Call for Papers —2018 Workshop on

Intelligent Operations Management in the Energy Sector IOMES 2018

in conjunction with GECCO 2018; Kyoto, Japan, July 10-15, 2018.

Organisers:

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https://iomes2018.github.io

It is our pleasure to invite you to the 2018 Workshop in Intelligent Operations in the Energy Sector (IOMES 2018) to be held in conjunction with the 2018 Genetic and Evolutionary Computation Conference, in Kyoto, Japan, on July 10-15, 2018.

The energy sector spans from traditional carbon-based non-renewable sources such as oil and gas through nuclear to modern renewables including wind, tide, and solar energy. All of these technologies are resource-intensive: they require massive investment in the construction of expensive assets and their maintenance over several decades.

Recent advances in sensors, data management, and cloud computing are transforming the environment for operations managers in these industries. Large, rich datasets can be readily assembled from diverse sources with substantial computational power available for analytics.

This creates a fertile environment for the application of computational intelligence. Prediction, classification and optimisation algorithms can support decision-makers in the management of highly expensive resources, where even small percentage cost reductions can amount to millions of dollars. In fact, the application of computational intelligence can be transformative, leading to large-scale efficiency and major changes in operations.

Topics of interest

We seek contributions on a range of topics related to this theme including but not limited to the following two main focus areas:

Applications papers, like those related to (i) wind, wave and tidal energy production, (ii) oil, gas or coal production, (iii) nuclear energy production, (iv) predictive maintenance, and (v) logistics and supply chain optimisation.

Relevant methods and techniques like (i) multi-component optimisation, (ii) simulation-optimisation, (iii) probabilistic modelling with large real-world datasets, and (iv) prediction, classification, and clustering with large real-world datasets.

Important dates

Workshop submissions open: 27.02.2018

Workshop submissions deadline: 27.03.2018 (UTC-12:00) (strict!)

Decision notifications: 10.04.2018 IOMES 2018 Workshop: 10-15.07.2018

Submissions

Paper submissions should be a PDF file with a maximum of 8 pages that conforms to the GECCO 2018 paper submission instructions. Visit https://iomes2018.github.io/04.Submissions/ for more information.