

Call for Papers for the Special Session on

Distributed Optimization, Game, and Learning-Based Control in Networked Systems with Their Industrial Applications

Organized and co-chaired by

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Technical Outline of the Session and Topics

Networked systems are increasingly important in industrial applications such as smart grids, intelligent transportation, industrial Internet of Things, and networked robotics. Their growing scale, complexity, and interconnectivity call for advanced approaches to distributed decision-making, coordination, and control under communication constraints, uncertainty, and dynamic operating conditions. Distributed optimization, game, and learning-based control have emerged as effective tools for addressing these challenges. This special session aims to bring together recent advances in these areas for networked systems, with a particular focus on industrial applications, including new theoretical results, algorithmic developments, and practical implementations.

Topics of the session include, but are not limited to:

- Distributed optimization in networked systems
- Game-based decision-making and coordination
- Learning-based control and optimization
- Multi-agent coordination and cooperative control
- Resilient and secure control of networked systems
- Data-driven and adaptive control for industrial systems
- Distributed resource allocation and energy management
- Smart grids, microgrids, and energy internet applications
- Intelligent transportation and connected autonomous systems

Timeline for Authors

All the instructions for paper submission are available on the conference website. Please visit www.iecon2026.org or scan the QR code for the timeline.

