



About

The International Journal of Applied Mathematics and Computer Science is a quarterly published jointly by the University of Zielona Góra and the Lubuskie Scientific Society in Zielona Góra, Poland, since 1991. 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 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.

Current indexing and abstracting

Science Citation Index Expanded (SciSearch®), Journal Citation Reports/Science Edition, Scopus-Elsevier, Google Scholar, INSPEC. EBSCO, DBLP Computer Science Bibliography, MathSciNet, Mathematical Reviews, Compendex, Zentralblatt MATH, Current Mathematical Publications, Computer Abstracts International Database, Applied Mechanics Reviews, ACM Digital Library, CSA Technology Research Database, CSA High Technology Research Database with Aerospace, Computer and Information Systems Abstracts, Summon by Serials Solutions, VINITI, BazTech, Polish Virtual Library of Science/Mathematical Collection, Digital Library of Zielona Góra

Impact Factor

0.487 (2011), 0.794 (2010), 0.684 (2009)



Editor-in-Chief

Józef KORBICZ University of Zielona Góra, Poland

Deputy Editor

Dariusz UCIŃSKI University of Zielona Góra, Poland

Associate Editors

Igor AIZENBERG Texas A&M University-Texarkana, USA Luís GOMES New University of Lisbon, Portugal Adam GRZÉCH Wrocław University of Technology, Poland Nicholas P. KARAMPETAKIS Aristotle University of Thessaloniki, Greece Jacek KLUSKA Rzeszów University of Technology, Poland Marek KURZYŃSKI Wrocław University of Technology, Poland James LAM University of Hong Kong, China Silvio SIMANI University of Ferrara, Italy Andrzej ŚWIERNIAK Silesian Úniversity of Technology, Gliwice, Poland

Board Members

Marian ADAMSKI University of Zielona Góra, Poland Sergei AVDONIN University of Alaska Fairbanks, USA Stanisław BAŃKA West Pomeranian University of Technology in Szczecin, Poland University of West Bohemia in Pilsen, Czech Republic Andrzej BARTOSZEWICZ Technical University of Łódź, Poland Vincent COCQUEMPOT Lille 1 University, France Michael A. DEMETRIOU Worcester Polytechnic Institute, USA Moritz DIEHL KU Leuven, Belgiun

Abdelhaq EL JAI Miroslav FIKAR Slovak University of Technology in Bratislava, Slovakia Bin JIANG Naniing University of Aeronautics and Astronautics, China Janusz KACPRZYK Polish Academy of Sciences, Warsaw, Poland Jerzy KLAMKA Silesian University of Technology, Gliwice, Poland Jan M. KOŚCIELNY Warsaw University of Technology, Poland Zdzisław KOWALCZUK Gdańsk University of Technology, Poland Krzysztof KOZŁOWSKI Poznań University of Technology, Poland Miroslav KRSTIC University of California, San Diego, USA Vyacheslav MAKSIMOV

Russian Academy of Sciences, Ural Branch, Ekaterinburg, Russia Krzysztof MALINOWSKI Warsaw University of Technology, Poland Wojciech MITKOWSKI AGH University of Science and Technology, Cracow, Poland Hans Henrik NIEMANN Technical University of Denmark, Kgs. Lyngby, Denmark Stanisław OSOWSKI Warsaw University of Technology, Poland Ronald J. PATTON University of Hull, UK Witold PEDRYCZ University of Alberta, Edmonton, Canada Marios M. POLYCARPOU University of Cyprus, Nicosia, Cyprus Vincenç PUIG Technical University of Catalonia, Barcelona, Spain Ewaryst RAFAJŁÓWICZ Wrocław University of Technology, Poland Leszek RUTKOWSKI

Technical University of Częstochowa, Poland Jose SÁ da COSTÁ Technical University of Lisbon, Portugal Dominique SAUTER University of Lorraine, Nancy, France Maria SERON The University of Newcastle, Australia Miroslav ŠIMANDL Piotr SKRZYPCZYŃSKI Poznań University of Technology, Poland Roman SŁOWIŃSKI Poznań University of Technology, Poland Mircea-Traian SOFONEA

