IEEE Control Systems Society™

April 2025

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COSPONSORED BY
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IEEE ROBOTICS AND AUTOMATION SOCIETY

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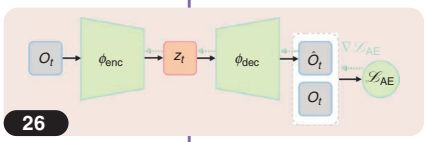
PAPERS

IEEE control systems

April 2025 Volume 45 Number 2

WWW.IEEECSS.ORG/PUBLICATIONS/CSM

FEATURES



COVER ART CREATED BY NICOLÒ BOTTEGHI

DESCRIPTION OF THE COVER ART:
STATE REPRESENTATION LEARNING IS THE PROCESS OF DISCOVERING LOW-DIMENSIONAL STATE REPRESENTATIONS FROM HIGH-DIMENSIONAL OBSERVATIONS (E.G., IMAGES OR SENSOR DATA) USING NEURAL NETWORKS. THESE COMPACT REPRESENTATIONS ENABLE DATA-EFFICIENT, INTERPRETABLE, AND ROBUST CONTROL, PAVING THE WAY FOR ADVANCEMENTS IN REAL-WORLD APPLICATIONS.

DEPARTMENTS

Digital Object Identifier 10.1109/MCS.2025.3534968

» DEPARTMENTS

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IEEE Control Systems publishes a variety of columns. "Applications of Control" columns are industrially oriented summaries of innovations in control technology. "Focus on Education" typically describes some aspect of education, such as novel control experiments. "Lecture Notes" can be theoretical in nature as long as they have clear tutorial value and intent. See recent issues for examples of these and other types of columns. Authors are encouraged to contact the editor-in-chief about the suitability of potential columns.

A detailed Author's Guide, a sample formatted manuscript, and LATEX template can be found at http://ieeecss.org/publication/ieee-control-systems-magazine. The specifications in this guide should be followed by all submissions.

All manuscripts should be submitted electronically to the *IEEE Control Systems* website, https://css.paperplaza.net/conferences/scripts/start.pl, with inquiries on appropriateness of content e-mailed to r.sepulchre@eng.cam.ac.uk.

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Periodicals postage paid at New York, NY, and additional mailing offices. Postmaster: Send address changes to *IEEE Control Systems*, IEEE, 445 Hoes Lane, Piscataway, NJ 08854 U.S.A. Canadian GST #125634188

