

# Zongjie Wang

**Research Interests** power system non-linear optimization and simulation  
AC optimal power flow applications  
grid resilience  
electricity market  
coordinated transmission and distribution systems  
dispatch control hierarchy  
data analytics  
engineering management  
active distribution systems  
microgrid

**Appointments** **Assistant Professor**, Department of Electrical & Computer Engineering, University of Connecticut, Aug. 2021–present  
**Eversource Energy Center**, Power System and Renewable Energy Integration Team, University of Connecticut, Aug. 2021–present  
**Academic Technician**, University of Connecticut, Jul. 2021–Jan. 2022  
**Research Assistant Professor**, Department of Electrical & Computer Engineering, University of Connecticut, Jul. 2021–Aug. 2021  
**Postdoctoral Research Associate**, Systems Engineering, Cornell University, Oct. 2018–Aug. 2021  
**Lecturer**, Department of Civil and Environmental Engineering, Cornell University, 2019-2020

**Education** **Joint Ph.D. Training Program**, Department of Electrical & Computer Engineering: Power Systems, Cornell University, 2014-2017  
**Ph.D.**, Department of Electrical & Computer Engineering: Power Systems, Harbin Institute of Technology, 2014-2018  
**M.S.**, Department of Electrical & Computer Engineering: Power Systems, Harbin Institute of Technology, 2012-2014  
**B.S.**, Department of Electrical & Computer Engineering: Power Systems, Harbin Institute of Technology, 2008-2012

**Publications** *Journals*  
Abdollah Younesi, Hossein Shayeghi, **Zongjie Wang**<sup>\*1</sup>, Pierluigi Siano, Ali Mehrizi-Sani, Amin Safari. Trends in Modern Power Systems Resilience: Smart Grids Challenges and Opportunities [J]. *Renewable and Sustainable Energy Reviews*, 2022, (162), 112397. *Impact Factor*: **16.8**  
Vivienne Liu, Bo Yuan, **Zongjie Wang**, Jeffrey A. Sward, K. Max Zhang, and C. Lindsay Anderson. An Open-Source Representation for the NYS Electric Grid to Support Power Grid and Market Transition Studies [J]. *IEEE Transactions on Power Systems*, 2022. (Accepted). *Impact Factor*: **7.326**

<sup>1</sup> \* represents corresponding author.

**Zongjie Wang\***, C. Lindsay Anderson. Progressive Optimal Power Flow in Power Systems with High Penetration of Variable Renewable Energy [J]. *Energies*, 2021, 14(10): 2815. (*Special Issue: Electrical Engineering for Sustainable and Renewable Energy*)

Claire Guo, Luckny Zephyr, Jose Morillo, **Zongjie Wang**, C. Lindsay Anderson. Chance Constrained Unit Commitment Approximation under Stochastic Wind Energy [J]. *Computers & Operations Research*, 2021, pp. 105398.

Sergio A. Dorado-Rojas, Felipe Halarza-Jimenez, Rajarshi Roychowdhury, Balaji Guddanti, **Zongjie Wang\***. Angular Domain Control Design for Single-Phase Inverter to Enhance Distribution Grid Power Quality [J]. *IEEE Transactions on Industry Applications*, 2022. (*Submitted*)

Yandi Wang, Hsiao-Dong Chiang, **Zongjie Wang**. Toward Feasible Injection Region of Distributed Generations in Active Distribution Networks: Theory and Computation [J]. *IEEE Transactions on Sustainable Energy*, 2022. (*Under Review*)

Liguo Wang, Mingliang Feng, Zhenteng Tian, Bai Yang, Jianxin Xu, **Zongjie Wang**. An approach for On-line Identifying Stator Winding Short-Circuit of a Submersible Motor Based on Monitoring Faulty Currents [J]. *Journal of Power Electronics*, pp.1-13, 2022.

**Zongjie Wang\***, Zhizhong Guo. On Critical Timescale of Real-time Power Balancing in Power Systems with Intermittent Power Sources [J]. *Electrical Power Systems Research*, 2018, 155:246-253.

**Zongjie Wang\***, Zhizhong Guo. Quantitative Characterization of Uncertainty Levels of Intermittent Power Sources [J]. *Journal of Renewable and Sustainable Energy*, 2018, 10(4): 043304. (*Awarded Editors' Choice*)

**Zongjie Wang\***, Zhizhong Guo. Statistical Forecast Functions of Intermittent Power Sources [J]. *Proceedings of CSEE*, 2018, 38(16): 4738-4746.

