CONTROL SYSTEMS SOCIETY

PUBLICATIONS CONTENT DIGEST

TABLE OF CONTENTS

Publications Activities

Vice-President

FABRIZIO DABBENE *Politecnico di Torino, Italy*

http://www.ieeecss.org/publications/css-publications

Journal Editors

IEEE Transactions on Automatic Control

PANOS J. ANTSAKLIS *University of Notre Dame*

http://www.ieeecss.org/publications/tac

IEEE Transactions on Control Systems Technology

THOMAS PARISINI *Imperial College, UK*

http://www.ieeecss.org/publications/tcst

IEEE Transactions on Control of Network Systems

IOANNIS PASCHALIDIS *Boston University*

MAGNUS EGERSTEDT Deputy **Editor-in-Chief**

http://www.ieeecss.org/publications/transactions-control-network-systems

IEEE Control Systems Magazine

JONATHAN HOW *Massachusetts Institute of Technology*

http://www.ieeecss.org/publications/csm

Electronics Editor

E-letter on Systems, Control and Signal Processing

JIANGHAI HU *Purdue University*

http://www.ieeecss.org/publications/e-letter/e-letter

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

For subscription to the monthly E-Letter, please visit:

http://www.ieeecss.org/newsletter/subscriptions

IEEE TRANSACTIONS ON

AUTOMATIC CONTROL

A PUBLICATION OF THE IEEE CONTROL SYSTEMS SOCIETY

FEBRUARY 2016 VOLUME 62 NUMBER 2 IETAA9 (ISSN 0018-9286)

Table of Contents
Full Text: PDF [46 KB]

IEEE Transactions on Automatic Control Publication information
Full Text: PDF [36 KB]

Scanning the Issue
Full Text: PDF [42 KB]

Full Papers

A Parametric Non-Convex Decomposition Algorithm for Real-Time and Distributed NMPC
J-H. Hours, C. N. Jones
Abstract | Full Text: PDF [1369 KB]

A Framework for Structural Input/Output and Control Configuration Selection in Large-Scale Systems
S. Pequito, S. Kar, A. P. Aguiar
Abstract | Full Text: PDF [633 KB]

Optimal Control with Noisy Time
A. Lamperski, N. J. Cowan
Abstract | Full Text: PDF [534 KB]

A Scenario Approach for Non-Convex Control Design
S. Grammatico, X. Zhang, K. Margellos, P. J. Goulart, J. Lygeros
Abstract | Full Text: PDF [626 KB]

Differentially Positive Systems
F. Forni, R. Sepulchre
Abstract | Full Text: PDF [821 KB]

Non-Asymptotic Kernel-Based Parametric Estimation of Continuous-time Linear Systems
G. Pin, A. Assalone, M. Lovera, T. Parisini
Abstract | Full Text: PDF [935 KB]

Reaching a Quantum Consensus: Master Equations that Generate Symmetrization and Synchronization
G. Shi, D. Dong, I. R. Petersen, K. H. Johansson
Abstract | Full Text: PDF [620 KB]

Compensating Drift Vector Fields with Gradient Vector Fields for Asymptotic Submanifold Stabilization
J. M. Montenbruck, M. Burger, F. Allgower
Abstract | Full Text: PDF [1010 KB]

Asymptotic Behavior of Recursive State Estimations with Intermittent Measurements
T. Zhou
Abstract | Full Text: PDF [700 KB]

Optimal Placement of Distributed Energy Storage in Power Networks
C. Thrampoulidis, S. Bose, B. Hassibi
Abstract | Full Text: PDF [581 KB]

Distributionally Robust Control of Constrained Stochastic Systems
B. P. G. Van Parys, D. Kuhn, P. J. Goulart, Manfred Morari
Abstract | Full Text: PDF [653 KB]

Convergence Time for Unbiased Quantized Consensus Over Static and Dynamic Networks
S. R. Etesami, T. Basar
Abstract | Full Text: PDF [467 KB]

Technical Notes and Correspondence

Convergence and Complexity Analysis of Recursive-RANSAC: A New Multiple Target Tracking Algorithm
P. C. Niedfeldt, R. W. Beard
Abstract | Full Text: PDF [219 KB]

Sampled-Data Adaptive Observer For a Class of State-Affine Output-Injection Nonlinear Systems
T. Folin, T. Ahmed-Ali, F. Giri, L. Burlion, F. Lamnabhi-Lagarrigue
Abstract | Full Text: PDF [498 KB]

