

Deep Learning for Power System Applications

Case Studies Linking Artificial Intelligence and Power Systems

This book provides readers with an in-depth review of deep learning-based techniques and discusses how they can benefit power system applications. Representative case studies of deep learning techniques in power systems are investigated and discussed, including convolutional neural networks (CNN) for power system security screening and cascading failure assessment, deep neural networks (DNN) for demand response management, and deep reinforcement learning (deep RL) for heating, ventilation, and air conditioning (HVAC) control.

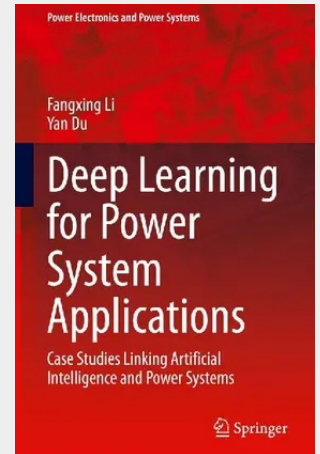
Deep Learning for Power System Applications: Case Studies Linking Artificial Intelligence and Power Systems is an ideal resource for professors, students, and industrial and government researchers in power systems, as well as practicing engineers and AI researchers.

- Provides a history of AI in power grid operation and planning;
- Introduces deep learning algorithms and applications in power systems;
- Includes several representative case studies.

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