

PUBLICATIONS CONTENT DIGEST



R1

CSS Publications Activities

Vice-President

ANDREA SERRANI *Ohio State University*

<http://ieeecss.org/publications>

Journal Editors

IEEE Transactions on Automatic Control

ALESSANDRO ASTOLFI *Imperial College London and University of Rome “Tor Vergata”*

<http://ieeecss.org/publication/transactions-automatic-control>

IEEE Transactions on Control Systems Technology

ILYA KOLMANOVSKY *University of Michigan*

<http://ieeecss.org/publication/transactions-control-systems-technology>

IEEE Transactions on Control of Network Systems

LACRA PAVEL *University of Toronto*

<http://ieeecss.org/publication/transactions-control-network-systems>

IEEE Control Systems Letters

LAURA MENINI *University of Rome “Tor Vergata”*

<http://ieeecss.org/publication/control-systems-letters>

IEEE Control Systems Magazine

ANURADHA ANNASWAMY *Massachusetts Institute of Technology*

<http://ieeecss.org/publication/ieee-control-systems-magazine>

IEEE Open Journal of Control Systems

SONIA MARTINEZ *University of California, San Diego*

<http://ieeecss.org/publication/open-journal-control-systems>

Electronic Information

CSS State-Space Forum

FABIO PASQUALETTI *University of California, Riverside*

<https://state-space.ieeecss.org>

***Submission and editorial instructions can be found on each publication’s homepage**

IEEE TRANSACTIONS ON AUTOMATIC CONTROL

A PUBLICATION OF THE IEEE CONTROL SYSTEMS SOCIETY



JULY 2025

VOLUME 70

NUMBER 7

IETAA9

(ISSN 1558-2523)

REGULAR PAPERS

Local Differential Privacy for Decentralized Online Stochastic Optimization With Guaranteed Optimality and Convergence Speed	<i>Z. Chen and Y. Wang</i>	4238
State Estimator Design: Addressing General Delay Structures With Dissipative Constraints	<i>Q. Feng, F. Xiao, and X. Wang</i>	4254
Low-Complexity Control for a Class of Uncertain MIMO Nonlinear Systems Under Generalized Time-Varying Output Constraints	<i>F. Mehdifar, L. Lindemann, C. P. Bechlioulis, and D. V. Dimarogonas</i>	4270
A Perron–Frobenius Theorem for Strongly Aperiodic Stochastic Chains	<i>R. Parasnis, M. Franceschetti, and B. Touri</i>	4286
Sensor and Filter Attacks Against Distributed State Estimation With Dual Stealthiness	<i>K. Jin and D. Ye</i>	4302
Soft Safety Analysis of Interconnected Systems	<i>W. Zhang, D. Zhao, and S. Liang</i>	4315
Green Routing Game: Pollution-Aware Mixed Fleet Logistics With Shared Charging Facilities	<i>H. Sasahara, G. Dán, S. Amin, and H. Sandberg</i>	4330
Singularly Perturbed Hybrid Systems for Analysis of Networks With Frequently Switching Graphs	<i>A. Tanwani, H. Shim, and A. R. Teel</i>	4344
Decentralized Upper Confidence Bound Algorithms for Homogeneous Multi-agent Multi-armed Bandits	<i>J. Zhu, E. Mulle, C. S. Smith, A. Koppel, and J. Liu</i>	4360
Discrete-Time Partially Observable Stochastic Optimal Control Problems of McKean–Vlasov Type and Branching Particle System Approximations	<i>H. Wan, G. Wang, and J. Xiong</i>	4376
Optimal Selection of Intervention Timing in Opinion Dynamics	<i>Q. Zhang, L. Wang, X. Wang, and G. Chen</i>	4392
A Large-Population Stochastic Differential Game With Terminal State Constraint and Common Noise	<i>P. Huang, G. Wang, and S. Wang</i>	4408
Securing Mobile Robotic Networks Against Replacement Attack	<i>Y. Li, J. He, C. Chen, X. Guan, and L. Cai</i>	4424
Motion Planning for Parabolic Equations Using Flatness and Finite-Difference Approximations	<i>S. Chatterjee and V. Natarajan</i>	4439
A Coupling Approach to Analyzing Games With Dynamic Environments	<i>B. C. Collins, S. Xu, and P. N. Brown</i>	4455
Distributed Proximal-Correction Algorithm for the Sum of Maximal Monotone Operators	<i>K. Gong and L. Zhang</i>	4469
Quantifying the Value of Preview Information for Safety Control	<i>Z. Liu and N. Ozay</i>	4484
Joint State Estimation and Noise Identification Based on Variational Optimization	<i>H. Lan, S. Zhao, J. Hu, Z. Wang, and J. Fu</i>	4500
Remote State Estimation for Complex Networks Under Probabilistic Bit Flips: A Transmission Power Allocation Scheme	<i>J. Song, Z. Wang, Q. Liu, and X. He</i>	4516
Value of Information in Games With Multiple Strategic Information Providers	<i>R. K. Velicheti, M. Bastopcu, and T. Başar</i>	4532

