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# Machine Learning Algorithms for Operation and Control of Microgrids with Distributed Energy Sources

Guest Editor:

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Deadline for manuscript submissions:
**closed (20 April 2023)**

## Message from the Guest Editor

Dear Colleagues,

It is our pleasure to invite submissions to the Special Issue on “Machine Learning Algorithms for Operation and Control of Microgrids with Distributed Energy Sources”.

In recent years, microgrids have attracted attention of researchers due to their ability to sustain the penetration of renewables and supply power locally during emergencies. Various mathematical model-based optimization models have been developed and are widely applied in operation and control of microgrid systems. However, with the high uncertainty of distributed energy sources, traditional methods often face two major challenges: (i) Mathematical-based optimization models are not flexible for dynamic environments with high uncertainties. (ii) Optimization process could be very time-consuming. Modern machine learning algorithms have been rapidly growing to solve operational and control problems in microgrid systems. In this Special Issue, we are looking for novel machine learning algorithms/methods, and applications for the operation and control of microgrids.

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## Message from the Editor-in-Chief

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