

# Table of Contents

## International Journal of Web Services Research

Volume 14 • Issue 1 • January-March-2017 • ISSN: 1545-7362 • eISSN: 1546-5004

*An official publication of the Information Resources Management Association*

### Guest Editorial Preface

#### vi Special Issue on BigData 2014

Patrick Hung, Faculty of Business and Information Technology, University of Ontario Institute of Technology, Oshawa, Canada  
Shih-Chia Huang, Department of Electronic Engineering, National Taipei University of Technology, Taipei City, Taiwan

### Research Articles

#### 1 A Fastest Patchwise Histogram Construction Algorithm based on Cloud-Computing Architecture

Chung-Chih Cheng, Department of Electronic Engineering, National Taipei University of Technology, Taipei City, Taiwan  
Fan-Chieh Cheng, Department of Electronic Engineering, National Taipei University of Technology, Taipei City, Taiwan  
Po-Hsiung Lin, Department of Electronic Engineering, National Taipei University of Technology, Taipei City, Taiwan  
Wen-Tzeng Huang, Department of Electronic Engineering, National Taipei University of Technology, Taipei City, Taiwan  
Shih-Chia Huang, Department of Electronic Engineering, National Taipei University of Technology, Taipei City, Taiwan

#### 13 Association Rule Mining of Personal Hobbies in Social Networks

Xiaoqing Yu, School of Communication and Information Engineering Shanghai University, Shanghai, China  
Shimin Miao, School of Communication and Information Engineering Shanghai University, Shanghai, China  
Huanhuan Liu, School of Communication and Information Engineering, Shanghai University, Shanghai, China  
Jenq-Neng Hwang, Department of Electrical Engineering, University of Washington, Seattle WA, USA  
Wanggen Wan, School of Communication and Information Engineering, Shanghai University, Shanghai, China  
Jing Lu, School of Communication and Information Engineering Shanghai University, Shanghai, China

#### 29 Automatic Identification of Simultaneous and Non-Simultaneous Singers for Music Data Indexing

Wei-Ho Tsai, Department of Electronic Engineering, National Taipei University of Technology, Taipei City, Taiwan  
Cin-Hao Ma, Department of Electronic Engineering, National Taipei University of Technology, Taipei City, Taiwan

#### 44 Efficient Vision-based Smart Meter Reading Network

Ching-Han Chen, Department of Computer Science and Information Engineering, National Central University, Taoyuan, Taiwan  
Ching-Yi Chen, Department of Information and Telecommunications Engineering, Ming Chuan University, Taoyuan, Taiwan  
Chih-Hsien Hsia, Department of Electrical Engineering, Chinese Culture University, Taipei, Taiwan  
Guan-Xin Wu, Department of Computer Science and Information Engineering, National Central University, Taoyuan, Taiwan

### COPYRIGHT

The *International Journal of Web Services Research (IJWSR)* (ISSN 1545-7362; eISSN 1546-5004), 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 of Web Services Research* is indexed or listed in the following: ABI/Inform; 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); PubList.com; Science Citation Index Expanded (SciSearch®); SCOPUS; The Index of Information Systems Journals; The Standard Periodical Directory; Ulrich's Periodicals Directory; Web of Science Science Citation Index Expanded (SCIE)