(Contents Continued on Page 4237)



Dynamic Event-Triggering Mechanism and Its Application to Dynamic Average Tracking	<i>T. Xu, X. Yi, Z. Duan, G. Chen, and G. Wen</i>	4548
Optimally Combined Incentive for Cooperation Among Interacting Agents in Population Games	<i>S. Wang, M. Cao, and X. Chen</i>	4562
System Class Extensions of the Modulating Function-Based State Reconstruction for the Advection–Diffusion–Reaction Equation	<i>F. Friedrich, N. Fokken, M. Noack, and J. Reger</i>	4578
Revisiting Split Covariance Intersection: Correlated Components and Optimality	<i>C. Cros, P.-O. Amblard, C. Prieur, and J.-F. Da Rocha</i>	4593
Homotopic Gaussian Mixture Filtering for Applied Bayesian Inference	<i>K. J. Craft and K. J. DeMars</i>	4608
Model Approximation in MDPs With Unbounded Per-Step Cost	<i>B. Bozkurt, A. Mahajan, A. Nayyar, and Y. Ouyang</i>	4624
Ergodic Control of a Heterogeneous Population and Application to Electricity Pricing	<i>Q. Jacquet, W. van Ackooij, C. Alasseur, and S. Gaubert</i>	4640
On Lie-Bracket Averaging for Hybrid Dynamical Systems With Applications to Model-Free Control and Optimization	<i>M. Abdelgalil and J. I. Poveda</i>	4655
Reachability Analysis Using Hybrid Zonotopes and Functional Decomposition	<i>J. A. Siefert, T. J. Bird, A. F. Thompson, J. J. Glunt, J. P. Koeln, N. Jain, and H. C. Pangborn</i>	4671
Generalized Simultaneous Perturbation-Based Gradient Search With Reduced Estimator Bias	<i>S. Pachal, S. Bhatnagar, and Prashanth L. A.</i>	4687
Tighter Analysis for Decentralized Stochastic Gradient Method: Impact of Data Homogeneity	<i>Q. Li and H.-T. Wai</i>	4703
Fast Networked Data Selection via Distributed Smoothed Quantile Estimation	<i>X. Zhang and M. M. Vasconcelos</i>	4719

TECHNICAL NOTES

Distributed Convex Optimization Over Nonlinear Networks Under Set Constraints	<i>J. Zhang, S. Liu, and L. Xie</i>	4735
On Distributed Prescribed-Time Unknown Input Observers	<i>J. Zhang, X. Zhao, G. Zheng, F. Zhu, and T. N. Dinh</i>	4743
Explicit Feedback Synthesis Driven by Quasi-Interpolation for Nonlinear Model Predictive Control	<i>S. Ganguly and D. Chatterjee</i>	4751
Completely Stealthy and Energy-Stealthy Sensor Attacks With Constrained Channels: Existence and Design	<i>K. Jin, D. Ye, and T.-Y. Zhang</i>	4759
Robust Control Barrier Functions Using Uncertainty Estimation With Application to Mobile Robots	<i>E. Daş and J. W. Burdick</i>	4766
New Method for SISO Strong Stabilization With Advantages Over Nevanlinna–Pick Interpolation	<i>A. H. Faruqi and A. Chatterjee</i>	4774
Robust Nonlinear Optimal Control via System Level Synthesis	<i>A. P. Leeman, J. Köhler, A. Zanelli, S. Bennani, and M. N. Zeilinger</i>	4780
On the Convergence Rate of MCTS for the Optimal Value Estimation in Markov Decision Processes	<i>H. S. Chang</i>	4788
Multistep Sensor Attackability in Cyber-Physical Systems	<i>W. Duo, S. Wang, and M. C. Zhou</i>	4794
Privacy-Preserving Average Consensus With Beaver Triple and Communication Obfuscation	<i>P. Wang, Y. Lu, J. Lian, L. Pan, H. Shao, and N. Li</i>	4801
Distributed Discrete-Time Dynamic Outer Approximation of the Intersection of Ellipsoids	<i>E. Sebastián, R. Aldana-López, R. Aragiüés, E. Montijano, and C. Sagüés</i>	4809
Complex Event Recognition Within a Discrete Event System Framework	<i>Y. Liu, L. Cao, S. Shu, and F. Lin</i>	4817
Distributed State Estimation for Discrete-Time Linear Systems: A Canonical Decomposition-Based Approach	<i>R. Gao and G.-H. Yang</i>	4825
Learning Dynamical Systems by Leveraging Data From Similar Systems	<i>L. Xin, L. Ye, G. Chiu, and S. Sundaram</i>	4833
A Robust Adaptive Control Approach to Leader-Following Consensus of Multiple Uncertain Euler–Lagrange Systems Over Switching Networks	<i>H. Lin and J. Huang</i>	4841
Supervisory Control of Networked Timed Discrete Event Systems With Bandwidth Constraints	<i>Z. Xiang, Y. Chen, N. Wu, and Z. Li</i>	4849
An L-BFGS-B Approach for Linear and Nonlinear System Identification Under ℓ_1 and Group-Lasso Regularization	<i>A. Bemporad</i>	4857
Extremum Seeking Control for Scalar Maps With Distributed Diffusion PDEs	<i>P. H. S. Coutinho, T. R. Oliveira, and M. Krstić</i>	4865
Finite-time Bipartite Synchronization of Homogeneous and Heterogeneous Multiple Agents with Input Saturation: A TVRE-Based Gain Approach	<i>Y. Zhou, Y. Liu, Y. Zhao, and Z. Li</i>	4873

