

Journal of Information and Organizational Sciences

UDC 004:005:3
ISSN 1846-3312
e-ISSN 1846-9418

Publisher

University of Zagreb
Faculty of Organization and Informatics
Varaždin
Pavlinska 2
HR-42 000 Varaždin, Croatia

Editor

Neven Vrček, University of Zagreb, Faculty of
Organization and Informatics, Varaždin, Croatia

Editorial board

Boris Aurer, University of Zagreb, Croatia
Josip Brumec, University of Zagreb, Croatia
Goran Bubaš, University of Zagreb, Croatia
Marijan Cingula, University of Zagreb, Croatia
Leo Budin, University of Zagreb, Croatia
Ivica Crnković, Mälardalen University, Sweden
Vlatko Čerić, University of Zagreb, Croatia
Mirko Čubrilo, University of Zagreb, Croatia
Blaženka Divjak, University of Zagreb, Croatia
Matilda Drozdova, University of Žilina, Slovakia
Vesna Dušak, University of Zagreb, Croatia
María José Escalona, University of Sevilla, Spain
Joaquim Filipe, Polytechnic Institute of Setúbal,
Portugal
Matjaz Gams, Jozef Stefan Institute, Slovenia
Tihomir Hunjak, University of Zagreb, Croatia
Maria Jakovljevic, University of the Witwatersrand,
South Africa
Dragutin Kermek, University of Zagreb, Croatia
Božidar Kliček, University of Zagreb, Croatia
Douwe Korff, London Metropolitan University, United
Kingdom
Zdravko Krakar, University of Zagreb, Croatia
Michael Lang, National University of Ireland, Ireland

Editor-in-Chief

Tihomir Hunjak, University of Zagreb, Faculty of
Organization and Informatics, Varaždin, Croatia

Alen Lovrenčić, University of Zagreb, Croatia
Mirko Maleković, University of Zagreb, Croatia
Dunja Mladenec, Jozef Stefan Institute, Slovenia
Pavle Mogin, Victoria University of Wellington, New
Zealand
Guenter Mueller, University of Freiburg, Germany
Jan Paralic, Technical University Kosice, Slovakia
Algirdas Pakstas, London Metropolitan University,
United Kingdom
Rimantas Petrauskas, Mykolas Romeris University,
Lithuania
Roman Povalej, Institute AIFB, University of Karlsruhe,
Germany
Wolf Rauch, Universität Graz, Austria
Slobodan Ribarić, University of Zagreb, Croatia
Tefko Saračević, State University of Jersey, United
States
Vjeran Strahonja, University of Zagreb, Croatia
J. Douglas Toma, University of Georgia, United States
József K. Tar, Institute of Intelligent Engineering
Systems, John von Neumann Faculty of Informatics,
Hungary
Mladen Vouk, North Carolina State University, United
States
Žugaj Miroslav, University of Zagreb, Croatia

Publishing Board

Maja Bratko, Darko Grabar, Goran Hajdin, Renata
Horvatek, Bernarda Kos, Alen Lovrenčić,
Dijana Plantak Vukovac, Kornelije Rabuzin

ISSN 1846-3312
e-ISSN 1846-9418

www.jios.foi.hr

Cover Design and Layout

ri mo dizajn

Printing

TIVA Tiskara Varaždin, Croatia

Principal Contact

Neven Vrčec
Faculty of Organization and Informatics, Varaždin
Pavlinka 2, HR-42000 Varaždin, Croatia
Tel. + 385 42 390 827
Fax: + 385 42 213 413
E-mail: neven.vrcek@foi.hr

JIOS is indexed in the following databases

CSA Technology Research Database
Computer and Information Systems Abstracts
DOAJ
INSPEC
LISA
OALster
Referativny Zhurnal

Proofreading

Authors

Copyeditor and Computer Type Set

Dijana Plantak Vukovac

Contact

Faculty of Organization and Informatics, Varaždin
Pavlinka 2, HR-42000 Varaždin, Croatia
Tel. +385 42 390 800, fax +385 42 213 413,
E-mail: jios@foi.hr (Correspondence Mail)
jios-pub@foi.hr (Publishing Board)
URL: www.jios.foi.hr

Subscription information

JIOS is published twice per year.
Printed in 500 copies.
Subscription rate per volume for printed edition:
100 HRK (15 €).
To subscribe, please contact the publisher at
jios-pub@foi.hr.
JIOS is published with financial support of the
Ministry of Science, Education and Sport of the
Republic of Croatia.

CONTENTS

<i>From the Editor</i>	V
Nadica Hrgarek, Kerri-Anne Bowers: Integrating Six Sigma into a Quality Management System in the Medical Device Industry Preliminary Communication Article	1-12
Nikola Kadoić, Matija Kopic: Theory of Microcrediting in Transitional Economies Original Scientific Paper	13-24
Andreja Kovačić, Valentina Kirinić, Blaženka Divjak: Linguistic Competence in Tertiary-Level Instruction in English and Its Relevance for Student Mobility Original Scientific Paper	25-37
Zdravko Krakar, Mario Žgela: Application of Benford's Law in Payment Systems Auditing Original Scientific Paper	39-51
Srećko Krile, Dario Krešić: An Efficient Algorithm for Congestion Control in Highly Loaded DiffServ/MPLS Networks Original Scientific Paper	53-64
Michael Lang: Web-based Systems Development: The Influence of Disciplinary Backgrounds on Design Practices Preliminary Communication Article	65-77
Alen Lovrenčić, Mario Konecki, Tihomir Orehovački: 1957-2007: 50 Years of Higher Order Programming Languages Review Paper	79-150
Kristína Machová, Lenka Gaňová: The Particular Mapping of the Nearest Surroundings Graph of the Actual Web Page Original Scientific Paper	151-163
Jan Piecha, Marcin Bernaś: Interactions Validation Methods for Training Resources Control Engine Development Original Scientific Paper	165-177
Božidar Radenković, Marijana Despotović, Zorica Bogdanović, Dušan Barać: Creating Adaptive Environment for e-Learning Courses Original Scientific Paper	179-189
Boubker Sbihi, Siham El Jazouli, Kamal Eddine El Kadiri: Web 2.1: Toward a Large and Qualitative Participation on the Web Original Scientific Paper	191-204
Dmitri A. Viattchenin: An Algorithm for Detecting the Principal Allotment among Fuzzy Clusters and Its Application as a Technique of Reduction of Analyzed Features Space Dimensionality Original Scientific Paper	205-217
Ivana Žiljak, Klaudio Pap, Vilko Žiljak: Double Separation Method for Translation of the Infrared Information into a Visible Area Preliminary Communication Article	219-225
<i>Instructions for Formatting JIOS Articles: A Microsoft Word Template</i>	227-230