**Zongjie Wang\***, Zhizhong Guo. Uncertainty Model of Renewable Energy Sources [J]. *Journal of Engineering*, 2017(13): 849-853.

**Zongjie Wang\***, Zhizhong Guo. Real-time Dispatch with Power Networks Under Renewable Energy Sources [J]. *Proceedings of CSEE*, 2017, 37(17): 1-8.

**Zongjie Wang\***, Zhizhong Guo. Sensitivity Factor Analysis for Bus Type Extended Load Flow [J]. *Journal of Harbin Institute of Technology*, 2017, 49(3): 35-39.

**Zongjie Wang\***, Zhizhong Guo. A Characteristic Optimal Power Flow Model for Time Period [J]. *Automation of Electric Power Systems*, 2014, 38(22): 50-56.

Liguo Wang, Liuhaofang, **Zongjie Wang**. Research on Suppressing the Sub-synchronous Resonance of a DFIG Wind Farm Based on Digital Twin Modeling [J]. *IEEE Transactions on Industrial Electronics*, 2022. (*Submitted*)

**Zongjie Wang\***, C. Lindsay Anderson. Linear Time Algorithm for Time-varying Power Flow [J]. *IEEE Transactions on Power Systems*, 2021. (*Under revision*)

**Zongjie Wang\***, Hsiao-Dong Chiang. Feasible Power Flow Solutions in Electrical Power Systems: Conjecture and Theorem [J]. *IEEE Transactions on Power Systems*, 2021. (*Under revision*)

**Zongjie Wang\***, Abdollah Younesi, M. Vivienne Liu, Ge Claire Guo, C. Lindsay Anderson. A Review of AC Optimal Power Flow in Power Systems with Renewable Energy Integration [J]. *Applied Energy*, 2022. (*In preparation*)

**Zongjie Wang\***, C. Lindsay Anderson. Power Flow Feasibility and Monotonic Voltage Properties in Three-phase Unbalanced Distribution Networks with Distributed Energy Resources [J]. *IEEE Transactions on Control of Network Systems*, 2021. (*Under Revision*)

Luckny Zephyr, **Zongjie Wang**, Jialin Liu, Amandeep Gupta and C. Lindsay Anderson. Comparison of Wind Scenario Generation Methods for Power Systems Operation [J]. *Renewable and Sustainable Energy Reviews*, 2022. (*In Preparation*)

Shriya Nagpal, **Zongjie Wang**, C. Lindsay Anderson. Real Time Identification of Important

Components in the Power Grid [J]. *IEEE Transactions on Power Systems*, 2021. (Under Review)

### *Conference Proceedings*

**Zongjie Wang\***. Quantitative Analysis on Time-series Nodal Voltages in Linear-time Intervals [C]. *56<sup>th</sup> Hawaii International Conference on System Sciences (HICSS 2023)*, Maui, Hawaii, 2023. (Accepted)

Altan Unlu, Malaquias Pena, **Zongjie Wang**. Comparison of the Hybrid Deep Learning Methods for Load Forecasting [C]. *2023 IEEE ISGT North America*, Washington DC, 2023. (Submitted)

Abdollah Younesi, **Zongjie Wang\***, Ligu Wang. Investigating the Impacts of Climate Change and Natural Disasters on the Feasibility of Power System Resilience [C]. *2022 IEEE PES GM*, 2022. (Accepted)

Abdollah Younesi, **Zongjie Wang\***, Thi Ha Nguye, Paras Mandal. Flexibility Behavior of Electric Vehicles in Modern Power System Resilience: Portable Mobile Sources and/or Transportation Facilities [C]. *2022 IEEE PES GM*, 2022. (Accepted)

Orlando Quezada Simental, Paras Mandal, Eric Galvan, **Zongjie Wang**. Leveraging Distributed EVs and PVs to Assess Networked Microgrids Resilience Against Extreme Weather Event [C]. *2022 IEEE PES GM*, 2022. (Accepted)

Kenneth Foss, **Zongjie Wang\***. Towards a Turbine Selection Method with Uncertainty Reduction and Efficiency Optimization [C]. *2022 Power and Energy Conference, Illinois*, pp.1-7, 2022.

