Special Issue

Cyber-Physical Systems in Real-Time and Edge Computing for Smart Grids

Message from the Guest Editors

A real-time cyber–physical system for Smart Grid (SG) must integrate and process real-time data from generation, distribution, and consumption facilities. The systems involved must have real time monitoring, communication, computing, and cloud storage capabilities.

There is currently a trend towards the application of Edge Computing (EC) with the incorporation of equipment located in the same facilities as edge nodes that act in a second processing phase to contribute to the optimisation of production or for the rapid detection of abnormal operating conditions.

This Special Issue is dedicated to research the improvement of response times with edge computing, cloud analytics techniques for the optimisation of production, techniques that allow for the development of edge–grid applications for consumption close to the generation site, the adoption of measures to guarantee response times according to standards, the application of transmission techniques with protocols such as IEC 61850 to facilitate the flow of information in real time, and all kinds of techniques that contribute to the coordination of renewable energy generation plants.

Guest Editors

Prof. Dr. Víctor Pallarés-López

Prof. Dr. Miguel González-Redondo

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Deadline for manuscript submissions

closed (20 October 2022)



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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multidimensional network.

Editor-in-Chief

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