

Table of Contents

International Journal on Semantic Web and Information Systems

Volume 13 • Issue 1 • January-March-2017 • ISSN: 1552-6283 • eISSN: 1552-6291

An official publication of the Information Resources Management Association

GUEST EDITORIAL PREFACE

V Special Issue on Big Data and Data Analytics Research: Challenging Data and Web Science for Next Generation High Performance Information Systems

Miltiadis D. Lytras, The American College of Greece, Athens, Greece & King Abdulaziz University, Jeddah, Saudi Arabia
Vijay Raghavan, University of Louisiana at Lafayette, Lafayette, IN, USA
Ernesto Damiani, EBTIC, Khalifa University, Abu Dhabi, UAE

RESEARCH ARTICLES

- 1 Big Data and Data Analytics Research: From Metaphors to Value Space for Collective Wisdom in Human Decision Making and Smart Machines**
Miltiadis D. Lytras, The American College of Greece, Athens, Greece & King Abdulaziz University, Jeddah, Saudi Arabia
Vijay Raghavan, University of Louisiana at Lafayette, Lafayette, IN, USA
Ernesto Damiani, EBTIC, Khalifa University, Abu Dhabi, UAE
- 11 Modelling Propagation of Public Opinions on Microblogging Big Data Using Sentiment Analysis and Compartmental Models**
Youjia Fang, Virginia Tech Transportation Institute, Virginia Tech, Blacksburg, VA, USA
Xin Chen, Department of Computer Science, Virginia Tech, Blacksburg, VA, USA
Zheng Song, Department of Computer Science, Virginia Tech, Blacksburg, VA, USA
Tianzi Wang, Department of Industrial & Systems Engineering, Virginia Tech, Blacksburg, VA, USA
Yang Cao, Department of Computer Science, Virginia Tech, Blacksburg, VA, USA
- 28 IoT-Based Big Data: From Smart City towards Next Generation Super City Planning**
M. Mazhar Rathore, School of Computer Science and Engineering, Kyungpook National University, Daegu, South Korea
Anand Paul, School of Computer Science and Engineering, Kyungpook National University, Daegu, South Korea
Awais Ahmad, School of Computer Science and Engineering, Kyungpook National University, Daegu, South Korea
Gwanggil Jeon, Department of Embedded Systems Engineering, Incheon National University, Incheon, South Korea
- 48 Finding Healthcare Issues with Search Engine Queries and Social Network Data**
M. Ikram Ullah Lali, Department of Computer Science & IT, University of Sargodha, Sargodha, Pakistan
Raza Ul Mustafa, Department of Computer Science, COMSATS Institute of Information Technology, Sahiwal, Pakistan
Kashif Saleem, Centre of Excellence in Information Assurance (CoEIA), King Saud University, Riyadh, Saudi Arabia
M. Saqib Nawaz, Department of Information Science, School of Mathematical Sciences, Peking University, Beijing, China
Tejseem Zia, Department of Computer Science, COMSATS Institute of Information Technology, Islamabad, Pakistan
Basit Shahzad, College of Computer and Information Sciences, King Saud University, Riyadh, Saudi Arabia
- 63 Harnessing Semantic Features for Large-Scale Content-Based Hashtag Recommendations on Microblogging Platforms**
Fahd Kallouli, University Sidi Mohamed Ben Abdellah, Fez, Morocco
El Habib Nfaoui, University of Sidi Mohamed Ben Abdellah, Fez, Morocco
Omar El Beqqali, University Sidi Mohamed Ben Abdellah, Fez, Morocco
- 82 Automatic Schema-Independent Linked Data Instance Matching System**
Khai Nguyen, National Institute of Informatics, SOKENDAI (The Graduate University for Advanced Studies), Hayama, Japan & University of Science, VNU-HCMC, Ho Chi Minh City, Vietnam
Ryutaro Ichise, National Institute of Informatics, SOKENDAI (The Graduate University for Advanced Studies), Hayama, Japan
- 104 Multi-Version Ontology-Based Personalization of Clinical Guidelines for Patient-Centric Healthcare**
Fabio Grandi, DISI, University of Bologna, Bologna, Italy
Federica Mandreoli, FIM Department, University of Modena and Reggio Emilia, Modena, Italy
Riccardo Martoglia, FIM Department, University of Modena and Reggio Emilia, Modena, Italy
- 128 SPedia: A Central Hub for the Linked Open Data of Scientific Publications**
Muhammad Ahtisham Aslam, Faculty of Computing and Information Technology, King Abdulaziz University, Jeddah, Saudi Arabia
Naif Radi Aljohani, Faculty of Computing and Information Technology, King Abdulaziz University, Jeddah, Saudi Arabia

OPEN ACCESS ARTICLE

- 148 Enabling Interoperability in the Internet of Things: A OSGi Semantic Information Broker Implementation**
Alfredo D'Elia, ARCES, University of Bologna, Bologna, Italy
Fabio Viola, ARCES, University of Bologna, Bologna, Italy
Luca Roffia, DISI, University of Bologna, Bologna, Italy
Paolo Azzoni, Eurotech Group, Trento, Italy
Tullio Salmon Cinotti, ARCES, DISI, University of Bologna, Bologna, Italy

Copyright

The **International Journal on Semantic Web and Information Systems (IJSWIS)** (ISSN 1552-6283; eISSN 1552-6291), Copyright © 2017 IGI Global. All rights, including translation into other languages reserved by the publisher. No part of this journal may be reproduced or used in any form or by any means without written permission from the publisher, except for noncommercial, educational use including classroom teaching purposes. Product or company names used in this journal are for identification purposes only. Inclusion of the names of the products or companies does not indicate a claim of ownership by IGI Global of the trademark or registered trademark. The views expressed in this journal are those of the authors but not necessarily of IGI Global.

The *International Journal on Semantic Web and Information Systems* is indexed or listed in the following: ACM Digital Library; Bacon's Media Directory; Burrelle's Media Directory; Cabell's Directories; Compendex (Elsevier Engineering Index); CSA Illumina; Current Contents®/Engineering, Computing, & Technology; DBLP; DEST Register of Refereed Journals; Gale Directory of Publications & Broadcast Media; GetCited; Google Scholar; INSPEC; Journal Citation Reports (JCR); JournalTOCs; Library & Information Science Abstracts (LISA); MediaFinder; Norwegian Social Science Data Services (NSD); Science Citation Index Expanded (SciSearch®); SCOPUS; The Index of Information Systems Journals; The Standard Periodical Directory; Ulrich's Periodicals Directory; Web of Science (All Journals); Web of Science Science Citation Index Expanded (SCIE)