

IEEE

CONTROL SYSTEMS LETTERS

A PUBLICATION OF THE IEEE CONTROL SYSTEMS SOCIETY



OCTOBER 2017

VOLUME 1

NUMBER 2

ICSLBO

(ISSN 2475-1456)

PAPERS

Third Order Sliding Mode Observer-Based Approach for Distributed Optimal Load Frequency Control	215
..... <i>G. Rinaldi, M. Cucuzzella, and A. Ferrara</i>	
Target Enclosing and Trajectory Tracking for a Mobile Robot With Input Disturbances	221
..... <i>X. Yu and L. Liu</i>	
Abstracting Partially Feedback Linearizable Systems Compositionally	227
..... <i>O. Hussien, A. Ames, and P. Tabuada</i>	
New Classes of Finite Dimensional Filters With Non-Maximal Rank	233
..... <i>J. Shi, X. Chen, W. Dong, and S. S.-T. Yau</i>	
Change Detection for Undermodelled Processes Using Mismatched Hidden Markov Model Test Filters	238
..... <i>J. James, J. J. Ford, and T. L. Molloy</i>	
A Nonlinear Sampled-Data Observer of Vehicle Lateral Velocity	244
..... <i>A. Borri</i>	
A Stochastic Multiple-Leader-Follower Incentive Stackelberg Strategy for Markov Jump Linear Systems	250
..... <i>H. Mukaidani, H. Xu, T. Shima, and V. Dragan</i>	
Invariant Sets Analysis for Constrained Switching Systems	256
..... <i>N. Athanasopoulos, K. Smpoukis, and R. M. Jungers</i>	
Provably Safe Cruise Control of Vehicular Platoons	262
..... <i>S. Sadraddini, S. Sivaranjani, V. Gupta, and C. Belta</i>	
Optimal Enforcement of Causality in Non-Parametric Transfer Function Estimation	268
..... <i>R. A. González, P. E. Valenzuela, C. R. Rojas, and R. A. Rojas</i>	
Sliding Mode Based Platooning With Non-Zero Initial Spacing Errors	274
..... <i>A. Rupp, M. Steinberger, and M. Horn</i>	
Minimax Robust Quickest Change Detection With Exponential Delay Penalties	280
..... <i>T. L. Molloy, J. M. Kennedy, and J. J. Ford</i>	
A Time Series Distance Measure for Efficient Clustering of Input/Output Signals by Their Underlying Dynamics	286
..... <i>O. Lauwers and B. De Moor</i>	
Supermodular Batch State Estimation in Optimal Sensor Scheduling	292
..... <i>P. Singh, S. Z. Yong, and E. Frazzoli</i>	
Minimal Inputs/Outputs for a Networked System	298
..... <i>T. Zhou</i>	

(Contents Continued on Page ii)

Analytic Analysis of the Data-Dependent Estimation Accuracy of Battery Equivalent Circuit Dynamics	<i>X. Lin</i>	304
Nonsmooth Barrier Functions With Applications to Multi-Robot Systems	<i>P. Glotfelter, J. Cortés, and M. Egerstedt</i>	310
Scalable Underapproximation for the Stochastic Reach-Avoid Problem for High-Dimensional LTI Systems Using Fourier Transforms	<i>A. P. Vinod and M. M. K. Oishi</i>	316
High-Voltage Solution in Radial Power Networks: Existence, Properties, and Equivalent Algorithms	<i>K. Dvijotham, E. Mallada, and J. W. Simpson-Porco</i>	322
Distributed Estimation of All the Eigenvalues and Eigenvectors of Matrices Associated With Strongly Connected Digraphs	<i>A. Gusrialdi and Z. Qu</i>	328
A Distributed Control Algorithm for Waterfilling of Networked Control Systems via Consensus	<i>R. Carli and M. Dotoli</i>	334
Dynamic Pinning Consensus Control of Multi-Agent Systems	<i>A. Sakaguchi and T. Ushio</i>	340
Fixed Mode Elimination by Minimum Communication Within an Estimator-Based Framework for Distributed Control	<i>Y. R. Stürz, A. Eichler, and R. S. Smith</i>	346
Robust Gradient-Based Adaptive Control of Nonlinearly Parametrized Plants	<i>S. B. Roy, S. Bhasin, and I. N. Kar</i>	352
H_∞ Based Estimation of Nonlinear Systems	<i>I. Rusnak</i>	358
Exploiting Nodes Symmetries to Control Synchronization and Consensus Patterns in Multiagent Systems	<i>D. Fiore, G. Russo, and M. di Bernardo</i>	364
Super-Twisting Control of Double Integrator Systems With Unknown Constant Control Direction	<i>C. Ton, S. S. Mehta, and Z. Kan</i>	370
Riemannian Optimal System Identification Algorithm for Linear MIMO Systems	<i>H. Sato and K. Sato</i>	376
Output Feedback Stable Stochastic Predictive Control With Hard Control Constraints	<i>P. K. Mishra, D. Chatterjee, and D. E. Quevedo</i>	382
EM-Based Hyperparameter Optimization for Regularized Volterra Kernel Estimation	<i>J. G. Stoddard, J. S. Welsh, and H. Hjalmarsson</i>	388
A Data-Driven Stochastic Optimization Approach to the Seasonal Storage Energy Management	<i>G. Darivianakis, A. Eichler, R. S. Smith, and J. Lygeros</i>	394
Semi-Decentralized Nash Equilibrium Seeking in Aggregative Games With Separable Coupling Constraints and Non-Differentiable Cost Functions	<i>G. Belgioioso and S. Grammatico</i>	400
Improved Remote Estimation Over a Capacity-Limited and Lossy Channel	<i>J.-H. Park and S. Han</i>	406
Zames–Falb Multipliers for Invariance	<i>M. Fetzer and C. W. Scherer</i>	412
Nonlinear Optimal Control Design Considering a Class of System Constraints With Validation on a Magnetic Levitation System	<i>A. T. Tran, S. Suzuki, and N. Sakamoto</i>	418
