Special Issue

Research Progress on the Application of Multi-agent Systems

Message from the Guest Editors

Multi-agent systems (MAS) revolve around the design and analysis of systems comprising multiple autonomous agents, each capable of independent decision making and action. The applications of multiagent systems span various domains, such as robotics, economics, transportation, and social sciences. The importance of multi-agent systems lies in their ability to solve complex problems that cannot be effectively addressed by single entities. They promote decentralized decision making, which can enhance efficiency, adaptability, and robustness in dynamic and uncertain environments. This Special Issue comprises an in-depth exploration of recent MAS applications, including innovative approaches to learning, coordination, and cooperation among autonomous agents, as well as agent-based simulations, in various fields. Topics of interest include, but are not limited to: Multi-agent reinforcement learning; Multi-agent systems for smart cities; Multi-agent systems in healthcare; Multi-agent systems for cybersecurity; Multi-agent systems for social networks; Multi-agent systems in industry; Autonomous vehicles; Swarm intelligence.

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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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