Data-Based Learning Methods and Their Applications

Guest Editors:

Prof. Dr. Yuanshi Zheng
Mechanical and Electrical
Engineering, Xidian University,
Xi'an, China

Dr. Jian Liu
Mechanical and Electrical
Engineering, Xidian University,
Xi'an, China

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Message from the Guest Editors

Data-based learning methods are an important and hot research direction in modern control theory and pattern recognition, among other fields. In contrast to traditional control techniques, data-based learning control methods require less information about system dynamics and use collected and stored data to construct the controllers or the control inputs and to discover underlying patterns; these methods have demonstrated superior performance. Despite the success of data-based learning methods for repetitive or non-strict repetitive control systems, pattern recognition, reinforcement learning, etc., data-based learning paradigms and their applications are still lacking.

This Special Issue aims to collect works on novel data-driven methods and their applications for repetitive or non-strict repetitive control systems. Works that include topics such as the design and analysis of iterative learning control systems, data-driven learning control techniques, non-standard iterative learning control, reinforcement learning, pattern recognition, and other learning control topics based on data are of particular interest.

Special Issue

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica,
Politecnico di Milano, Piazza L.
da Vinci 32, 20133 Milano, Italy

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 multi-dimensional network.

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