Ligu Wang, Zhenteng Tian, Yuanting Hu, Chunlai Yu, **Zongjie Wang**. Research on High-Power Rapid Charge Approach for EV Based on Clustered Multi-node Learning Gaussian Process [C]. *International Power Electronics Conference (IPEC 2022)*, Himeji, Japan, 2022. (Accepted)

Sergio A. Dorado-Rojas, Felipe Halarza-Jimenez, Rajarshi Roychowdhury, Balaji Guddanti, **Zongjie Wang\***. Angular Domain Control Design for Single-Phase Inverter to Enhance Distribution Grid Power Quality [C]. *2022 IEEE Industry Applications Annual Meeting (IAS 2022)*, 2022. (Accepted)

Kalinath Katuri, Ha Thi Nguyen, **Zongjie Wang**. Evaluation of DER Integration Impact on Distribution Protection Using Hardware in The Loop [C]. *Conference on Renewable Energies and Smart Technologies (REST 2022)*, 2022. (Accepted)

Leila Chebbo, Ha Thi Nguyen, **Zongjie Wang**. Optimal Size and Location of Batteries for São Vicente Island's Renewable-Based Power System [C]. *Conference on Renewable Energies and Smart Technologies (REST 2022)*, 2022. (Accepted)

Peter Chardavoyne, Allan Feygin, Uiliam Kutrolli, **Zongjie Wang\***. Feasibility of Shiftable Loads: An Expansion of Deferrable Loads in Distribution Systems [C]. *54th North American Power Symposium (NAPS 2022)*, Salt Lake City, Utah, 2022. (Accepted)

Altan Unlu, Malaquias Pena, **Zongjie Wang**. Deep Learning Architectures for Solar PV Forecasting [C]. *54th North American Power Symposium (NAPS 2022)*, Salt Lake City, Utah, 2022. (Accepted)

**Zongjie Wang\***, C. Lindsay Anderson. Simulation Case Studies On An Advanced Sensitivity Analysis For New Extended Bus Types In The Modern Power Systems [C]. *2021 Winter Simulation Conference (WSC)*, JW Marriott Desert Ridge, Phoenix, AZ, USA, pp. 1-12, 2021.

Yang Li, **Zongjie Wang\***. Statistical Uncertainty Modelling and Dispatch Control Systems in Power Systems with High Penetrations of Intermittent Power Sources [C]. *5th IEEE ICGEA Conference, Singapore*, pp. 1-8, 2021.

**Zongjie Wang\***, Ge Guo and C. Lindsay Anderson. Simulation Case Studies on Period Optimal Power Flow [C]. *2019 Winter Simulation Conference (WSC)*, National Harbor, MD,

USA, 2019, pp. 3669-3680.

Luckny Zephyr, Ge Guo, **Zongjie Wang**, Jose Morillo. Approximate Chance-Constrained Unit Commitment under Wind Energy Penetration [C]. *55th Hawaii International Conference on System Sciences (HICSS 2022)*, Maui, Hawaii, 2022.

Liguo Wang, Hanyu Liu, Jianhua Chen, Chunlai Yu, **Zongjie Wang**. Research on Identifying Parameter of DFIG-Based Wind Farm Based on Mathematical Mechanization Analysis [C]. *IOP Conference Series: Earth and Environmental Science*. vol. 983, no. 1, pp. 012009. *IOP Publishing*, 2022.

**Zongjie Wang\***, Zhizhong Guo. Toward a Characteristic Optimal Power Flow Model for Temporal Constraints [C]. *2017 ITEC-AP*, 2017: 1-6.

**Zongjie Wang\***, Hsiao-Dong Chiang and Zhizhong Guo. On the Phase Voltage Monotonic Property in Unbalanced Distribution Networks [C]. *2017 IEEE PES Power Africa*, 2017: 366-370.

### *Selected Conference Presentations*

**Zongjie Wang**, 2019. "Period Optimal Power Flow in Power Systems with Variable Renewable Energy." *Energy and Water Resources Systems Seminar*, Department of Civil and Environmental Engineering, Cornell University, Ithaca, NY.

**Zongjie Wang**, 2019. "Optimal Power Flow in Power Systems with High Penetration of Variable Renewable Energy." *BEE Research Seminar*, Department of Biological and Environmental Engineering, Cornell University, Ithaca, NY.

**Zongjie Wang**, 2017. "Critical Timescale of Real-time Power Balancing in Power Systems with Intermittent Power Sources." *Center for Automotive Research*, Columbus, Ohio.

**Zongjie Wang**, 2017. "Uncertainty Models of Renewable Energy Sources." *IET Renewable Power Generation Conference*, Wuhan, China.

