



IEEE Open Journal of Control Systems (OJ-CSYS)

Special Section on Intersection of Machine Learning with Control

*This special section is recurring.

The scientific and technological impact of machine learning and artificial intelligence continues to reverberate through all areas of science and engineering. As learning-enabled systems are increasingly deployed in complex operating environments, there is a growing need for formal guarantees for these systems in a wide range of applications, from mainstream to critical. Prime examples are physical control systems, such as autonomous systems (e.g., self-driving cars). Another example is the growing prominence of large language models, which combine continuous and discrete (symbolic) dynamics and are increasingly interconnected in a closed-loop fashion with physical control systems, such as robots. These challenges open new directions in control systems. This special section of the IEEE Open Journal of Control Systems aims to contribute to this growing area of interest and thus calls for papers situated at the intersection of machine learning and control.

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

- Emerging theory and 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 for multi-agent systems, including reinforcement learning
- Optimization, dynamics, and control for machine learning
- Analysis of capabilities and fundamental limits of machine learning through the lens of control systems
- Analysis of large language models from a control and dynamical systems perspective
- Formal guarantees for physical artificial intelligence

Special Section Schedule:

- **Special Section Submission Window: 30 September 2026 – 15 May 2027**
- Notification of reviews 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: <https://css.paperplaza.net/>

Length: 10-15 pages, not including references. Justification of longer papers is required.

Discounts: 50% discounts on APCs are available for the first several papers published in this special section; inquire with the editorial assistant for more information.

***Open Journal of Control Systems (OJ-CSYS)** 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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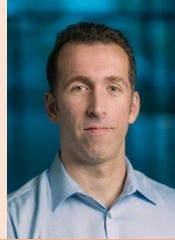


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