REGULAR PAPERS

Control Theory and Applications

Solution to Mixed H2/H∞ Control for Discrete-time Systems with (x, u, v)-dependent Noise
X. Li, W. Wang, J. Xu, and H. Zhang 273

Controllability for Time-dependent Neutral Stochastic Functional Differential Equations with Rosenblatt Process and Impulses
E.H. Laktash and M.A. McKibben 286

Leader-following Consensus of Nonlinear Multi-agent Systems via Reliable Control with Time-varying Communication Delay
K. Subramanian, P. Mathukumal, and T. H. Joo 298

Robust Model Predictive Control for Uncertain Positive Time-delay Systems
J. Zhang, H. Xiang, M. Li, and Q. Wang 307

Finite-time Positivity/Passivity Gain Minimization
H. Wang, C. Wang, Y. Zheng, Z. Chen, and S. He 319

Delay-dependent Robust Dissipative Control for Singular LPV Systems with Multiple Input Delays
X. Wang, X. Zhang, and X. Yang 327

Robust State Observer Design for Dynamic Connection Relationships in Complex Dynamical Networks
Z. L. Gan, Y. Wang, J. Xiang, L. Zhang, and W. Wang 336

Strong Tracking Trible Kalman Filter with Model Uncertainties
Z. Du and X. Li 345

Disturbance-observer Based Adaptive Control for Second-order Nonlinear Systems Using Clustering-free Reaching Law
L. Tao, Q. Chen, and Y. Nan 356

Cooperative Control of Multiple Dynamic Positioning Vessels with Input Saturation Based on Finite-time Disturbance Observer
C. Xie, C. Sun, B. Zhao, and J. Xue 370

Fault-Tolerant Time Optimization of Switched Systems with Application to Multi-agent Flight Control
X. Fu, H. Yang, and B. Jiang 380

Analytical Design and Stability Analysis of the Universal Integral Regulator Applied in Flight Control
Y. Qiao, M. de Sasso, G. Camera, S. Carleo, and A. Rames 391

Linear Matrix Inequality Approach to Stochastic Stabilization of Networked Control System with Markovian Jumping Parameters
Y. Wu and T. Wu 405

Distributed Fault Tolerant Control for Multi-agent Systems with Complex-weighted Directed Communication Topology subject to Actuator Faults
A. Ghahramani, J. Akbari, and M. B. Menhaj 415

Coprime Representations and Feedback Stabilization of Discrete-Time-varying Linear Systems
L. Liu and Y. Li 425

UFO-based Fault Estimation and Accommodation for Nonlinear Switched Systems

Robot and Applications

ROS-based Teleoperation Application for Transmitting High-bandwidth Kinematic Data over a Limited Network
M. A. Arastu and N. E. Benchet 445

RAVEN Eyes Around the Instrument from Modular Axis Sharing
C. A. Macas, F. S. Kim, T. S. Lawring, A. Ramirez, and W. J. Yoon 454

An Adaptive Backstepping Trajectory Tracking Control of a Tractor Trailer Wheelbase Robotic
N. T. Binh, N. A. Tang, D. P. N. Nam, and N. H. Quang 465

A Socio-Physical Human-robot Interaction Scheme Based on Body Motion Analysis
T. Zhu, Z. Xie, J. Dong, and Q. Zhao 474

Flight and Hover Control System Design for a Mini-quadrotor Based on Multi-sensors
Z. Liu, H. Li, Y. Gu, Z. Li, and Q. Li 486

Reducing the Design Complexity of Automated Vehicle Electrical and Electronic Systems Using a Cyberphysical System Concept
Y. Song, J. Park, K.-C. Lee, and S. Lee 500

Intelligent Control and Applications

Global Robust Synchronization of Fractional Order Complex-valued Neural Networks with Mixed Time Varying Delays and Impulses
P. Anbalagan, P. Prakashchander, J. Cao, G. Rajchakit, and C. P. Lim 509

Global Synchronization in Finite-time of Fractional-order Complex-valued Delayed Hopfield Neural Networks
Y. Zhang, P. Niu, N. Liu, and G. Li 521

Design of Type-2 Fuzzy Logic Systems Based on Improved Ant Colony Optimization
Z. Zhang, T. Wang, Y. Chen, and J. Lan 536

INDEXED IN Science Citation Index Expanded (SciSearch), SCOPUS, INSPEC, Google Scholar, ProQuest, Current Contents/Engineering, Computing and Technology, EI-Compendex, Journal Citation Reports/Science Edition, OCLC, Summon by Serial Solutions, Korea Citation Index.
Aims and Scope

The International Journal of Control, Automation, and Systems (IJCAS) is a monthly published periodical. As of 2003, it is a joint publication of the Institute of Control, Robotics and Systems (ICROS) and the Korean Institute of Electrical Engineers (KIEE). The purpose of the journal is to establish a high quality archival periodical presenting state of the art, recent advances and practical applications of control, automation and systems engineering. In the journal, the three technical areas included are: Control Theory and Applications, Robot and Applications, Intelligent Control and Applications.

