# Journal of Information Technology Research

January-March 2014, Vol. 7, No. 1

## **Table of Contents**

Special Issue from the International Conference on Health and Social Care (HCist'2013)

## **GUEST EDITORIAL PREFACE**

iv Ricardo Martinho, School of Technology and Management, Polytechnic Institute of Leiria, Leiria, Portugal & Centre for Research in Health Technologies and Information Systems (CINTESIS), University of Porto, Porto, Portugal

### **Research Articles**

1 Enrichment/Population of Customized CPR (Computer-Based Patient Record) Ontology from Free-Text Reports for CSI (Computer Semantic Interoperability)

David Mendes, Universidade de Évora, Évora, Portugal Irene Pimenta Rodrigues, Universidade de Évora, Évora, Portugal Carlos Rodriguez-Solano, Universidad de Alcalá, Alcalá de Henares, Spain Carlos Fernandes Baeta, Unidade Local de Saúde do Norte Alentejano, Portalegre, Portugal

#### 12 Clinical Pathway Analytics

Filip Caron, Department of Decision Sciences and Information Management, Faculty of Economics and Business, KU Leuven, Leuven, Belgium Jan Vanthienen, Department of Decision Sciences and Information Management, Faculty of Economics and Business, KU Leuven, Leuven, Belgium Bart Baesens, Department of Decision Sciences and Information Management, Faculty of Economics and Business, KU Leuven, Leuven, Belgium Bart Baesens, Department of Decision Sciences and Information Management, Faculty of Economics and Business, KU Leuven, Leuven, Belgium Bart Baesens, Department of Decision Sciences and Information Management, Faculty of Economics and Business, KU Leuven, Leuven, Belgium Bart Baesens, Department of Decision Sciences and Information Management, Faculty of Economics and Business, KU Leuven, Leuven, Belgium Bart Baesens, Department of Decision Sciences and Information Management, Faculty of Economics and Business, KU Leuven, Leuven, Belgium Bart Baesens, Department of Decision Sciences and Information Management, Faculty of Economics and Business, KU Leuven, Leuven, Belgium Bart Baesens, Department of Decision Sciences and Information Management, Faculty of Economics and Business, KU Leuven, Leuven, Belgium Bart Baesens, Department of Decision Sciences and Information Management, Faculty of Economics and Business, KU Leuven, Leuven, Belgium Bart Baesens, Department of Decision Sciences and Information Management, Faculty of Economics and Business, KU Leuven, Leuven, Belgium Bart Baesens, Belgium Bart Baesens, Bart Baesens, Belgium Bart Baesens, Ba

#### 27 Endoscopic Imaging Results: Web-Based Solution for Video Diffusion with Real-Time Assistance

- Joel Braga, Computer Science and Technology Center (CCTC), Life and Health Sciences Research Institute (ICVS), School of Health Sciences, University of Minho, Braga, Portugal
- Isabel Laranjo, Computer Science and Technology Center (CCTC), Life and Health Sciences Research Institute (ICVS), School of Health Sciences, University of Minho, Braga, Portugal
- Carla Rolanda, Life and Health Sciences Research Institute (ICVS), School of Health Sciences, University of Minho, Braga, Portugal & ICVS/3B's PT Government Associate Laboratory, Braga/Guimarães, Portugal & Department of Gastroenterology, Hospital de Braga, Braga, Portugal
- Luís Lopes, Department of Gastroenterology, Santa Luzia Hospital, Viana do Castelo, Portugal
- Jorge Correia-Pinto, Life and Health Sciences Research Institute (ICVS), School of Health Sciences, University of Minho, Braga, Portugal & ICVS/3B's - PT Government Associate Laboratory, Braga/Guimarães, Portugal & Department of Pediatric Surgery, Hospital de Braga, Braga, Portugal

Victor Alves, Computer Science and Technology Center (CCTC), University of Minho, Braga, Portugal

#### 41 Information Technology Supporting Healthcare and Social Care Services: An e-Marketplace Case Study

Maria Manuela Cruz-Cunha, Polytechnic Institute of Cávado and Ave, Barcelos, Portugal & GCIT Research Centre, University of Minho, Guimarães, Portugal

Ricardo Simoes, Polytechnic Institute of Cávado and Ave, Barcelos, Portugal & Institute for Polymers and Composites – IPC/I3N, Guimarães, Portugal & Life and Health Sciences Research Institute (ICVS), University of Minho, Braga, Portugal

João Varajão, University of Minho, Guimarães, Portugal & Algoritmi Research Centre, University of Minho, Guimarães, Portugal Isabel Miranda, Câmara Municipal de Guimarães, Guimarães, Portugal

#### 59 See-Through-Sound: Transforming Images into Sonic Representations to Help the Blind

J. Tomás Henriques, SUNY at Buffalo State, Buffalo, NY, USA & CESEM, Universidade Nova de Lisboa, Lisboa, Portugal Sofia Cavaco, CITI, Departamento de Informática, Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa, Caparica, Portugal Nuno Correia, CITI, Departamento de Informática, Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa, Caparica, Portugal

#### 78 Group-Based Discretionary Access Control in Health Related Repositories

João Zamite, LaSIGE, Faculty of Sciences, University of Lisbon, Lisbon, Portugal Dulce Domingos, LaSIGE, Faculty of Sciences, University of Lisbon, Lisbon, Portugal Mário J. Silva, IST/INESC-ID, University of Lisbon, Lisbon, Portugal Carlos Santos, LaSIGE, Faculty of Sciences, University of Lisbon, Portugal

#### Copyright

The Journal of Information Technology Research (JITR) (ISSN 1938-7857; eISSN 1938-7865), Copyright © 2014 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 Journal of Information Technology Research is indexed or listed in the following: ACM Digital Library; Bacon's Media Directory; Cabell's Directories; Compendex (Elsevier Engineering Index); CSA Illumina; DBLP; GetCited; Google Scholar; INSPEC; JournalTOCs; MediaFinder; SCOPUS; The Index of Information Systems Journals; The Standard Periodical Directory; Ulrich's Periodicals Directory