

ISSN 0972 - 9038

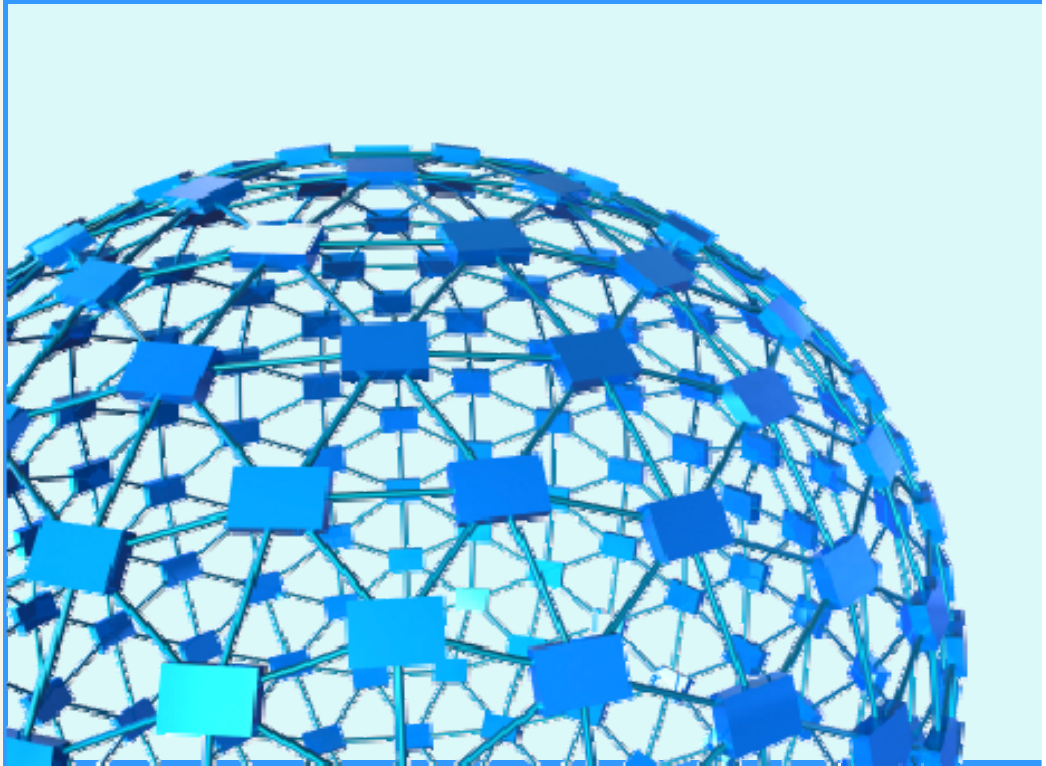
I
J
C
S
A

International Journal of Computer Science & Applications

VOLUME 9, ISSUE 2

MAY 2012

Editor-in-Chief
Rajendra Akerkar



Published by

Technomathematics Research Foundation, India

International Journal of Computer Science & Applications



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

Copyright © 2012 by Technomathematics Research Foundation

International Journal of Computer Science & Applications (ISSN 0972 – 9038) is high quality electronic journal published by Technomathematics Research Foundation, Kolhapur, India.

The www-site of IJCSA is <http://www.tmrfindia.org/ijcsa.html>

IJCSA

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.



EDITORIAL BOARD

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*

David F. Barrero, *Universidad de Alcalá, Madrid, Spain*

Will Browne, *Victoria University of Wellington, New Zealand*

Lenka Carr-Motyckova, *Palacky University, Czech Republic*

Barbara Catania, *Universita' di Genova, Italy*

Jianer Chen, *Texas A&M University, Texas, USA*

Daoud S Daoud, *Eastern Mediterranean University, Cyprus*

Ivan Jelínek, *Czech Technical University in Prague, Czech Republic*

Osamu Katai, *Kyoto University, Sakyo-ku, Kyoto, Japan*

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*

Priti Srinivas Sajja, *Sardar Patel University, India*

Cliff A. Shaffer, *Virginia Tech, Blacksburg, USA*

Council of Editors:

Stuart Aitken *University of Edinburgh, UK*

JF Baldwin *University of Bristol, UK*

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

Jacques Calmet *Universität Karlsruhe, Germany*

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

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

Maria Ganzha *IBS PAN and EUH-E, 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 *IBS PAN and WSM, Poland*

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*

Tetsuo Asano *JAIST, Japan*

Bijoy Bandyopadhyay *University of Calcutta, India*

Ivan Bruha *McMaster University, Canada*

Narendra S. Chaudhari *Indian Institute of Technology, Indore*

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 Wecl *The Poznan University of Economics, Poland*



CONTENTS (Vol. 9, No. 2, May 2012)

A Culturally Aware Rescue Model for Natural Disasters <i>Henry Hexmoor and Deepti Shetty</i>	1- 14
Scientific Collaboration in Research Networks: A Quantification Method by Using Gini Coefficient <i>Giseli Rabello Lopes, Roberto Da Silva, Mirella M. Moro and José Palazzo Moreira De Oliveira</i>	15 - 31
Ontology and Ontology Construction: Background and Practices <i>Terje Aaberge and Rajendra Akerkar</i>	32 - 41
Logical Fibering and Knowledge Bases <i>Jacques Calmet and Marvin Oliver Schneider</i>	42 - 52



Editorial (Vol. 9, No. 2, May 2012)

I am delighted to present this 2nd issue of year 2012 to our readers.

The first paper discusses an approach that deals with techniques for matching social demands of a disaster type with the strengths of human cultural traits among rescue teams.

Second paper presents a use of Gini Coefficient for analysis of scientist groups as research Social Networks. This is the first time Gini coefficient is applied over social networks for evaluating research.

Next paper describes a perspective on the notion of 'ontology' and of ontology construction. In this paper two ways of conceiving ontology construction are presented and four categories in the construction methods of ontology learning are reviewed.

Finally, forth paper provides a viewpoint on a means of intelligent formalization of knowledge in different domains. In particular this work elaborates the use of Virtual Knowledge Communities, establishment of trust and cooperation as well as the benefits of Logical Fibering as a data structure.

I hope that this Issue stimulates fresh directions and solutions that can lead to both theoretical insight and practical applications.

It will be my and my team's honor and privilege to help you make that work known by our distinguished readership. Please consider submitting your best work to IJCSA.

Rajendra Akerkar
Editor-in-Chief, IJCSA