Two types of contributions are regularly considered:

(1) Regular Papers: Presentation of significant research, development or application of control concepts and normally limited to 10000 words.
(2) Technical Notes and Correspondence: Brief technical notes and short communications on previously published areas or established control topics, corrections to papers, and notes published in the Journal. Manuscripts up to five pages are allowed in final form.

Conditions of Publication

Submission of a manuscript implies that it has not been copyrighted, published, submitted, nor accepted for publication elsewhere. Longer manuscripts may be considered, but have a proportionately lower probability of acceptance.

Peer-Review

All manuscripts are treated as confidential and peer-reviewed by at least two independent reviewers selected by Editorial Board. The corresponding author is notified possible of the editor’s decision by anonymous reviewers selected by Editorial Board. The peer review process is double-blind and all manuscripts are judged on the basis of their scientific merit. Longer manuscripts may be considered, but have a proportionately lower probability of acceptance.

Copyright

It is the policy of the IJCAS to own the copyright to the technical contributions that it publishes on behalf of the interests of the IJCAS, its authors, and their employers, and to facilitate the appropriate reuse of this material to others.

Page Charge and Reprints

Authors should be charged for publication to make a contribution to defray part of the publication cost. A page charge form (USD 300 under 8 pages) is sent to the authors with proofs. Authors will receive 1 hard copy of journal only if the reprints charge (USD 100) is honored.

Overlength Page Charge

An overlength page charge is imposed on all pages exceeding 8 pages in length, including illustrations. The charge is USD 100 per page for each page over the first eight.

Information for Authors

International Journal of Control, Automation, and Systems

The Korean Institute of Electrical Engineers

Subscription Information

Under the subscription terms of the IJCAS, authors may have a copy of all their papers published.

Manuscript Preparation

(1) Manuscripts must be written in English and the Title source file should be prepared in a LaTex format (by using UCAS). Other file formats are accepted also as long as the manuscript is typewritten in two-column and single-space structure; however, the conversion process by the UCAS may result in 1 to 3 month delay in the printing process.

(2) Authors of an accepted manuscript will be required to provide the text of the final version of their manuscript on the website http://ijcas.com.

(3) The preferred formats for graphics are TIFF, EPS, and JPEG formats. The contrast-contrail figures should be prepared with 600 dpi resolution, and color/grey photographs should be prepared with more than 300 dpi resolution. The color figures should be clearly seen even though they are printed black and white.

(4) For biographies and other clear glossy photographs of the authors or TIF, EPS, and JPEG files if the author wishes to add in the last page.

Manuscript Style

A) Title page must contain:

1) Title of paper, author(s), and affiliation(s);
2) Abstract (not exceeding 300 words for Regular Papers or 100 words for Technical Notes and Correspondence, and without equations, references, or footnotes);
3) Keywords (all at least four key words or phrases);
4) Complete mailing address and e-mail address;
5) Preferred address for correspondence and return of proofs;
6) Footnotes (if desired) containing acknowledgement of financial or other support.

B) Provide an introduction that includes a statement of the purpose and contribution of the paper.

C) References should be cited within the text in numerical order according to their order of appearance. The numbered reference citation should be enclosed in brackets, e.g., ‘‘K.P is known in (1) for .’’ (2) Introduce another method.


Copyright

It is the policy of the IJCAS to own the copyright to the technical contributions that it publishes on behalf of the interests of the IJCAS, its authors, and their employers, and to facilitate the appropriate reuse of this material to others.

Page Charge and Reprints

Authors should be charged for publication to make a contribution to defray part of the publication cost. A page charge form (USD 300 under 8 pages) is sent to the authors with proofs. Authors will receive 1 hard copy of journal only if the reprints charge (USD 100) is honored.

Overlength Page Charge

An overlength page charge is imposed on all pages exceeding 8 pages in length, including illustrations. The charge is USD 100 per page for each page over the first eight.