

# IEEE TRANSACTIONS ON CYBERNETICS

A PUBLICATION OF THE IEEE SYSTEMS, MAN, AND CYBERNETICS SOCIETY

Indexed in PubMed® and MEDLINE®, products of the United States National Library of Medicine



MAY 2016

VOLUME 46

NUMBER 5

ITCEB8

(ISSN 2168-2267)

---

## REGULAR PAPERS

Off-Policy Actor-Critic Structure for Optimal Control of Unknown Systems With Disturbances .....	<i>R. Song, F. L. Lewis, Q. Wei, and H. Zhang</i>	1041
Neural Network-Based Control of Networked Trilateral Teleoperation With Geometrically Unknown Constraints .....	<i>Z. Li, Y. Xia, D. Wang, D.-H. Zhai, C.-Y. Su, and X. Zhao</i>	1051
Entropy Measurement for Biometric Verification Systems .....	<i>M.-H. Lim and P. C. Yuen</i>	1065
Binarization With Boosting and Oversampling for Multiclass Classification .....	<i>A. Sen, M. M. Islam, K. Murase, and X. Yao</i>	1078
On Input-to-State Stability of Switched Stochastic Nonlinear Systems Under Extended Asynchronous Switching .....	<i>Y. Kang, D.-H. Zhai, G.-P. Liu, and Y.-B. Zhao</i>	1092
A Novel Extreme Learning Control Framework of Unmanned Surface Vehicles .....	<i>N. Wang, J.-C. Sun, M. J. Er, and Y.-C. Liu</i>	1106
A Stochastic Framework for Robust Fuzzy Filtering and Analysis of Signals—Part I .....	<i>M. Kumar, N. Stoll, R. Stoll, and K. Thurth</i>	1118
High Capacity Reversible Data Hiding in Encrypted Images by Patch-Level Sparse Representation .....	<i>X. Cao, L. Du, X. Wei, D. Meng, and X. Guo</i>	1132
Evolving Scale-Free Networks by Poisson Process: Modeling and Degree Distribution .....	<i>M. Feng, H. Qu, Z. Yi, X. Xie, and J. Kurths</i>	1144
Solving Potential Games With Dynamical Constraint .....	<i>M. Ye and G. Hu</i>	1156
Synchronous Hybrid Event- and Time-Driven Consensus in Multiagent Networks With Time Delays .....	<i>F. Xiao, T. Chen, and H. Gao</i>	1165
The $k$ -Unanimity Rule for Self-Organized Decision-Making in Swarms of Robots .....	<i>A. Scheidler, A. Brutschy, E. Ferrante, and M. Dorigo</i>	1175
Learning With $\ell_1$ -Regularizer Based on Markov Resampling .....	<i>T. Gong, B. Zou, and Z. Xu</i>	1189
System Identification in Presence of Outliers .....	<i>C. Yu, Q.-G. Wang, D. Zhang, L. Wang, and J. Huang</i>	1202
Robotic Online Path Planning on Point Cloud .....	<i>M. Liu</i>	1217
Inverse-Free Extreme Learning Machine With Optimal Information Updating .....	<i>S. Li, Z.-H. You, H. Guo, X. Luo, and Z.-Q. Zhao</i>	1229

---

## TECHNICAL CORRESPONDENCE

Notion of Control-Law Module and Modular Framework of Cooperative Transportation Using Multiple Nonholonomic Robotic Agents With Physical Rigid-Formation-Motion Constraints .....	<i>W. Li</i>	1242
--	--------------	------

---