



Distributed Optimization: Challenges and Applications

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Message from the Guest Editor

Dear Colleagues,

Recent years have borne witness to the proliferation of modern sensors and actuation equipment with ever-increasing processing power and built-in communication capabilities. As a direct result, most modern monitoring and control systems, generally referred to as multi-agent networked systems or multi-agent systems for short, have come to be characterised as multiple autonomous agents interacting over an ad hoc network to achieve a common goal.

This Special Issue focuses on fully distributed optimisation techniques derived to enable multi-agent systems to observe, learn, and implement optimal decisions to achieve a common goal. Moreover, applications of these distributed optimisation techniques in modelling social behaviour of robots and humans, internet of things (IoT), smart energy distribution systems, federated learning, distributed estimation, decentralised control, and autonomous vehicles are of particular interest.

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Message from the Editor-in-Chief

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