amcs

International Journal of
applied mathematics and computer science

Special section

EXPLORING COMPLEX AND BIG DATA

Editors

Johann GAMPER
Robert WREMBEL

AIMS & SCOPE

The *International Journal of Applied Mathematics and Computer Science* strives to meet the demand for the presentation of interdisciplinary research in various fields related to control theory, applied mathematics, scientific computing, and computer science. In particular, it publishes high quality original research results in the following areas:

- modern control theory and practice

- artificial intelligence methods and their applications

- applied mathematics and mathematical optimisation techniques

- mathematical methods in engineering, computer science, and biology.

We are primarily interested in presenting theoretical and application-oriented full-length research papers dealing with the following topics:

- control theory, including optimal control, system identification, adaptive and robust control, multivariable control, and non-linear systems

- dynamical systems, including spatiotemporal processes, control problems, state and parameter estimation, and sensor networks

- fault detection and diagnosis, including model-based approaches, observers, and classifiers

- fault-tolerant control, including the control of continuous-variable and quantised systems

- robotics, including modelling and simulation, mobile robots, and optimal trajectory planning

- mathematical modelling and simulation, including numerical algorithms

- optimisation, including mathematical optimisation techniques, global optimisation, and evolutionary algorithms

- classification and pattern recognition

- artificial intelligence, including neural networks, knowledge engineering, reasoning and learning models, expert and decision support systems, fuzzy systems, and search methods

- mathematical biology

- applications in engineering and medicine.

The editors welcome proposals for exchange between similar journals. Also, all persons interested in bringing out special issues of *AMCS* are encouraged to contact the Editor-in-Chief. Such issues may be published on any important and timely subject within the scope of the journal. All papers proposed for specials should be refereed and meet the same criteria for scientific quality as articles presented in regular issues.

AMCS is published in Poland by the University of Zielona Góra in partnership with the Lubuskie Scientific Society and De Gruyter Open, under the auspices of the Committee on Automatic Control and Robotics of the Polish Academy of Sciences.

For more information, visit our website at `www.amcs.uz.zgora.pl`.

Profile

Indexation

About

The *International Journal of Applied Mathematics and Computer Science* is a quarterly published in Poland since 1991 by the University of Zielona Góra in partnership with the Lubuskie Scientific Society and De Gruyter Poland, under the auspices of the Committee on Automatic Control and Robotics of the Polish Academy of Sciences. It strives to meet the demand for the presentation of interdisciplinary research in various fields related to control theory, applied mathematics, scientific computing, and computer science.

In particular, *AMCS* publishes original, high-quality full-length research papers in the following areas: *modern control theory and practice; artificial intelligence methods and their applications; applied mathematics and mathematical optimisation techniques; and mathematical methods in engineering, computer science and biology.*

Chief indexing and abstracting services

ACM Digital Library, Applied Mechanics Reviews, Clarivate Analytics (formerly Thomson Reuters), Current Mathematical Publications (AMS), DBLP Computer Science Bibliography, EBSCO, Elsevier, Google Scholar, Inspec, Mathematical Reviews (MathSciNet), Proquest, Zentralblatt MATH, *and others.*

Impact Factor

1.694 (2017)
5-Year IF: **1.712** (2017)

Editors

Guide

Requirements in brief

Our basic rules include electronic paper submission and processing, the LaTeX format following a special *AMCS* style, a license to publish, and a publication charge.

Paper submission

Paper proposals may be submitted only through our on-line submission system. If suitable for our journal, the papers will be subject to a full review procedure, and a decision on whether or not to accept the paper will be made based on the reviewers' comments.

Paper style

The style of papers to be published in *AMCS* is determined by a special LaTeX class, which is described in detail in our instructions for authors. No other formats are accepted.

License to publish

All authors must sign a license to publish upon paper acceptance. The license governs in detail the commercial and non-commercial use of papers published by our journal, and determines user and author rights.

Publication charge

The authors are expected to pay page charges, which cover the costs of the publishing process and will be processed following paper acceptance.

Provisions

One sample copy of the journal and the electronic version of the paper are provided for authors once the issue has been published.

Details, submission and downloads

The complete guide for authors can be found on our website at www.amcs.uz.zgora.pl.

Present your research with us!

Subscription

Our subscription is annual and covers four printed issues.

2019 Rates

Domestic

Individuals & scientific institutions:	180 PLN
Other customers:	480 PLN

Foreign

Individuals:	120 EUR
Institutions:	200 EUR

Prices exclusive of VAT. Postage free for standard delivery.

Payment methods

We accept bank transfers and off-line credit card payments.

Orders

Please contact the Editorial Office for subscription orders.

Specials

Recent special issues and sections

2018, Vol. 28, No. 2: Special section
ADVANCED DIAGNOSIS AND FAULT-TOLERANT CONTROL METHODS
Editors: Vicenç PUIG, Dominique SAUTER, Christophe AUBRUN, Horst SCHULTE
Authors: S. Pröll *et al.*, S. Simani *et al.*, B. Li *et al.*, M. Quiñones-Grueiro *et al.*, M. Pazera *et al.*, G.P. Falconí *et al.*, N. Harrabi *et al.*

2018, Vol. 28, No. 1: Special section
ISSUES IN PARAMETER IDENTIFICATION AND CONTROL
Editor: Abdel AITOUCHE
Authors: K.A. Markowski, E. Zattoni, M. Patan and D. Kowalów, K. Srinivasarengan *et al.*, S. Li *et al.*, M. Zhou *et al.*, F. Karimi Pour *et al.*, N. El Fezazi *et al.*

2017, Vol. 27, No. 4: Special section
EXPLORING COMPLEX AND BIG DATA
Editors: Jerzy STEFANOWSKI, Krzysztof KRAWIEC, Robert WREMBEL
Authors: J. Stefanowski *et al.*, R. Bembenik *et al.*, B. Bilalli *et al.*, M. Gorawski and M. Lorek, M. Koziarski and M. Woźniak, A.I. Weinberg and M. Last

2017, Vol. 27, No. 3: Special section
SYSTEMS ANALYSIS: MODELLING AND CONTROL
Editors: Vyacheslav MAKSIMOV, Boris MORDUKHOVICH
Authors: M. Blizorukova and V. Maksimov, V.I. Maksimov and B.S. Mordukhovich, V.G. Pimenov and A.S. Hendy, R. Rabah *et al.*

CONTENTS