

ISSN 0972 - 9038

International Journal of Computer Science & Applications

Volume 5 Issue 3b

September 2008

Special Issue on
New Trends in Information System Modelling

Editor-in-Chief
Rajendra Akerkar

Special Issue Editors
Martine Collard, André Flory, & Oscar Pastor

Advisory Editor: Douglas Comer *Purdue University, USA.*

Editor-in-Chief: Rajendra Akerkar *Technomathematics Research Foundation , India.*

Managing Editor: David Camacho *Universidad Autonoma de Madrid, Spain.*

Associate Editors:

Costin Badica
University of Craiova, Craiova, Romania

Barbara Catania
Universita' di Genova, Italy

Jianer Chen
Texas A&M University, Texas, USA

Daoud S Daoud
Eastern Mediterranean University, Cyprus

Evangelos Kranakis
Carleton University, Canada

Mal Rey Lee
Chonbuk National University, Korea

Maria D. R-Moreno
Universidad de Alcalá, Spain

Roger RN. Nkambou
Université du Québec à Montréal, Canada

Hans Juergen Ohlbach
Ludwig -Maximilians-Universitaet, Germany

Parag C. Pendharkar
Pennsylvania State University, Harrisburg, USA

Chunming Rong
University of Stavanger, Stavanger, Norway

Cliff A. Shaffer,
Virginia Tech, Blacksburg, USA

Mengjie Zhang
Victoria University of Wellington, New Zealand

Editorial Council :

Stuart Aitken *University of Edinburgh, UK*

JF Baldwin *University of Bristol, UK*

Ivan Bruha *Mcmaster University, Canada*

Narendra S. Chaudhari *Nanyang Techno. University, Singapore*

David Hung-Chang Du *University of Minnesota, USA*

Yakov I. Fet *Russian Academy of Sciences, Russia*

S. K. Gupta *IIT, New Delhi, India*

Ray Jarvis *Monash University, Victoria, Australia*

Pawan Lingras *Saint Mary's University, Halifax, Canada.*

Pericles Loucopoulos *UMIST, Manchester, UK*

C. R. Muthukrishnan *Indian Institute of Techno., Chennai, India*

Lalit M. Patnaik *Indian Institute of Science, Bangalore, India*

Shahram Rahimi *Southern Illinois University, Illinois, USA*

Dharmendra Sharma *University of Canberra, Australia*

José M. Valls Ferrán *Universidad Carlos III, Spain*

Krzysztof Wecel *The Poznan University of Economics, Poland*

Tetsuo Asano *JAIST, Japan.*

Pavel Brazdil *LIACC/FEP, University of Porto, Portugal*

Jacques Calmet *Universität Karlsruhe Germany*

K. V. Dinesha *IIT, Bangalore, India*

Hai-Bin Duan *Beihang University, P. R. China.*

Maria Ganzha, *Gizycko Private Higher Educational
Institute, Poland*

Henry Hexmoor *Southern Illinois University, Carbondale, U.S.A.*

Peter Kacsuk *MTA SZTAKI Research Institute, Hungary*

Huan Liu *Arizona State University, USA*

Lorraine McGinty *University College Dublin, Belfield, Ireland*

Marcin Paprzycki *SWPS and IBS PAN, Warsaw*

Dana Petcu *Western University of Timisoara, Romania*

Sugata Sanyal *Tata Institute of Fundamental Research, India.*

Ion O. Stamatescu *FEST, Heidelberg, Germany*

Rajeev Wankar *University of Hyderabad, Hyderabad, India*

Editorial Office: Technomathematics Research Foundation,
204/17 Kh, New Shahupuri, Kolhapur 416001, India.
E-mail: editor@tmrfindia.org

Copyright © 2008 by Technomthematics Research Foundation

All rights reserved. This journal issue or parts thereof may not be reproduced in any form or by any means, electrical or mechanical, including photocopying, recording or any information storage and retrieval system now known or to be invented, without written permission from the copyright owner.

Permission to quote from this journal is granted provided that the customary acknowledgement is given to the source.

International Journal of Computer Science & Applications (ISSN 0972 – 9038) is high quality electronic open access journal published six-monthly by Technomathematics Research Foundation, Kolhapur, India. The www-site of IJCSA is <http://www.tmrfindia.org/ijcsa.html>

CONTENTS

Editorial	v
Distributed Information Systems Development: A Framework for Understanding & Managing. <i>Jolita Ralyte, Xavier Lamielle, Nicolas Arni-Bloch, and Michel Leonard.</i>	1 - 24
Towards an approach to Select an Asset Information Management Strategy <i>Mohamed Zied Ouertani, Ajith K. Parlikad, and Duncan McFarlane</i>	25 - 44
Using Declarative Specifications in Business Process Design <i>Irina Rychkova, Gil Regev, and Alain Wegmann</i>	45 - 68
A Scenario and Aspects- Oriented Requirements Agile Approach. <i>Joao Araujo and Joao Carlos Ribeiro</i>	69 - 92
The Use of a Formal Representation of Accounting Standards. <i>Teller Pierre</i>	93 - 116
Semantic Web Service Research: Current Challenges and Proximate Achievements. <i>Daniel Bachlechner and Kerstin Fink</i>	117 - 140
Dynamic Plugging of Business Processes in Cross Organizational Workflow. <i>Lotfi Bouzguenda, Rafik Bouaziz and Eric Andonoff</i>	141 - 164
Consistency Check Algorithms for Multi-Dimensional Preference Trade-Offs. <i>Christoh Lofi, Wolf-Tilo Balke, and Ulrich Güntzer</i>	165 - 185

Editorial

The 2nd International Conference on Research Challenges in Information Science (RCIS) aimed at providing an international forum for scientists, researchers, engineers and developers from a wide range of information science areas to exchange ideas and approaches in this evolving field. While presenting research findings and state-of-art solutions, authors were especially invited to share experiences on new research challenges.

High quality papers in all information science areas were solicited and original papers exploring research challenges did receive especially careful interest from reviewers. Papers that had already been accepted or were currently under review for other conferences or journals were no to be considered for publications at RCIS'08.

108 papers were submitted and 35 were accepted as long papers. They were published in the RCIS'08 proceedings.

This special issue of the International Journal of Computer Science & Applications, dedicated to *NewTrends in Information System Modelling*, presents 8 extended versions of long papers that obtained the highest marks in the reviewing process. In the context of RCIS'08, they are linked to Information System Modelling and Business Processes, Agile approaches, Ontologies and Semantic Web techniques.

Guest Editors :

Martine Collard

André Flory

Oscar Pastor