Exponential Regulation of Uncertain Nonlinear Triangular Impulsive Systems: A Logic-Based Switching Gain Approach	<i>D. Fan, X. Zhang, and C. Wen</i>	4881
An LMI-Based Tool for \mathcal{H}_∞ Robust Performance Margin Evaluation of Uncertain Linear Systems and Robustification of Controllers	<i>P. J. de Oliveira, R. C. L. F. Oliveira, and P. L. D. Peres</i>	4889
Adaptive Dynamic Programming for Optimal Control of Unknown LTI System via Interval Excitation	<i>Y.-S. Ma, J. Sun, Y. Xu, S.-S. Cui, and Z.-G. Wu</i>	4896
Computing Optimal Joint Chance Constrained Control Policies	<i>N. Schmid, M. Fochesato, S. H.Q. Li, T. Sutter, and J. Lygeros</i>	4904
Contraction Analysis of Time-Varying DAE Systems via Auxiliary ODE Systems	<i>H. Yin, B. Jayawardhana, and S. Trenn</i>	4912
Asynchronous Parallel Policy Gradient Methods for the Linear Quadratic Regulator	<i>F. Zhao, X. Sha, and K. You</i>	4920
Real-Time Distributed Model Predictive Control With Limited Communication Data Rates	<i>Y. Yang, Y. Wang, C. Manzie, and Y. Pu</i>	4928
Saturated RISE Controllers With Exponential Stability Guarantees: A Projected Dynamical Systems Approach	<i>O. S. Patil, R. Kamalapurkar, and W. E. Dixon</i>	4936

IEEE TRANSACTIONS ON CONTROL SYSTEMS TECHNOLOGY



A PUBLICATION OF THE IEEE CONTROL SYSTEMS SOCIETY

JULY 2025

VOLUME 33

NUMBER 4

IETTE2

(ISSN 1063-6536)

SPECIAL ISSUE ON INTELLIGENT DECISION-MAKING, MOTION PLANNING, AND CONTROL OF AUTOMATED VEHICLES IN INTERACTION-DRIVEN TRAFFIC SCENARIOS

GUEST EDITORIAL

Special Issue on Intelligent Decision-Making, Motion Planning, and Control of Automated Vehicles in Interaction-Driven Traffic Scenarios	
..... A. Katriniok, E. Silvas, F. Borrelli, M. Zanon, J. Tumova, S. Bolognani, and Y. Chen	1144

SPECIAL ISSUE PAPERS

Trust-Aware Safe Control for Autonomous Navigation: Estimation of System-to-Human Trust for Trust-Adaptive Control Barrier Functions	S. Ejaz and M. Inoue	1151
Proactive Emergency Collision Avoidance for Automated Driving in Highway Scenarios	L. Gharavi, A. Dabiri, J. Verkuijlen, B. De Schutter, and S. Baldi	1164
Predictive Control for Autonomous Driving With Uncertain, Multimodal Predictions	S. H. Nair, H. Lee, E. Joa, Y. Wang, H. E. Tseng, and F. Borrelli	1178
Recursively Feasible Chance-Constrained Model Predictive Control Under Gaussian Mixture Model Uncertainty	K. Ren, C. Chen, H. Sung, H. Ahn, I. M. Mitchell, and M. Kamgarpour	1193
Safe Control Architecture via Model Predictive Control	M. Nezami, N. T. Nguyen, G. Männel, R. Kensbock, H. S. Abbas, and G. Schildbach	1207
Optimization-Based Coordination of Automated and Human-Driven Vehicles in Confined Sites	S. Kojchev, R. Hult, M. Kneissl, and J. Fredriksson	1221
Interaction-Aware Traffic Prediction and Scenario-Based Model Predictive Control for Autonomous Vehicles on Highways	X. Zhang, S. Zeinali, and G. Schildbach	1235

(Contents Continued on Page 1143)



