# IEEE Transactions on Cybernetics

# CALL FOR PAPERS

## for Special Issue on

## Prescribed-Time Control: The First Decade and Beyond

**Theme:** Since the seminal work by Song et al. on prescribed-time stabilization of nonlinear systems published in 2017, nearly a decade has passed. This theoretical paradigm has since evolved into a flourishing frontier field within automatic control, whose research output and theoretical depth are now on par with the long-established classical subfields of the discipline. Distinct from conventional control strategies, prescribed-time control (PTC) uniquely permits users to arbitrarily predefine the convergence time of a dynamical system, irrespective of the system's initial conditions. This remarkable property marks a fundamental breakthrough relative to classical asymptotic, finite-time, and fixed-time stabilization frameworks. PTC is critically important for cybernetic systems requiring predictable, time-critical performance, such as multi-agent robotics, missile guidance, autonomous vehicle emergency braking, and time-constrained industrial automation. However, challenges remain in robustness to noise and perturbations, scalability, and the gap between theory and real-world deployment. Accordingly, this special issue seeks original and high-quality submissions that advance the theory, overcome current limitations, and demonstrate the distinct value of prescribed-time control in complex and intelligent cybernetic systems.

### This special issue will focus on (but not limited to) the following topics:

Foundational theories and new design paradigms for prescribed-time stabilization and tracking; Robust prescribed-time control against measurement noise, input disturbances, and dynamic uncertainties; Prescribed-time observers and output-feedback for systems with unmeasurable states; Prescribed-time control for multi-agent systems: consensus, formation, and distributed optimization; Prescribed-time control for cyber-physical systems with communication delays and packet loss; Learning-enhanced prescribed-time control; Prescribed-time control for autonomous and robotic systems; Applications of prescribed-time control in missile guidance, spacecraft rendezvous, emergency braking, and industrial automation; Fixed-time vs. prescribed-time control: comparative studies and hybrid schemes; Non-singular and numerically implementable realization schemes for prescribed-time control systems; Open problems, surveys, and visionary perspectives on the future of prescribed-time control.

### Manuscript Preparation and Submission

Follow the guidelines in "Information for Authors" in the IEEE Transaction on Cybernetics https://www.ieeesmc.org/publications/transactions-on-cybernetics. Please submit your manuscript in electronic form through Manuscript Central web site: https://mc.manuscriptcentral.com/cyb-ieee. On the submitting page # 1 in popup menu of manuscript type, select: SI on Prescribed-Time Control: The First Decade and Beyond. Submissions to this special issue must represent original materials that have been neither submitted to, nor published in, any other journal. The review process for the special issue submissions and the paper length requirement are the same as the regular issue papers.

**Note:** The recommended papers for the special issue are subject to the final approval by the Editor-in-Chief. Some papers may be published in a regular issue, at the EIC discretion. Depending on the number of accepted manuscripts, this special issue could be published as a special section in a regular issue.

### Timetable:

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| **Paper submission:** | **November, 2026** |
| **Completion of first round of review:** | January, 2027 |
| **Completion of final review:** | **April, 2027** |
| **Submission of final manuscripts:** | May, 2027 |
| **Scheduled publication:** | **June, 2027** |

### Guest Editors:


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