





IEEE Open Journal of Control Systems (OJ-CSYS)

Special Section on "Intersection on Machine Learning with Control"

Unprecedented technological advances have fueled the creation of devices that can collect, generate, store, and transfer large amounts of data. This massive data outpour is profoundly changing the way in which complex engineering problems are solved, calling for the conception of new interdisciplinary tools at the intersection of machine learning, dynamic systems and control, and optimization. While the repurposing of control theories building on new machine learning methods can be highly successful, dynamic systems and control can greatly contribute to analyze and devise novel adaptive, safety-critical controllers with performance guarantees. This special section aims to contribute to this growing area of interest.

Prospective authors are invited to submit original contributions on related topics including, but are not limited to, the following:

- Machine learning for dimensionality reduction and system identification
- Emerging applications for learning-based control
- Data-driven optimization and control for dynamical systems
- Safe reinforcement learning and safe adaptive control
- Bridging model-based and learning-based control systems
- Distributed learning over distributed systems
- Reinforcement learning for multiagent systems
- Optimization, dynamics and control for machine learning
- Reinforcement learning and statistical learning for dynamical and control systems

Special Section Schedule:

Special Section Submission Deadline: 30 April 2022

- Notification of reviews of and recommendations: 10 weeks after initial submission
- ✤ Final notification of regular papers: 20 weeks after initial submission
- Manuscript publication on IEEE Xplore: 24 weeks after initial submission
 Review process starts at time of manuscript submission

Submission Site: <u>https://css.paperplaza.net/</u>

Article Processing Fees (APCs): Standard flat rate of \$1850 **Special Offer:** APCs waived for the first 20 accepted papers IEEE Members get 5% off / IEEE CSS Members get 20% off

Length: 12 pages or under, not including references. Justification of longer papers is required.

Open Journal of Control Systems (OJ-CSYS) is a new journal that will publish its inaugural volume in 2022 which covers significant theoretical and applied developments that impact the field of dynamic systems and control. The field integrates elements of sensing, communication, decision and actuation components as relevant for the analysis, design and operation of dynamic systems and control. The systems considered include: technological, physical, biological, economic, organizational and other entities, and combinations thereof.

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