Automated Lane Change via Adaptive Interactive MPC: Human-in-the-Loop Experiments	<i>V. Bhattacharyya and A. Vahidi</i>	1246
Automated Lane Merging via Game Theory and Branch Model Predictive Control	<i>L. Zhang, S. Han, and S. Grammatico</i>	1258
Equivariant Deep Learning of Mixed-Integer Optimal Control Solutions for Vehicle Decision Making and Motion Planning	<i>R. Reiter, R. Quirynen, M. Diehl, and S. Di Cairano</i>	1270
Decision-Making for Autonomous Vehicles With Interaction-Aware Behavioral Prediction and Social-Attention Neural Network	<i>X. Li, K. Liu, H. E. Tseng, A. Girard, and I. Kolmanovsky</i>	1285
Active Exploration in Iterative Gaussian Process Regression for Uncertainty Modeling in Autonomous Racing	<i>T. Benciolini, C. Tang, M. Leibold, C. Weaver, M. Tomizuka, and W. Zhan</i>	1301
Learning-Based NMPC Adaptation for Autonomous Driving Using Parallelized Digital Twin	<i>J. P. Allamaa, P. Patrinos, H. Van der Auweraer, and T. D. Son</i>	1317
A Large-Scale Analysis to Optimize the Control and V2V Communication Protocols for CDA Agreement-Seeking Cooperation	<i>E. Hyeon, P. Misra, and D. Karbowski</i>	1333
Asynchronous Sampled-Data String Stability for a Platoon of Heterogeneous Vehicles via a Mesoscopic Approach	<i>M. Mattioni and A. Iovine</i>	1345
Cooperative Adaptive Cruise Control for Heterogeneous Platoons With Delays: Controller Design and Experiments	<i>R. de Haan, T. P. J. van der Sande, E. Lefeber, and I. J. M. Besselink</i>	1361
Sharable Clothoid-Based Continuous Motion Planning for Connected Automated Vehicles	<i>S. Oh, Q. Chen, H. E. Tseng, G. Pandey, and G. Orosz</i>	1372
An Optimization-Based Dynamic Reordering Heuristic for Coordination of Vehicles in Mixed Traffic Intersections	<i>M. Faris, M. Zanon, and P. Falcone</i>	1387
Stochastic Time-Optimal Trajectory Planning for Connected and Automated Vehicles in Mixed-Traffic Merging Scenarios	<i>V.-A. Le, B. Chalaki, F. N. Tzortoglou, and A. A. Malikopoulos</i>	1403
Share the Unseen: Sequential Reasoning About Occlusions Using Vehicle-to-Everything Technology	<i>T. Nyberg, J. M. G. Sánchez, V. Narri, H. Pettersson, J. Mårtensson, K. H. Johansson, M. Törngren, and J. Tumova</i>	1418
Single Intersection MPC Traffic Signal Control in Presence of Automated Vehicles	<i>F. Liberati, M. Donsante, and A. Tortorelli</i>	1432
Smart Traffic Manager for Speed Harmonization and Stop-and-Go Waves Mitigation Dedicated to Connected Autonomous Vehicles	<i>L. P. N. Dongmo, J. Auriol, and A. Iovine</i>	1447
Hierarchical Control for Vehicle Repositioning in Autonomous Mobility-on-Demand Systems	<i>P. Zhu, G. Ferrari-Trecate, and N. Geroliminis</i>	1463

IEEE TRANSACTIONS ON CONTROL OF NETWORK SYSTEMS

A PUBLICATION OF THE IEEE CONTROL SYSTEMS SOCIETY



COSPONSORED BY
IEEE CIRCUITS AND SYSTEMS SOCIETY
IEEE COMMUNICATIONS SOCIETY
IEEE COMPUTER SOCIETY
IEEE ROBOTICS AND AUTOMATION SOCIETY



JUNE 2025

VOLUME 12

NUMBER 2

ITCNAY

(ISSN 2325-5870)

REGULAR PAPERS

Secure Formation Control of Multiagent System Against FDI Attack Using Fixed-Time Convergent Reinforcement Learning	<i>Z. Gong, F. Yang, Y. Yuan, Q. Ma, and W. X. Zheng</i>	1203
Achieving Near-Optimal Oracle Complexity in Decentralized Stochastic Optimization With Channel Noise	<i>S. Mukherjee and M. Chakraborty</i>	1215
An Enhanced Distributed Optimization Subject to Multiple Constraints: A Case Study on Entire Ethylene Separation Process	<i>B. Liu, W. Du, and Z. Li</i>	1227
United We Fall: On the Nash Equilibria of Multiplex and Multilayer Network Games	<i>R. Ebrahimi and P. Naghizadeh</i>	1238
Asynchronously Integral Event-Triggered Formation Tracking in UAV Swarm Systems Featuring Switching Directed Topologies	<i>Z. Dong, S. Shi, and Z. Zhen</i>	1251
Cooperative Fault Tolerant Control With State Constraints for Nonlinear Multiple-Agent Systems	<i>Z. Zhang, Z. Chen, and W. Fang</i>	1264
Distributed Stackelberg Equilibrium Seeking for Networked Multileader Multifollower Games With a Clustered Information Structure	<i>Y. Chen and P. Yi</i>	1277
Nussbaum-Based Distributed Containment Control for Nonlinear Multiagent Systems With Quantized Inputs	<i>Y. Liu and J. Zhang</i>	1290
Distributed Multiagent Reinforcement Learning With One-Hop Neighbors and Compute Straggler Mitigation.	<i>B. Wang, J. Xie, and N. Atanasov</i>	1300
Resilient Control of Networked Control Systems With Hidden DoS Attacks and Unknown Observation Probability	<i>Y. Wang, H. Yan, J. H. Park, H. Zhang, and H. Shen</i>	1313
Intracluster Synchronization of Linear Networks Over Finite Fields	<i>S. Zou, T. Li, and J. Zhu</i>	1324
Distributed Optimal Contract for Data Rewarding With Network Effects	<i>A. Baneshi, M. Montazeri, and H. Kebraei</i>	1332
Virtual Leader and Distance-Based Formation Control With Funnel Constraints	<i>M. Charitidou and D. V. Dimarogonas</i>	1342