Reduction-Based Robustness Analysis of Linear Predictor Feedback for Distributed Input Delays
A. Ponomarev
Abstract | Full Text: PDF [104 KB]

Corrective Control of Composite Asynchronous Sequential Machines under Partial Observation
J-M. Yang
Abstract | Full Text: PDF [258 KB]

On H-infinity Estimation of Randomly Occurring Faults for A Class of Nonlinear Time-Varying Systems with Fading Channels
H. Dong, Z. Wang, S. X. Ding, H. Gao
Abstract | Full Text: PDF [284 KB]

On the Number and Types of Unstable Equilibria in Nonlinear Dynamical Systems with Uniformly-Bounded Stability Regions
H-D. Chiang, T. Wang
Abstract | Full Text: PDF [790 KB]

Negative Imaginary Lemmas for Descriptor Systems
J. Xiong, A. Lanzon, I. R. Petersen
Abstract | Full Text: PDF [150 KB]

A Graph-Theoretic Condition for Global Identifiability of Weighted Consensus Networks
S. Nabavi, A. Chakrabortty
Abstract | Full Text: PDF [640 KB]

Stability and Stabilization of Discrete-Time Semi-Markov Jump Linear Systems via Semi-Markov Kernel Approach
L. Zhang, Y. Leng, P. Colaneri
Abstract | Full Text: PDF [1519 KB]

On the Smallest Eigenvalue of Grounded Laplacian Matrices
M. Pirani, S. Sundaram
Abstract | Full Text: PDF [209 KB]

Distributed Consensus Control of Multi-agent Systems with Higher Order Agent Dynamics and Dynamically Changing Directed Interaction Topologies
S. Su, Z. Lin
Abstract | Full Text: PDF [296 KB]

Computation of the Structured Singular Value via Moment LMI Relaxations
D. Piga
Abstract | Full Text: PDF [409 KB]

Stochastic Bridges of Linear Systems
Y. Chen, T. Georgiou
Abstract | Full Text: PDF [380 KB]

Distributed Satisficing MPC with Guarantee of Stability
M. L. de Lima, D. Limon, D. Munoz de la Pena, E. Camponogara
Abstract | Full Text: PDF [330 KB]

A Passivity-Based Approach to Formation Control Using Partial Measurements of Relative Position
G. Stacey, R. Mahony
Abstract | Full Text: PDF [443 KB]

A Direct Proof of the Discrete-Time Multivariate Circle and Tsypkin Criteria
J. Nygren, K. Pelckmans
Abstract | Full Text: PDF [218 KB]

Identification Scheme for Hammerstein Output Error Models with Bounded Noise
R. Martin
Abstract | Full Text: PDF [413 KB]

Feedback Particle Filter for a Continuous-time Markov Chain
Z. Cao, R. Zhang, Y. Yang, J. Lu, F. Gao
Abstract | Full Text: PDF [306 KB]

Integrity of LTI Time-Delay Systems
M. Eslami, A. Nobakhti
Abstract | Full Text: PDF [420 KB]

Introducing IEEE Collabratec
Full Text: PDF [1924 KB]

FEBRUARY 2016 Volume 36 Number 1

Front Cover
Full Text: PDF [969 KB]

Table of Contents
Full Text: PDF [1180 KB]

Conference Presentations
[From the Editor]
J. How
Full Text: PDF [316 KB]

Control of Spreading Processes [About This Issue]
J. How
Full Text: PDF [2047 KB]

The Many Faces of Control [President's Message]
F. Doyle III
Full Text: PDF [457 KB]

CSS News
F. Allgower
Full Text: PDF [162 KB]

[25 Years Ago]
Full Text: PDF [304 KB]

IEEE Control Systems Magazine Board
Full Text: PDF [231 KB]

Technical Committee on Healthcare and Medical Systems [Technical Activities]
C. Scoglio
Full Text: PDF [309 KB]

Control Systems and the Internet of Things [Technical Activities]
T. Samad
Full Text: PDF [5580 KB]

Alexandre Bayen [People in Control]
Full Text: PDF [1345 KB]

Aaron D. Ames [People in Control]
Full Text: PDF [1246 KB]

Analysis and Control of Epidemics: A Survey of Spreading Processes on Complex Networks
C. Nowzari, V. Preciado, G. Pappas
Full Text: PDF [1814 KB]

