



## **Machine Learning for Process Systems Engineering, Classification, Estimation, Prediction, and Updating**

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### **Message from the Guest Editors**

Control, FDI and FTC problems are defined in several cases of application as classification or regression issues. For example, the detection and identification of faults in complex systems in the presence of multiple faults can be considered as a classification problem, and the estimation of unmeasurable state variables for the control of a system as a regression problem. Artificial intelligence tools such as Machine Learning, Deep Learning, and Reinforcement Learning are powerful methods increasingly used to provide robust solutions to these issues.

This Special Issue aims to gather and highlight works using artificial intelligence tools to solve classification, regression and model-updating problems on application cases in various fields, such as sensors, microelectronics, transport and energy.





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