(Contents Continued on Page 1201)



Discrete-Time Leader-Following Multiagent Systems: Saturation Constraints and Event-Triggered Control	<i>Y. Xu and F. Jabbari</i>	1354
Consensus of High-Order Multiagent Systems With Binary-Valued Communications and Switching Topologies	<i>R. An, Y. Wang, Y. Zhao, and J.-F. Zhang</i>	1369
Live Streaming Synchronization Using Event-Triggered Consensus Control	<i>G. Manfredi, V. A. Racanelli, L. De Cicco, and S. Mascolo</i>	1381
Deep and Decentralized Multiagent Coverage of a Target With Unknown Distribution	<i>H. Rastgoftar</i>	1393
Leader-Following Consensus of Multiple Rigid Body Systems by Bounded Attitude Feedback	<i>C. He and K. W. S. Au</i>	1406
Forced Symmetric Formation Control	<i>D. Zelazo, S.-I. Tanigawa, and B. Schulze</i>	1415
Minimal Sensor Placement for Generic State and Unknown Input Observability	<i>R. Cheng, Y. Zhang, A. M. Al, and Y. Xia</i>	1427
Online and Offline Dynamic Influence Maximization Games Over Social Networks	<i>M. Bastopcu, S. R. Etesami, and T. Başar</i>	1440
A Modified Distributed Gradient Dynamics for Multiagent Optimization on Directed Networks	<i>M. Jahvani and M. Guay</i>	1454
Stability of Networked Evolutionary Games With Randomly Mixed Two-Level Reasoning	<i>J. Li, Y. Ding, Y. Guo, and W. Gui</i>	1466
An Interval-Appointed Looped-Functional Approach for Switching Event-Triggered Systems With Input Saturation and Its Application to Memory-Based Event-Triggered Control	<i>Z. Wang, Y. Ni, Y. Fan, and J. Xia</i>	1478
Lag Synchronization and Lag \mathcal{H}_∞ Synchronization for Multiweighted Coupled Reaction–Diffusion Neural Networks Suffering Topology Attacks	<i>J.-L. Wang, X.-Y. Zhao, S.-Y. Ren, and T. Huang</i>	1488
Distributed Time-Varying Constrained Convex Optimization: Finite-Time/Fixed-Time Convergence	<i>G. Guo, Z.-D. Zhou, and R. Zhang</i>	1500
Cooperative Hierarchical Coverage Control of Multiagent Systems With Nonholonomic Constraints in Poriferous Environments	<i>J. Zou, H.-T. Zhang, C. Zhai, N. Xing, Y. Ma, and X. Liu</i>	1512
Control of Multiagent Networks With Misbehaving Nodes Over Directed Graph Topologies	<i>E. Yildirim and T. Yucelen</i>	1521
Distributed Identification for Node and Edge Numbers of Time-Varying Anonymous Networks	<i>X. Liu, H.-T. Zhang, H. Cao, N. Xing, B. Xu, J. Zou, and H. Meng</i>	1531
Q-DADAM: A Quantized Distributed Online Optimization Algorithm With Adaptive Momentum	<i>Y. Li, C. Chen, K. Zhang, D. Li, Q. Lü, S. Deng, and H. Li</i>	1540
On the Constrained CAV Platoon Control Problem	<i>M. S. Bahavarnia, J. Ji, A. F. Taha, and D. B. Work</i>	1552
Approximate Dynamic Programming With Feasibility Guarantees	<i>A. Engelmann, M. B. Bandeira, and T. Faulwasser</i>	1565
Closed-Loop Design for Scalable Performance of Vehicular Formations	<i>J. Hansson and E. Tegling</i>	1577
Polyhedral Restrictions of Feasibility Regions in Optimal Power Flow for Distribution Networks	<i>M. Christianen, S. van Kempen, M. Vasiou, and B. Zwart</i>	1587
Timer-Based Coverage Control for Mobile Sensors	<i>F. M. Zegers, S. Phillips, and G. P. Hicks</i>	1600
Consensus of Multiagent Systems Under Unbounded Communication Delays via Adaptive Distributed Observers	<i>C. Bi, X. Xu, L. Liu, and G. Feng</i>	1613
Robust Quantized Consensus of Multiagent Systems Under Disturbance and DoS Attacks	<i>X. Wang, G. Wen, D. Zhao, and T. Huang</i>	1626
Strategic Pricing and Routing to Maximize Profit in Congested Roads Considering Interactions With Travelers	<i>Y. Kim, N. Duan, G. Zardini, S. Samaranayake, and D. Wischik</i>	1638
Computationally Light Privacy Preservation of Matrix-Weighted Average Consensus	<i>P. Wang, H. Shao, L. Pan, W. Yan, and N. Li</i>	1651
Differentially Private Opinion Dynamics of Influence Networks	<i>G. Wu, W. Zhang, S. Mao, X. Wu, and Y. Tang</i>	1662
Privacy-Preserving Distributed Extended Kalman Filtering for Graphical Nonlinear Systems	<i>S. Guo, W. Li, Y. Liu, and J. Song</i>	1674
Scalable Primal Decomposition Schemes for Large-Scale Infrastructure Networks	<i>A. Engelmann, S. Shin, F. Pacaud, and V. M. Zavala</i>	1687

