Special Issue

Machine Learning for Next-Generation Power Systems: Challenges and Opportunities

Message from the Guest Editor

The integration of machine learning into the field of power systems represents a transformative shift to revolutionize the way we generate, distribute, and consume electricity. This Special Issue aims to explore the forefront of this burgeoning field, presenting cutting-edge research, innovations, and applications that demonstrate the potential and address the complexities of leveraging machine learning in modern power systems. Research areas may include (but are not limited to) the following: Machine Learning Algorithms for:

- Power System Operation Optimization;
- Power System Planning;
- Predictive Maintenance and Fault Detection;
- Renewable Energy Integration;
- Smart Grid Technologies;
- Energy Consumption Forecasting;
- Real-Time Energy Management;
- Enhancing Grid Stability and Reliability;
- Data-Driven Decision Making in Power Systems;
- Cybersecurity in Power Systems;
- Energy Storage Systems Optimization;
- Demand Response and Consumer Behavior.

I look forward to receiving your contributions.

Guest Editor

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Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

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