Special Issue

Distributed Optimization: Challenges and Applications

Message from the Guest Editor

Recent years have borne witness to the proliferation of modern sensors and actuation equipment with everincreasing 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 multiagent 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.

Guest Editor

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Deadline for manuscript submissions

closed (20 September 2024)



Electronics

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mdpi.com/si/137679

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