Codesign of Dynamic Quantizer and Small-Gain-Based Distributed Model Predictive Control of Nonlinear Continuous System	<i>Y. Zheng, Y. Zhang, S. Li, and M. Luo</i>	1699
Nonfragile Consensus Strategy for Variable Fractional-Order Multiagent Systems Based on Disturbance Observer.....	<i>L. Chen, C. Liu, A. M. Lopes, Z. Zhang, and Y. Q. Chen</i>	1709
Parallel Momentum Methods Under Biased Gradient Estimations	<i>A. Beikmohammadi, S. Khirirat, and S. Magnússon</i>	1721
Fixed-Time Formation Tracking for Heterogeneous Linear Multiagent Systems With a Nonautonomous Leader	<i>S. Zhou, D. Sun, and G. Feng</i>	1733
Adaptive Prescribed-Time Distributed Nash Equilibrium Seeking for Networked Games With Heterogeneous Dynamics and Unknown Uncertainties	<i>Y. Chen, Y. Hua, Z. Feng, and X. Dong</i>	1744
Stochastic Event-Triggered Estimation With Smart Sensors Over Packet-Dropping Links	<i>Y. Deng, N. Yang, and Y. Li</i>	1756
Worst-Case Integrity Attacks and Resilient State Estimation With Partially Secured Measurements.....	<i>J. Zhou, J. Shang, and T. Chen</i>	1769
Convergence of Backward/Forward Sweep for Power Flow Solution in Radial Networks	<i>B. Fang, C. Zhao, and S. H. Low</i>	1780
Discrete-Time Formation Control With Attitude Alignment: A Geometric Approach Under Ergodic Products...	<i>Z. Li, Y. Tang, W. Zhang, Y. Fan, and T. Huang</i>	1793
Mixed-Integer Linear Programming Approaches for Tree Partitioning of Power Networks	<i>L. Lan and A. Zocca</i>	1805
Interpopulation and Intrapopulation Linear Quadratic Differential Games	<i>J. Barreiro-Gomez</i>	1815

IEEE

CONTROL SYSTEMS LETTERS

A PUBLICATION OF THE IEEE CONTROL SYSTEMS SOCIETY



2025

VOLUME 9

NUMBER 3 (PAPERS 33 to 92)

