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EDUCATION

2017– PhD in Electrical Engineering, Xi'an Jiaotong University, China

2013–2017 BSc in Electrical Engineering, Xi'an Jiaotong University, China

RESEARCH AREA

Three key words can be used to depict my research interests: reliability/resilience evaluation, integrated energy systems, and machine learning applications. At present, I am trying to use machine learning techniques (especially deep learning and reinforcement learning) to improve the efficiency and feasibility of reliability/resilience evaluation in complicated systems.

PUBLICATIONS

Notably, I only list the papers I wrote personally, and Gengfeng Li is my supervisor.

PEER-REVIEWED

2020 Li G, **Huang Y**, Bie Z, Ding T. Machine-learning-based reliability evaluation framework for power distribution networks. *IET Generation, Transmission & Distribution*. doi:10.1049/iet-gtd.2019.1520.

2019 Li G, **Huang Y**, Bie Z, AN J, Sun S, Qiu Q, Gao X, Peng Y, Lei Y. Review and prospect of operational reliability evaluation of integrated energy system *Electric Power Automation Equipment*. doi:10.16081/j.epae.201908040.

2018 Li G, **Huang Y**, Bie Z. Reliability evaluation of smart distribution systems considering load rebound characteristics. *IEEE Transactions on Sustainable Energy*. doi:10.1109/TSTE.2018.2810220.

2017 **Huang Y**, Li G, Bie Z, Kou Y, Jiang J. Reliability evaluation of distributed integrated energy systems. *Smart Power*. doi:10.3969/j.issn.1673-7598.2017.07.008.

PEER-REVIEWED CONFERENCE PROCEEDINGS

2019 **Huang Y**, Li G, Wang J. Perceptron learning model based reliability evaluation method of medium voltage electrical distribution networks. *Proceeding of ICAE2019: The 11th International Conference on Applied Energy*.

2018 **Huang Y**, Li G, Bie Z, Jiang J. Interaction strategy of user side storage devices for the day-ahead dispatch of distributed integrated energy systems. *2018 China International Conference on Electricity Distribution (CICED)*. doi:10.1109/CICED.2018.8592364.

2017 **Huang Y**, Li G. Reliability evaluation of distributed integrated energy systems via Markov chain Monte Carlo. *2017 IEEE Conference on Energy Internet and Energy System Integration (EI2)*. doi:10.1109/EI2.2017.8245412.

AWARDS & HONOURS

2018 National Scholarship for Postgraduate students. Award ID: 2018.14283. Amount: 20,000 CNY.

2018 National Second Prize of "HUAWEI Cup" The 15th China Post-Graduate Mathematical Contest in Modelling. Award ID: B2018200628.

2016 UHV (Ultra High Voltage) Scholarship. Amount: 10,000 CNY.

2016 National Second Prize of The 9th National University Student Social Practice and Science Contest on Energy Saving & Emission Reduction. Award ID: 2016A-B-019.

PROJECTS

Notably, I participate in the following projects as a PhD student, not the project leader.

2020– Researches on model-data hybrid driven operational reliability evaluation of integrated energy systems. National Natural Science Foundation of China (Grant No. 51977168). 01/2020.01-12/2023.

2017–2019 Researches on the model and algorithm of reliability evaluation for integrated energy system. National Natural Science Foundation of China (Grant No.51607136). 01/2017-12/2019.

2016–2020 Basic theory for the planning, operation and markets of Energy Internet. National Key Research and Development Program of China (Grant No. 2016YFB0901900). 06/2016-06/2020.

TECHNICAL SKILLS

Languages	Chinese, English (preparing for the TOEFL test)
Programming	Python, C/C++, Matlab, LaTeX
Tools	TensorFlow, PyTorch, CVX, Gorubi, OpenDSS