SHENGYANG WU

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EDUCATION

University of Michigan   Ann Arbor, US
Ph.D. in Electrical Engineering   *September 2024 - Present*
Supervisor: Prof. Vladimir Dvorkin

Huazhong University of Science and Technology   Wuhan, China
M.Sc. in Electrical Engineering   *September 2021 - July 2024*
Supervisor: Prof. Dongyuan Shi

North China Electric Power University   Beijing, China
B.Sc. in Electrical Engineering and its Automation   *September 2017 - July 2021*
Supervisor: Prof. Zhaohao Ding

PUBLICATIONS

Submitted Publications

S1 **S. Wu.** and V. Dvorkin. Cyber Resiliency and Privacy Guarantees for Synthetic OPF Datasets. IEEE Control System Letters (Under Review).

Journal Publications

J1 **S. Wu.**, C. Yang, D. Shi and J.Wang. Efficient Generation of Power System Topology Diagrams Based on Graph Neural Network. *Engineering Applications of Artificial Intelligence* (accepted).

J2 **S. Wu.**, C. Yang, D. Shi and J.Wang. A Lightweight Framework for Measurement Causality Extraction and FDIA Localization. *IEEE Transactions on Smart Grid* (accepted).

J3 D. Hu, **S. Wu**, J. Wang., et al. Training a Dynamic Neural Network to Detect False Data Injection Attacks Under Multiple Unforeseen Operating Conditions. *IEEE Transactions on Smart Grid*, vol. 15, no. 3, pp. 3248-3261, May 2024, doi: 10.1109/TSG.2023.3339975.

J4 **S. Wu**, Z. Ding , J. Wang , et al. Unveiling bidding uncertainties in electricity markets: A Bayesian deep learning framework based on accurate variational inference. *Energy*, 2023, 276: 127286. doi: 10.1016/j.energy.2023.127286.

Conference Publications

C1 **S. Wu**, D. Hu, Y. Gao, J. Wang and D. Shi, "Interpretable Detection and Localization of False Data Injection Attacks Based on Causal Learning", *2023 IEEE Power & Energy Society General Meeting (PESGM)*, Orlando, FL, USA, 2023, pp. 1-5, doi: 10.1109/PESGM52003.2023.10253166.

C2 Z. Zhao, Y. Zou, **S. Wu**, et al, "VSC-HVDC Traveling Wave Protection Based on the First Current Extremum of the Non-Fault Pole", *2023 IEEE Power & Energy Society General Meeting (PESGM)*, Orlando, FL, USA, 2023, pp. 1-5, doi: 10.1109/PESGM52003.2023.10252595.

REVIEWER SERVICES

IEEE Transactions on Smart Grids	*Since 2024*
IEEE Transactions on Energy Markets, Policy, and Regulation	*Since 2024*
Journal of Modern Power Systems and Clean Energy	*Since 2024*
IEEE Power and Energy Society General Meeting	*Since 2023*

AWARDS

National Scholarships of China	*2018 & 2019*