PAPERS

- Set-Based and Dynamical Feedback-Augmented Hands-Off Control, *A. Sperilă, S. Olaru and S. Drobot* pp. 198-203
- On the Convergence of Re-Centered Chen-Fliess Series, *F. Boudaghi, W. S. Gray and L. A. Duffaut Espinosa* pp. 204-209
- Static Output Feedback Control of Heat Equations With Small Reaction Terms, *H. Lhachemi and C. Prieur* pp. 210-215
- Data-Driven Input-Output Control Barrier Functions, *M. Bajelani and K. van Heusden* pp. 216-221
- Distributed Prescribed-Time Observer for Nonlinear Systems in Block-Triangular Form, *V. de Heij, M. U. B. Niazi, K. H. Johansson and S. Ahmed* pp. 222-227
- Optimal Control for Minimizing Inescapable Ellipsoids in Linear Periodically Time-Varying Systems Under Bounded Disturbances, *E. Dogadin and A. Peregudin* pp. 228-233
- Designing Control Barrier Functions for Underactuated Euler–Lagrange Systems Using Dynamic Safety Margins, *V. Freire, S. Debarshi and M. M. Nicotra* pp. 234-239
- Sample Complexity Bounds for Scalar Parameter Estimation Under Quantum Differential Privacy, *F. Farokhi* pp. 240-245
- Discrete-Time Lossless Convexification for Pointing Constraints, *D. Luo, F. Spada and B. Açikmeşe* pp. 246-251
- Learning Quasi-LPV Models and Robust Control Invariant Sets With Reduced Conservativeness, *S. K. Mulagaleti and A. Bemporad* pp. 252-257
- Willems’ Lemma Reformulations: Which Operators Preserve LTI System Behavior? *A. Faye-Bédrin, P. Chaucha, S. Aranovskiy and R. Bourdais* pp. 258-263
- Extremum Seeking for Controlled Vibrational Stabilization of Mechanical Systems: A Variation-of-Constant Averaging Approach Inspired by Flapping Insects Mechanics, *A. A. Elgohary and S. A. Eisa* pp. 264-269
- L_2 Gain for Ultimately Bounded Systems With Application to Quantized Input Systems, *M. C. Turner and C. M. Richards* pp. 270-275
- Robustness of Incentive Mechanisms Against System Misspecification in Congestion Games, *C. -Y. Chiu and B. L. Ferguson* pp. 276-281
- Conformal Prediction in the Loop: Risk-Aware Control Barrier Functions for Stochastic Systems With Data-Driven State Estimators, *J. Zhang, B. Hoxha, G. Fainekos and D. Panagou* pp. 282-287
- Solving Unbounded Optimal Control Problems With the Moment-SOS Hierarchy, *K. Sehnalová, D. Henrion, M. Korda and M. Kružík* pp. 288-293
- Bayes and Biased Estimators Without Hyper-Parameter Estimation: Comparable Performance to the Empirical-Bayes-Based Regularized Estimator, *Y. Ju, B. Wahlberg and H. Hjalmarsson* pp. 294-299
- An Interval Observer Optimization Design Method for Discrete Linear Time-Invariant Systems, *F. Xu* pp. 300-305
- Properties of Fixed Points of Generalised Extra Gradient Methods Applied to Min-Max Problems, *A. A. Farzin, Y. -M. Pun, P. Braun and I. Shames* pp. 306-311
- Actively Learning Equilibria in Nash Games With Misleading Information, *B. Franci, F. Fabiani and A. Bemporad* pp. 312-317

A Convex Formulation of Game-Theoretic Hierarchical Routing, <i>D. Ho Lee, K. Donnel, M. Z. Li and D. Fridovich-Keil</i>	pp. 318-323
Stability and Dissipativity of the Distributed LuGre Friction Model, <i>L. Romano, O. Morten Aamo, J. Åslund and E. Frisk</i>	pp. 324-329
Three-Dimensional Repulsive Vector Field Strategy for Collision Avoidance in Quadrotors Trajectory Tracking, <i>M. Martínez-Ramírez, M. Trujillo-Flores, X. Shao, J. G. Romero and H. Rodríguez-Cortés</i>	pp. 330-335
Switched-Gain Observers for Linear Systems by Using Max/Min Lyapunov Functions, <i>A. Alessandri and R. G. Sanfelice</i>	pp. 336-341
Passivity-Based Distributed Event-Triggered Flocking Control of Port-Hamiltonian Systems, <i>E. Aranda-Escolástico, M. Abdelrahim, D. Fernández-Amorós, M. Guinaldo and L. Colombo</i>	pp. 342-347
Minimax Optimistic Planning for Continuous-Action Noncooperative Sequential Control, <i>S. Bogdan, R. Herzal, V. S. Varma and L. Buşoniu</i>	pp. 348-353
Global Synchronization of Multi-Agent Systems With Nonlinear Interactions, <i>A. Couthures, V. S. Varma, S. Lasaulce and I. -C. Morărescu</i>	pp. 354-359
Parameter-Dependent Control Lyapunov Functions for Stabilizing Nonlinear Parameter-Varying Systems, <i>P. Zhao</i>	pp. 360-365
Switched Control Strategies in Platooning With Dwell-Time-Based String Stability Guaranties, <i>E. Gorski, I. C. Morărescu, V. S. Varma, L. Buşoniu and J. Daafouz</i>	pp. 366-371
On Regular Regressors in Adaptive Control, <i>E. Mejia Uzeda and M. E. Broucke</i>	pp. 372-377
Output Feedback Control of Nonlinear Systems via Lipschitz Continuous Sliding Modes, <i>O. Texis-Loaiza, J. A. Moreno, M. A. Estrada, L. Fridman and A. Levant</i>	pp. 378-383
Optimal Operation of Solar Battery Chargers via Mixed-Integer Linear Programming, <i>G. Bianchini, M. Casini, A. Laudani and G. Maria Lozito</i>	pp. 384-389
Controlling Ensemble States of a Quantum System, <i>V. Kaushik and N. Khaneja</i>	pp. 390-395
Nash Equilibrium Learning in Large Populations With First-Order Payoff Modifications, <i>M. S. Hankins, J. Certório, T. Jeng and N. C. Martins</i>	pp. 396-401
Parameter Invariance Analysis of Moment Equations Using Dulmage-Mendelsohn Decomposition, <i>A. Igarashi and Y. Hori</i>	pp. 402-407
Intrinsic Successive Convexification: Trajectory Optimization on Smooth Manifolds Letters, <i>S. Kraisler, M. Mesbahi and B. Açıkmeşe</i>	pp. 408-413
Finding Approximate Correlated Equilibrium for Decentralized Control, <i>R. Misra, R. Wiśniewski and C. S. Kallesøe</i>	pp. 414-419
Online Fault Prognosis of Labeled Petri Nets, <i>B. I. de Freitas, A. Toguyeni and J. C. Basilio</i>	pp. 420-425
Contraction Analysis of Almost Surely Monotone Discrete-Time Systems With Unknown Time Delay, <i>Y. Kawano and Y. Hosoe</i>	pp. 426-431
Safe Control for Pursuit-Evasion With Density Functions, <i>M. Bozdog, A. Honarpisheh and M. Sznaier</i>	pp. 432-437
Synthesizing Grid Data With Cyber Resilience and Privacy Guarantees, <i>S. Wu and V. Dvorkin</i>	pp. 438-443
Distributions and Direct Parametrization for Stable Stochastic State-Space Models, <i>M. Al Ahdab, Z. -H. Tan and J. Leth</i>	pp. 444-449
Swarm-Level Task Learning via Generalized Moments in Reinforcement Learning With Reward Machines, <i>S. Meshkat Alsadat, V. S. Kulkarni and Z. Xu</i>	pp. 450-455
Localized Data-Driven Distributed Controller Design for Positive Stabilization, <i>T. Iwata, S. -I. Azuma and M. Nagahara</i>	pp. 456-461
On the Stabilization of Directed Formation Using Geometric Algebra Approach, <i>F. Sahebsara, M. Green and C. Barbalata</i>	pp. 462-467
Stackelberg Evolutionary Games With Modulated Leadership: A Three-Agent Framework for Tumor–Immune Dynamics, <i>C. Romano, M. Domenica Di Benedetto and A. Borri</i>	pp. 468-473
Punitive Policies to Combat Misreporting in Dynamic Supply Chains, <i>M. Dhiman, A. Maurya, V. Kavitha and P. Sinha</i>	pp. 474-479

