Machine Learning and Optimization with Applications of Power System III

Guest Editor:

Prof. Dr. Hongseok Kim
Department of Electronic Engineering, Sogang University, Seoul 04107, Republic of Korea

Deadline for manuscript submissions:
closed (31 October 2023)

Message from the Guest Editor

This Special Issue is focused on machine learning and optimization techniques that can be applied for power system operation, such as energy data analytics, time series energy forecasting, renewable energy markets, energy storage systems (ESS), microgrids, and distribution networks. Modern power systems face new challenges due to the high penetration of renewable generation, and thus, prediction and control are essential for grid reliability. Thanks to the massively deployed energy IoT sensors and energy big data, machine learning, including deep learning, is being actively applied to predict renewable generation and electric loads. The accurate forecasting of PV and wind power is also of prime importance for strategic bidding in renewable energy markets. Deep learning techniques including recurrent neural networks (RNN), long short-term memory (LSTM), and convolution neural networks (CNN) are expected to improve the prediction accuracy of time series energy data.

Special Issue

Editor-in-Chief

Prof. Dr. Enrico Sciubba
Department of Mechanical and
Aerospace Engineering,
University of Roma Sapienza, Via
Eudossiana 18, 00184 Roma, Italy

Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.
High Visibility: indexed within Scopus, SCIE (Web of Science), Ei Compendex, RePEc, Inspec, CAPlus / SciFinder, and other databases.
Journal Rank: CiteScore - Q1 (Control and Optimization)

Contact Us