Adaptation Is Necessary in formula Adaptive Control: What Makes an Adaptive Controller "Adaptive?"
R. Ortega, E. Panteley
Full Text: PDF [1337 KB]

On Teaching Model-Based Fault Diagnosis In Engineering Curricula [Lecture Notes]
R. Costa-Castello, V. Puig, J. Blesa
Full Text: PDF [1428 KB]

An Interactivity0Based Methodology to Support Control Education: How to Teach and Learn Using Simple Interactive Tools [Lecture Notes]
J. Guzman, R. Costa-Castello, S. Dormido, M. Berenguel
Full Text: PDF [3538 KB]

Stability of Dynamical Systems-On the Role Of Monotonic and Non-Monotonic Lyapunov Functions [Bookshelf]
N. McClamroch
Full Text: PDF [1005 KB]

Handbook of Marine Craft Hydrodynamics and Motion Control [Bookshelf]
L. McCue
Full Text: PDF [945 KB]

Book Announcements [Bookshelf]
Full Text: PDF [1986 KB]

2015 IEEE CSS Awards [Awards]
Full Text: PDF [547 KB]

The 10th Edition of the International Workshop Of Robot Motion and Control (RoMoCo) [Conference Reports]
K. Kozlowski, D. Pazderski
Full Text: PDF [1691 KB]

The 34th Chinese Control Conference and SICE Annual Conference 2015 (CCC&SICE 2015) [Conference Reports]
Q. Zhao, Y. Zhao, Y. Qu
Full Text: PDF [2574 KB]

The 2016 Multiconference on Systems and Control (MSC 2016) [Conference Reports]
Full Text: PDF [2848 KB]

In Memory of A.V. Balakrishnan (December 4, 1922-March 17, 2015) [Obituary]
R. Baheti, R. Mazumdar
Full Text: PDF [321 KB]

[Conference Calendar]
Full Text: PDF [357 KB]

[IEEE Control Systems Society]
Full Text: PDF [223 KB]

Data Logging [Random Inputs]
Full Text: PDF [595 KB]

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

DECEMBER 2015 VOLUME 2 NUMBER 4 ITCNAY (ISSN 2325-5870)

Optimal Distributed Finite-Time Consensus On Unknown Undirected Graphs.....
S. Ghosh and J.-W. Lee 323.....PDF

Information Exchange and Decision Making in Micro Aerial Vehicle Networks for Cooperative Search
A. Khan, E. Yanmaz, and B. Rinner 335.....PDF

H_1 Almost Output Synchronization for Heterogeneous Networks Without Exchange of Controller States
M. Zhang, A. Saberi, H. F. Grip, and A. A. Stoorvogel 348.....PDF

A Sequential Cluster-Based Approach to Node Localizability of Sensor Networks . . . . .
Y. Diao, M. Fu, Z. Lin, and H. Zhang 358.....PDF

Distributed Finite-Time Average Consensus in Digraphs in the Presence of Time Delays
T. Charalambous, Y. Yuan, T. Yang, W. Pan, C. N. Hadjicostis, and M. Johansson 370 .....PDF

A Delay-Distribution Approach to Stabilization of Networked Control Systems
B. Tang, J. Wang, and Y. Zhang 382.....PDF

Leader-Following Coordination of Nonlinear Agents Under Time-Varying Communication Topologies
F. D. Priscoli, A. Isidori, L. Marconi, and A. Pietrabissa 393.....PDF

Decentralized Protection Strategies Against SIS Epidemics in Networks .
S. Trajanovski, Y. Hayel, E. Altman, H. Wang, and P. Van Mieghem 406.....PDF

Decentralized Control of Linear Switched Nested Systems With ℓ_2 -Induced Norm Performance
A. Mishra, C. Langbort, and G. E. Dullerud 420.....PDF

Upcoming IEEE Conferences

Important Dates

September 27, 2015: Draft Manuscripts Due **[PASSED]**

October 5, 2015: Best Student Paper Nominations **[PASSED]**

October 16, 2015: Workshop Proposals Due **[PASSED]**

January 31, 2016: Acceptance/Rejection Notice **[PASSED]**

March 15, 2016: Final Manuscript Submission Due

http://acc2016.a2c2.org/

BOSTON, MA, USA JULY 6-8, 2016

September 19-21, 2016
Buenos Aires, Argentina

2016 IEEE Multi-Conference On Systems and Control

April 15, 2016: Contributed papers, Invited session proposals, and Invited papers deadline