Generating Informative Benchmarks for Reinforcement Learning, <i>G. Yamerenko, S. Ibrahim, F. Moreno-Mora, P. Osinenko and S. Streif</i>	pp. 480-485
Distributed Lyapunov Functions for Nonlinear Networks, <i>Y. Wang, A. N. Montanari and A. E. Motter</i>	pp. 486-491
Bang-Bang Optimal Control of Vaccination in Metapopulation Epidemics With Linear Cost Structures, <i>L. M. Moschen and M. Soledad Aronna</i>	pp. 492-497
Fast Computation of the TGOSPA Metric for Multiple Target Tracking via Unbalanced Optimal Transport, <i>V. Nevelius Wernholm, A. Wärnsäter and A. Ringh</i>	pp. 498-503
A Spectral Approach to Optimal Control of the Fokker–Planck Equation, <i>D. Kalise, L. M. Moschen, G. A. Pavliotis and U. Vaes</i>	pp. 504-509
Erratum to “Solving Unbounded Optimal Control Problems With the Moment-SOS Hierarchy”, <i>K. Sehnalová, D. Henrion, M. Korda and M. Kružík</i>	pp. 510-510
Synchronization of Impulsive Control Systems: A Round-Robin Protocol Approach, <i>W. Wang, B. Chen and W. Li</i>	pp. 511-516
On the Convergence of Gradient Descent in Scalar Two-Agent Infinite-Horizon LQ Games, <i>G. Salizzoni and M. Kamgarpour</i>	pp. 517-522
A Distributed Kalman-Like Observer With Dynamic Inversion-Based Correction for Multi-Agent Estimation, <i>N. De Carli and D. V. Dimarogonas</i>	pp. 523-528
Finite-Time Boundary Output Feedback Stabilization of an Anti-Stable Wave Equation With Matched Disturbance, <i>R. Li and F. -F. Jin</i>	pp. 529-534
A Simple P+d Controller for Consensus of Euler-Lagrange Systems Over Directed Graphs, <i>I. Sarras, A. Loría, E. Panteley and E. Nuño</i>	pp. 535-540
Modeling Reduction and Dither-Free Extremum Seeking Control of Gas-Lifted Oil Wells, <i>A. J. Peixoto, C. M. Pimenta, T. S. Resende and M. M. Angelo</i>	pp. 541-546
Identification of Additive Multivariable Continuous-Time, <i>M. van der Hulst, R. A. González, K. Classens, N. Dirkx, J. v. d. Wijdeven and T. Oomen</i>	pp. 547-552

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 (Passed)~~

<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 (Passed)

Decision Notification

Mid-July, 2025

Final Submissions and Advance Registration Due

September 3, 2025

<https://cdc2025.ieeeccs.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/>