Printed in U.S.A

UPCOMING CONFERENCES

American Control Conference

ACC 2025

July 8–10, Denver, CO, USA

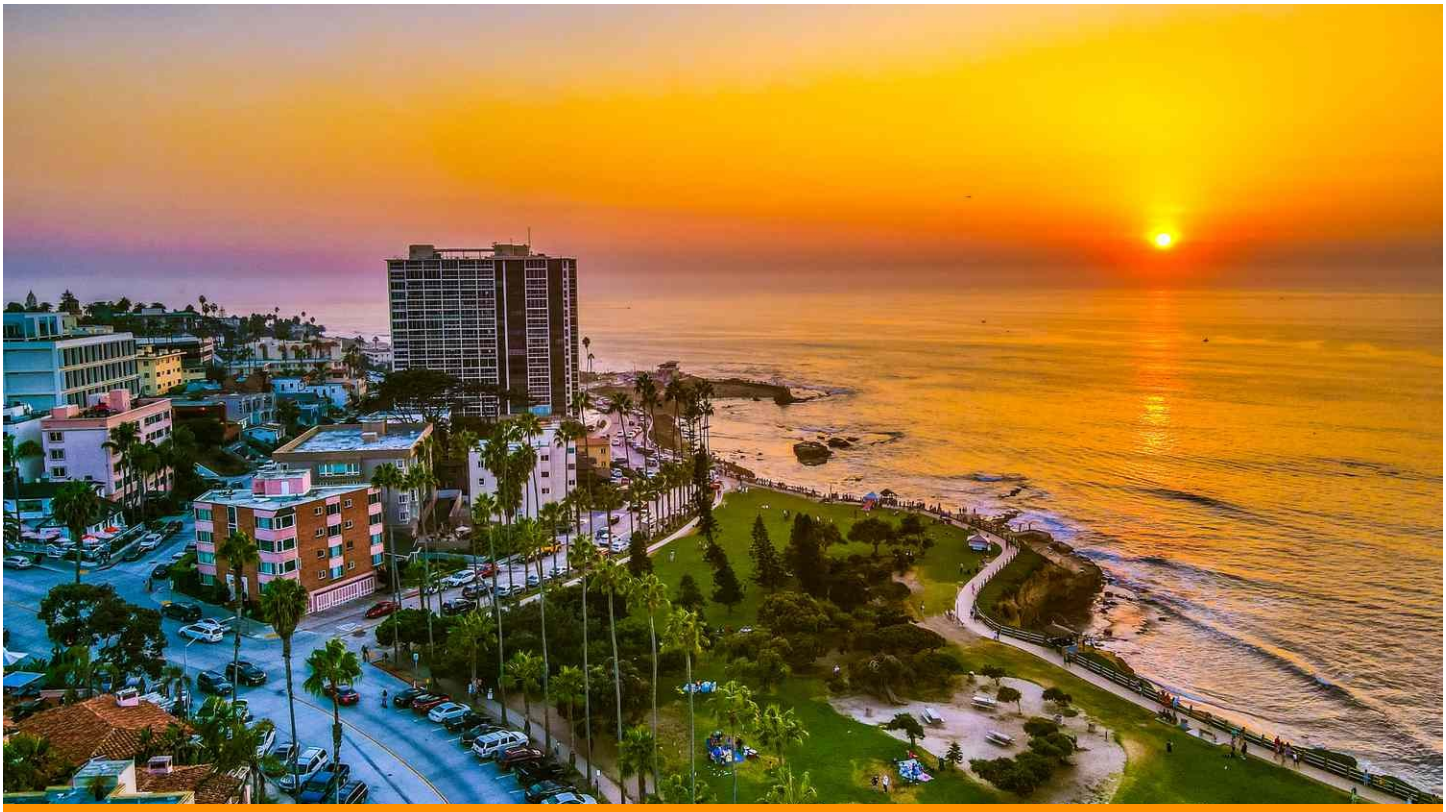
L-CSS option Submission
~~September 13, 2024~~ (Passed)

ACC Manuscript Submission
~~September 27, 2024~~ (Passed)

Acceptance/Rejection Notice
January 24, 2025

Final Manuscript Submission
~~March 14, 2025~~ (Passed)

https://acc2025.a2c2.org/



Conference on Control Technology and Applications

CCTA 2025

August 25–27, San Diego, USA

Tutorial Session Proposals Due
~~29 January, 2025~~ (Passed)

Invited Session Proposals Due
~~24 February, 2025~~ (Passed)

Paper Submissions Due
~~5 February, 2025~~ (Passed)

Registration Opens
mid May, 2025

Notification of Acceptance
mid May, 2025

Final Paper Uploads
30 June, 2025

https://ccta2025.ieeecss.org/

Conference on Decision and Control

CDC 2025

December 10–12, Rio de Janeiro, Brazil

Initial Paper Submissions to L-CSS with CDC Option Due
~~March 17, 2025~~ (Passed)
Invited Session Proposals Due
~~March 24, 2025~~ (Passed)
Initial Paper Submissions Due
~~March 31, 2025~~ (Passed)
Workshop Proposals Due
May 2, 2025
Decision Notification
Mid-July, 2025
Final Submissions and Advance Registration Due
September 3, 2025

https://cdc2025.ieeecss.org/

American Control Conference

ACC 2026

May 26–29, New Orleans, LA, USA

L-CSS option Submission
September 12, 2025

ACC Manuscript Submission
September 26, 2025

Acceptance/Rejection Notice
January 23, 2026

Final Manuscript Submission
March 13, 2026

https://acc2026.a2c2.org/