April 15, 2016: Workshop proposals deadline

July 1, 2016: Notification of Acceptance /Rejection

July 15, 2016: Final submission deadline

July 15, 2016: Advance registration deadline

http://www.msc2016.org/

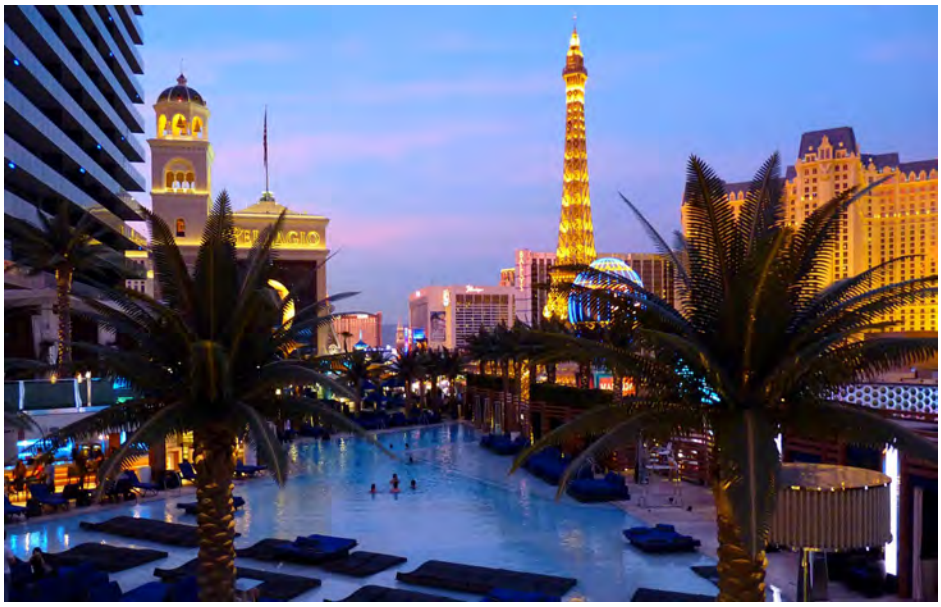
CDC

2016

The CDC is recognized as the premier scientific and engineering conference dedicated to the advancement of the theory and practice of systems and control. The CDC annually brings together an international community of researchers and practitioners in the field of automatic control to discuss new research results, perspectives on future developments, and innovative applications relevant to decision making, automatic control, and related areas.

December 12-14, 2016

LAS VEGAS
NEVADA
USA



55th Conference on Decision and Control

IMPORTANT DATES

Submission Site Open: **January 4, 2016**
Invited Session Proposals Due: **March 7, 2016**
Initial Submissions Due: **March 15, 2016**
Workshop Proposals Due: **May 2, 2016**
Decision Notification: **End-July 2016**
Registration Opens: **August 1, 2016**
Final Submissions Due: **Mid-September 2016**

http://www.cdc2016.ieeecss.org/

ACC 2017

Important Dates

Draft Manuscripts:
September 19, 2016

Best Student Paper Nominations:
September 30, 2016

Workshop Proposals:
October 10, 2016

Acceptance/Rejection Notice:
January 15, 2017

Final Manuscript Submission:
February 28, 2017

2017 AMERICAN CONTROL CONFERENCE

MAY 24-26, 2017
SEATTLE, WA, USA

The 2017 American Control Conference will be held Wednesday through Friday, May 24-26 at the Sheraton Seattle Hotel, centrally located in the heart of downtown Seattle, WA. Sheraton Seattle Hotel is near nightlife, restaurants, shopping, and entertainment, just a walk to all of Seattle's known sights such as the Seattle Waterfront, Pike Place Market, Space Needle, Seattle Aquarium, and the Washington State Ferries.

http://acc2017.a2c2.org/

CDC 2017

Important Dates

January 4, 2017: Submission Site Opens

March 20, 2015: Initial Paper Submissions Due

May 1, 2017 Workshop Proposals Due

August 1, 2017: Final Submission Open and Registration Opens

September 20, 2017: Accepted Papers Due

http://cdc2017.ieeecss.org/

MELBOURNE, AUSTRALIA DEC. 12-15, 2017