**Zongjie Wang**, 2017. "Toward a Characteristic Optimal Power Flow Model for Temporal Constraints." *2017 IEEE Transportation Electrification Conference and EXPO Asia-Pacific*, 2017.

**Zongjie Wang**, 2017. "On the Phase Voltage Monotonic Property in Unbalanced Distribution Networks." *2017 IEEE Power Africa*, Accra, Ghana.

### *Selected Conference Posters*

**Zongjie Wang**, 2019. "Period Optimal Power Flow in Power Systems with Renewable Energy Integration." *2019 PSERC IAB Meeting*, Madison, Wisconsin.

**Zongjie Wang**, 2019. "Critical Real-time Dispatch Timescale in Power Systems with High Penetration of Renewable Energies." *Cornell Energy Systems Conference*, Ithaca, NY, Apr. 2019.

**Zongjie Wang**, 2019. "Generic Optimal Power Flow Formulations in Power Systems with Renewable Energy Integration." *11th Annual BEE Research Symposium*, Ithaca, NY.

**Zongjie Wang**, 2017. "Uncertainty Models of Renewable Energy Sources." *IET Renewable Power Generation Conference*, Wuhan, China.

**Zongjie Wang**, 2017. "Toward a Characteristic Optimal Power Flow Model for Temporal Constraints." *2017 IEEE Transportation Electrification Conference and EXPO Asia-Pacific*, 2017.

### **Invited Talks**

Invited Speaker and Panelist. The 2nd Women in STEM Frontiers in Research Expo (WiSFIRE) at UConn, Storrs, CT, 2022.

"Enabling Sustainable Energy Sources With Innovative Tools Through System Optimal Dispatch." *Seminar*, University of Houston. 2022. (Virtually)

“Co-optimization and Co-simulation T & D framework in Electricity Market Under High Penetration of Variable Renewable Energy Resources.” Adaptable transportation and/or power systems Workshop, University of Washington. 2021. (Virtually)

“Coordinated Transmission and Distribution Optimization Framework.” *Public Utilities Regulatory Authority (PURA) Symposium*, Eversource Energy Center at UConn, Storrs, CT. 2021.

“Enabling Sustainable Power Systems Through Innovations in Optimal System Dispatch.” *Center for Automotive Research*, The Ohio State University, Columbus, OH. 2021.

“Getting a Faculty Position: Lessons Learned During the Academic Job Search.” Panelist, Cornell, Ithaca, NY. 2021.

“Period Optimal Power Flow Model in Power Systems with High Penetrations of Intermittent Power Sources.” *FERC’s Technical Meeting*, Headquarter of Federal Energy Regulatory Commission, Washington DC. 2019.

“Critical Timescale of Real-time Power Balancing in Power Systems with Intermittent Power Sources.” *Center for Automotive Research*, Columbus, Ohio. 2017.

“The Existence and Uniqueness of Feasible Power Flow Solutions in Weakly Meshed Distribution Networks.” Department of Electrical and Computer Engineering, *Tianjin University*, Tianjin, China. 2017.

“Toward a Characteristic Optimal Power Flow Model for Temporal Constraints.” *2017 IEEE Transportation Electrification Conference and EXPO Asia-Pacific*. Harbin, China. 2017.

“Sensitivity Factor Analysis for Bus Type Extended Load Flow.” Department of Electrical and Computer Engineering, *Tsinghua University*, Beijing, China. 2017.

## Grants

Principal Investigator, “Progressive Period Optimal Power Flow Model in Active Distribution Systems with Distributed Energy Resources”. Eversource Energy (*Industrial Grant*), \$50,000. 2021– 2023.

Co-Principal Investigator, “Multi-Time Scale Forecasting in Dispatch Hierarchy Frameworks for Renewable Energy Integration”. Research Excellence Program, UConn OVPR (*Internal Grant*), \$50,000. 2022-2023.

Co-Principal Investigator, “Power System Optimization Designs to Spur Renewable Energy Sources Adoption in a Changing Climate”. NSF IUCRC, \$150,000. 2022-2023.

## Projects

National Science Foundation, USA: Innovations at the Nexus of Food, Energy and Water Systems. Participant. PI: Lindsay Anderson. 2020-2021.

Optimal Model Coordination for Integrated Transmission and Distribution Systems, PSERC, USA. (T-61) Participant. PI: Lindsay Anderson. 2018-2021.

National Science Foundation, USA. (No. 1225682) Participant. PI: Hsiao-dong Chiang. 2014-2017.

