Machine Learning and Data-Driven Approaches to Photovoltaic and Solar Forecasting

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Message from the Guest Editors

Dear Colleagues,

To comply with the ever-challenging constraints imposed by environmental impact reduction policies, electricity generation from renewable electricity sources has grown rapidly since the last decade and is expected to continue to grow. However, a big family of renewable sources have the peculiarity of being non-programmable. Among these, the photovoltaic (PV) sources are the ones that have developed more rapidly. Solar and PV forecasts are in general significant for enabling an optimal unit commitment and economical dispatch, for ensuring grid stability and for planning the operations of power plants.

Machine learning (ML), or more generally Artificial Intelligence, are nowadays being applied in almost every aspect of human life, especially in forecasting energy production from renewable.

This Special Issue will cover recent advances in ML for PV and solar forecasts. Priority will be given to research articles that present significant advances in their field of application or propose methods never applied in the renewable forecasting field.

Special Issue

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Message from the Editor-in-Chief

The new open access journal Forecasting provides an interdisciplinary forum for all aspects related to the immensely broad field of time series analysis and forecasting. The range of applications in forecasting is enormous, from energy forecasting or economic analysis of stock indices prediction, climate forecasting, chemical or natural process forecasting, etc. It is the aim of the journal to publish relevant topical contributions for the scientific community of forecasting in a timely manner. We would like to invite you to contribute to the journal by sending us your high quality research papers and would be pleased to welcome you as one of our authors.

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