

# JINNING WANG

Graduate Research Assistant, PhD Student.

1520 Middle Dr  
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## PUBLICATIONS

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### *Journals*

**J. Wang**, F. Li, H. Cui, Q. Shi, and M. Trey, “Electricity Consumption Variation versus Economic Structure during COVID-19 on Metropolitan in the United States” *Nature Communications*, In-Press, 2022

H. Cui, S. Konstantinopoulos, Denis Osipov, **J. Wang**, F. Li, K. L. Tomsovic, J. H. Chow, “Disturbance Propagation in Power Grids With High Converter Penetration,” *Proceedings of the IEEE*, In-Press, 2022, doi: [10.1109/JPROC.2022.3173813](https://doi.org/10.1109/JPROC.2022.3173813).

X. Wang, F. Li, Q. Zhang, Q. Shi, and **J. Wang**, “Profit-Oriented BESS Siting and Sizing in Deregulated Distribution Systems,” *IEEE Trans. Smart Grid*, In-Press, 2022, doi: [10.1109/TSG.2022.3150768](https://doi.org/10.1109/TSG.2022.3150768).

B. Zhang, **J. Wang**, D. Liang, and X. Han, “Optimization Control Strategy of Distributed Energy Storage in Autonomous Microgrid Cluster on Consensus Algorithm,” *Power System Technology*, doi: [10.13335/j.1000-3673.pst.2019.1968](https://doi.org/10.13335/j.1000-3673.pst.2019.1968).

**J. Wang**, L. Wang, X. Han, R. Meng, and H. Guo, “Analysis on AC/DC Harmonic Coupling Characteristics of Converter Based on Harmonic State Space Modeling,” *Automation of Electric Power Systems*, doi: [10.7500/AEPS20190409002](https://doi.org/10.7500/AEPS20190409002).

### *Conferences*

**J. Wang**, F. Li, H. Cui, and Q. Zhang, “Impacts of VSG Control on Frequency Response in Power Systems with High-Penetration Renewables,” in *2021 IEEE 5th Conference on Energy Internet and Energy System Integration (EI2)*, Taiyuan, China, Oct. 2021, pp. 171–176. doi: [10.1109/EI252483.2021.9712880](https://doi.org/10.1109/EI252483.2021.9712880).

Y. Liu, T. Overbye, W. Wang, X. Fang, **J. Wang**, H. Cui, F. Li, “Transmission-Distribution Dynamic Co-simulation of Electric Vehicles Providing Grid Frequency Response,” in *IEEE PES General Meeting 2022*, Denver, July 2022, In-Press.

## RESEARCH EXPERIENCE

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**Heterogeneous Communication-Delay-Resilient Secondary Frequency Regulation from Aggregated Electric Vehicles** 1/2022 - Now

NREL, CURENT, UTK

Advisor: Xin Fang (NREL), Fangxing Fan Li

**Large-Scale Testbed (LTB)**

3/2021 - Now

CURENT, UTK

Advisor: Fangxing Fan Li

Advisor: Fangxing Fran Li

Shanxi Key Laboratory of PSOC, Taiyuan University of Technology

## EDUCATION

<b>PhD</b>	<b>University of Tennessee, Knoxville</b> Electrical Engineering GPA: 3.97/4.00	05/2020 – 05/2024 (expected)
<b>MS</b>	<b>University of West Florida</b> Data Science GPA: 4.00/4.00	05/2019 – 05/2020
<b>MS</b>	<b>Taiyuan University of Technology</b> Electrical Engineering GPA: 81.91/100	09/2017 – 07/2020
<b>BS</b>	<b>Taiyuan University of Technology</b> Electrical Engineering GPA: 85.61/100	09/2013 – 07/2017

## SKILLS

**General programming:** Python, C

**Power system analysis:** ANDES, PSSE, Matlab, PLECS

**Data analysis:** SQL, R, SAS, Spark

## HONORS AND AWARDS

<b>Min H. Kao EECS Fellowship</b>	08/2022
Excellent academic performance	
<b>China Graduate National Scholarship</b>	11/2019
Outstanding graduates	