National Science Foundation, China. (No. HITZ2017001) Participant. PI: Zhizhong Guo. 2016-2018.

National Science Foundation, China: National Key Basic Research Program of China (973 Program, No. 2012CB027082) Participant. PI: Zhizhong Guo. 2012-2016.

## Program

Cornell’s Leadership Certificate Program. Cornell University, Ithaca, NY. 2020-2021.

SET Teaching Training Program. Cornell University, Ithaca, NY. 2016.

- Industry**      Research Assistant, Bigwood Systems Inc., Ithaca, NY. 2014.
- Teaching**      *University of Connecticut (Instructor)*  
 ECE 3231: Introduction of Modern Power Systems (3 credits). Fall 2021.  
 ECE 5552: Communication Systems in Smart Grids (4 credits). Spring 2022.  
 ECE 4099: Independent Study in Electrical and Computer Engineering (3 credits). 2011-2022.
- Cornell University (Instructor)*  
 CEE 5930: Engineering Management Methods (4 credits). Fall 2019.
- Harbin Institute of Technology (Teaching Assistant)*  
 EE 643: Power System Analysis and Design (3 credits.) Fall 2013.  
 EE 640: Modeling and Optimization of Renewable Energy Systems (3 credits.) Fall 2013.
- Advising**      *University of Connecticut*  
 Kallol Biswas, Ph.D., Electrical and Computer Engineering. Advisor. 2022–present.  
 Abdollah Younesi, Ph.D., Electrical and Computer Engineering. Advisor. 2022–present.  
 Sergio A. Dorado-Rojas, Ph.D., Electrical and Computer Engineering. Advisor. 2022–present.  
 Amin Sedgh, Ph.D., Electrical and Computer Engineering. Advisor. 2022–present.  
 Leila Chebbo, Ph.D., Electrical and Computer Engineering. Co-Advisor. 2021–present.  
 Kenneth Foss, Undergraduate, Electrical and Computer Engineering. Independent Study Advisor. 2021–present.  
 Peter Chardavoyne, Undergraduate, Electrical and Computer Engineering. Independent Study Advisor. 2021–present.  
 Uiliam Kutrolli, Undergraduate, Electrical and Computer Engineering. Independent Study Advisor. 2021–present.  
 Allan Feygin, Undergraduate, Electrical and Computer Engineering. Independent Study Advisor. 2021–present.
- Cornell University*  
 Served as major mentor to all the undergraduates (4), masters (4), and Ph.D. students (4) in Anderson’s Lab. 2018-2021.  
 Served as undergraduate research assistant mentor under Dr. Hsiao-dong Chiang’s power system research group. 2014-2017.  
 Teaching assistant in the Department of Electrical and Computer Engineering. 2014-2016.  
 Administrative Assistant in the Department of Electrical and Computer Engineering. 2016-2017.
- Harbin Institute of Technology*  
 Served as teaching assistant & lab instructor. Fall 2013.
- Viax Online Workshop*  
 Served as teaching and research mentors to 5 undergraduates with courses and academic publications. 2017-2020.



### *Embark Education*

Served as teaching and research mentors to 4 undergraduates with courses and academic publications. 2018-2020.

### **Awards**

Career Champion Spotlight, UConn, 2022. (*A web link will be provided soon.*)  
Scholarship Facilitation Fund Award, UConn, 2022.  
Project Award, A Pathway To Enable Sustainable Modern Power Systems: Optimal System Dispatch, Eversource, 2021.  
*Editor's best choice award*, Journal of Renewable and Sustainable Energy. 2018.  
*Best Paper Award*, IEEE Transportation Electrification Conference and Expo Asia Pacific. 2018.  
*Graduate Assistant Outstanding Teaching Award*, Cornell University Graduate School. 2016.  
*Outstanding Student Honor* (granted to top 2%), Harbin Institute of Technology, 2018, 2013, 2012, 2010.  
*National Scholarship* (granted to top 0.2%). 2017, 2011.  
*Great Contribution Award* (granted to top 1%), Harbin Institute of Technology, 2017, 2011.  
*Graduate Assistant Outstanding Teaching Award*, Harbin Institute of Technology, Graduate School. 2016.  
*Outstanding Undergraduate Scholarship*, Harbin Institute of Technology, 2013, 2011.  
*Social Activists Award*, Harbin Institute of Technology, 2009.

### **Outreach**

Taught classes on renewable energy modeling and simulation, Viax and Embark Summer School, 2017-2020.

