

Yaze (Arthur) Li

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EDUCATION

• University of Arkansas

PhD, Electrical Engineering

August 2023

Fayetteville, AR

Thesis: Achieving High Renewable Energy Integration in Smart Grids with Machine Learning

• Tsinghua University

BS, Electrical, Electronics and Communication Engineering

July 2017

Beijing, China

SKILLS

- **Programming Languages:** Python, MATLAB, R, C, MySQL
- **Machine Learning Frameworks:** Tensorflow, PyTorch, NumPy, Pandas, Stable Baselines
- **Engineering Tools:** Simulink, PSS/E, TARA, ASPEN OneLiner, OPAL-RT, LabVIEW, L^AT_EX, AMPL
- **Electrical Engineering Skills:** Power flow, State estimation, Short circuit analysis, SCADA system

EXPERIENCE

• Manager, Power System Engineering

E Source

Aug 2025 – Present

Calgary, AB

- Lead PJM M-3 Do-No-Harm (DNH) Studies and develop automation tools via the TARAVIEWER API.
- Lead MISO Affected System Studies and Replacement/Surplus Interconnection Studies for generation interconnection projects.
- Performed PSS/E Model Quality Testing (MQT) for NYISO projects per EMT Modeling Guideline (UG28).
- Led steady state study team and maintained automation tools for wind, solar, and BESS projects in Texas.

• Power System Engineer

CF Power Ltd. – an E Source Company

Aug 2024 – Aug 2025

Calgary, AB

- Led steady state team; performed ERCOT interconnection studies (power flow, stability, VRT) using PSS/E, TARA, and ASPEN OneLiner.
- Supported PJM RTEP 2029 case build and conducted dynamic studies for TC1/TC2 cluster projects.
- Conducted PJM Cluster Study including model development, case build, and transient stability analysis.
- Developed PSS/E automation tool and performed transient stability study for AESO Cluster Study.

• Graduate Assistant

University of Arkansas (SEEDS & CITES)

August 2017 – July 2023

Fayetteville, AR

- Developed DP and DDPG-based scheduling algorithms for battery-assisted PV systems, reducing costs by 29.3% over ten years. [Journal][GitHub]
- Proposed a MEC scheduling framework for distribution networks with renewables using Pan-

dapower and Stable Baselines. [Journal][GitHub]

- Developed cyberattack detection algorithms (DQN, dynamic watermarking) for smart grids with 50 ms detection delay. [Journal][Journal]

PUBLICATIONS [GOOGLE SCHOLAR LINK]

- **Y. Li** and J. Wu, “Optimum design of battery-assisted photo-voltaic energy system for a commercial application,” in *Power & Energy Society General Meeting (PESGM)*. IEEE, 2019. [Conference][GitHub]
- **Y. Li** and J. Wu, “Optimum integration of solar energy with battery energy storage systems,” *IEEE Transactions on Engineering Management*, 2020. [Journal][GitHub]
- S. Nath, **Y. Li**, J. Wu, and P. Fan, “Multi-user multi-channel computation offloading and resource allocation for mobile edge computing,” in *ICC 2020–2020 IEEE International Conference on Communications (ICC)*. IEEE, 2020, pp. 1–6. [Conference]
- **Y. Li** and J. Wu, “Low latency cyberattack detection in smart grids with deep reinforcement learning,” *International Journal of Electrical Power & Energy Systems*, vol. 142, p. 108265, 2022. [Journal][GitHub]
- **Y. Li**, N. Lin, J. Wu, Y. Pan and Y. Zhao, “Low Latency Attack Detection with Dynamic Watermarking for Grid-Connected Photovoltaic Systems,” in *IEEE Journal of Emerging and Selected Topics in Industrial Electronics*, doi: 10.1109/JESTIE.2023.3327051. [Journal][GitHub]
- **Y. Li**, J. Wu and Y. Pan, “Deep Reinforcement Learning for Online Scheduling of Photovoltaic Systems with Battery Energy Storage Systems,” in *Intelligent and Converged Networks*, vol. 5, no. 1, pp. 28–41, March 2024, doi: 10.23919/ICN.2024.0003. [Journal][GitHub]
- **Y. Li**, J. Wu and Y. Pan, “Optimum Scheduling of Truck-Based Mobile Energy Couriers (MEC) Using Deep Deterministic Policy Gradient,” in *Intelligent and Converged Networks*, vol. 6, no. 3, pp. 195–208, September 2025, doi: 10.23919/ICN.2025.0016. [Journal][GitHub]

RESEARCH INTEREST

Power System analysis, Detection and Estimation, Renewable Energy Systems