05 million allocated for the development of a blockchain platform from the US Department of Energy. August 2019.
- ComEd Simulates Islanding with its Bronzeville Community Microgrid. July 2019.
- ComEd Bronzeville Community Microgrid Demonstrates Ability to Keep Power Flowing in Event of an Emergency. April 2019.
- 2018 IEEE PES T&D Conference Review: Power Forward. April 2018.
- ComEd Awarded \$1.2 Million Grant from U.S. DOE for Microgrid Controller. September 2014.
- Industry Consortium Seeks To Leverage Smart Grid Data. January 2013.