### **Professional**

Review Committee for ECE Department Head Evaluation, UConn, 2022  
Secretary Elect-Elect, PEEC Awards Subcommittee, IEEE Power & Energy Education Committee, 2022-present  
Committee member, CIGRE Working Group C6.45: The Impact of Distributed Energy Resources (DER) on the Resilience of Distribution Network. 2022-present  
Technical Program Committee, 2022 North American Power Symposium, Salt Lake City, Utah, 2022.  
Young Professional Member, U.S. National Committee of CIGRE, 2022-present  
Academic Editor, IntechOpen, 2022-present  
Senior Project Design Faculty Judge, UConn, 2022.  
Poster Competition Faculty Judge, 8<sup>th</sup> Annual Engineering Graduate Poster Competition & Presentation, UConn, 2022.  
Guest Associate Editor, Frontiers in Energy Research, 2022-present  
Mentor, Women in STEM Frontiers in Research Expo (WiSFIRE) at UConn  
Advisor, IEEE PES Connecticut Chapter, 2022-present  
McNair Faculty Mentor, 2021-present  
Center for Career Development Member at UConn, 2021-present  
Committee, Faculty Resilience—a collaborative community for female, tenure-track faculty at colleges and universities in the United States, 2021-present  
Early Career Researcher Board of Oxford Open Energy Committee, 2021-present  
Panel Reviewer, NSF Energy, Power, Control, Network (EPCN) Program. 2021-present  
Reviewer, NSF Graduate Research Fellowship Program. 2021-present  
Reviewer, Applied Energy. 2021-present

Reviewer, Advances in Applied Energy. 2021-present  
 Reviewer, Journal of Modern Power Systems and Clean Energy. 2021-present  
 Reviewer, UConn IDEA Grant Program. 2021-present  
 UConn ECE Systems Group in Power and Energy Committee. 2021-present  
 IEEE PES Subcommittee, Smart Buildings and Customer Systems. 2021-present  
 IEEE Bulk Power System Operations Subcommittee. 2021-present  
 IEEE Transmission Subcommittee (Switching Working Group). 2021-present  
 IEEE PES Renewable Systems Integration Coordinating Committee. 2021-present  
 IEEE PES Power & Energy Education Committee (PEEC). 2021-present  
 Member, IEEE PES Women in Power, 2021-present  
 Member, NSF Industry-University Cooperative Research Centers Program -- Weather Innovation and Smart Energy and Resilience -- IUCRC WISER. 2021-present  
 Reviewer, Frontiers in Energy Research. 2021-present  
 Reviewer, IEEE Transactions on Control of Network Systems, 2021-present  
 Reviewer, IEEE Transactions on Power Systems. 2018-present  
 Reviewer, Electrical Power Systems Research. 2018-present  
 Reviewer, Energies. 2018-present  
 Reviewer, Journal of Renewable and Sustainable Energy. 2018-present  
 Track Programme Committee, Association for Information Systems. 2018-present  
 Reviewer, IEEE PES General Meeting. 2012-present  
 Reviewer, Journal of Engineering, 2016-present  
 Reviewer, International Conference on Electronics, Communications and Networks, 2016-present  
 Reviewer, Proceedings of CSEE. 2014-present  
 Reviewer, Automation of Electric Power Systems. 2014-present  
 Reviewer, IEEE Transportation Electrification Conference and EXPO Asian-Pacific. 2014-present  
 Reviewer, Journal of Harbin Institute of Technology. 2014-present  
 Special Issue Reviewer, IEEE Industrial Electronics Society. 2014-present  
 Guest Editor, Special Issue-International Journal of Energy Optimization and Engineering. 2014-2015.  
 Research Assistant, Power System Research Group, Cornell University. 2014-2017.  
 Research Assistant, Renewable Energy System Lab, Harbin Institute of Technology, 2012-2014.  
 Member, CIGRE, 2010-present  
 Member, IEEE, 2010-present

## Leadership

Active Member, Cornell Club of Boston, Cornell Club of Greater Hartford. 2022-present  
 Worship Leader & Sunday School Teacher. Ithaca First Assembly of God. 2014-2020.  
 President of Cornell Eastern Music Ensemble (CEME). Cornell University. 2014-2017.  
 Vice President of Dance Club. Harbin Institute of Technology. 2010-2012.  
 President of HIT Musical Assemblé. Harbin Institute of Technology. 2010-2012.  
 President of Student Union. Harbin Institute of Technology. 2009-2011.