Jan SOKOLOWSKI

University of Lorraine, Nancy, France

Ryszard TADEUSIEWICZ AGH University of Science and Technology, Cracow, Poland Yonghong TAN Shanghai Normal University, China Piotr TATJEWSKI Warsaw University of Technology, Poland Krzysztof TCHOŃ Wrocław University of Technology, Poland Didier THEILLIOL University of Lorraine, Nancy, France Marcin WITCZAK University of Zielona Góra, Poland Guisheng ZHAI Shibaura Institute of Technology, Tokyo, Japan Changshui ZHANG Tsinghua University, Beijing, China Alexey ZHIRABOK Far Eastern Federal University, Vladivostok, Russia Enrique ZUAZUA Basque Center for Applied Mathematics, Bilbao, Spain Jacek M. ZURADA

Editorial Office

University of Zielona Góra

University of Louisville, USA

Institute of Control & Computation Engineering ul. Podgórna 50 65-246 Zielona Góra Poland tel.: +48 683282506 fax: +48 683284751 e-mail: amcs@uz.zgora.pl website: www.amcs.uz.zgora.pl

Agnieszka ROŻEWSKA

Agata WIŚNIEWSKA-KUBICKA

www.amcs.uz.zgora.pl



Requirements in brief

Our basic rules include electronic paper submission and processing, the LaTeX format following a special AMCS style. copyright transfer, a voluntary page 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'

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.

Copyright transfer

All authors must sign the copyright transfer agreement before the article can be published. The agreement allows protecting the copyrighted material, without affecting the authors' proprietary rights, and covers the exclusive rights to reproduce and distribute the article.

Page charge

Papers published in AMCS are subject to a voluntary page charge, which will be invoiced through the authors to their institutions. Publication is not dependent on the payment of this charge. However, for papers exceeding the required length, mandatory excess page charges will be applied.

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!

© University of Zielona Góra & Lubuskie Scientific Society. All rights reserved. Printed in 200 copies, Primary version; print,



Our subscription is annual and covers four printed issues.

2013 Rates

Domestic

Individuals & scientific institutions: 180 PLN Other customers: 600 PLN

Foreign

Individuals: 180 EUR 200 EUR Institutions:

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.



Recent special issues and sections

2012, Vol. 22, No. 4: Special section HYBRID AND ENSEMBLE METHODS IN MACHINE LEARNING Editors: Oscar CORDÓN, Przemysław KAZIENKO Authors: C. Li and T.-W. Chiang, R. Colomo-Palacios et al., H. Qin et al., T. Kajdanowicz and P. Kazienko, S.M. Sumi et al., M. Woźniak and B. Krawczyk, B. Trawiński et al.

2012, Vol. 22, No. 2: Special section ANALYSIS AND CONTROL OF SPATIOTEMPORAL DYNAMIC SYSTEMS Editors: Dariusz UCIŃSKI, Józef KORBICZ Authors: Z. Emirsajłow, P.J. Mitkowski and W. Mitkowski, A. Myśliński, E. Niewiadomska-Szynkiewicz, M. Patan, E. Rafajłowicz et al.

2012, Vol. 22, No. 1: Special issue ADVANCES IN CONTROL AND FAULT-TOLERANT SYSTEMS Editors: Józef KORBICZ, Didier MAQUIN, Didier THEILLIOL Authors: H. Jamouli et al., D. Uciński, F. Yang et al., M. Ungermann et al., H.H. Niemann, H. Yang et al., X. Olive, C. Edwards et al., T. Jain et al., P. Weber et al., R.J. Patton et al., S. Montes de Oca et al., P. Gáspár et al., D. Xu et al., D. Ichalal et al., A. Yetendje et al., K. Patan and J. Korbicz

2011, Vol. 21, No. 3: Special section ISSUES IN ADVANCED CONTROL AND DIAGNOSIS Editors: Vicenç PUIG, Marcin WITCZAK Authors: W. Chen et al., A. Khelassi et al., M. Bonfè et al., B. Boussaid et al., S. Fang and M. Blanke, K-U Dettmann and D.Söffker

2011, Vol. 21, No. 2: Special section EFFICIENT RESOURCE MANAGEMENT FOR GRID-ENABLED APPLICATIONS Editors: Joanna KOŁODZIEJ, Fatos XHAFA Authors: O. Terzo et al., A. Carpen-Amarie et al., J. Kołodziej and F. Xhafa, M. Hall-May et al., H. González-Vélez and M. Kontagora, G. Di Modica et al., F.A. López-Fuentes