

IADIS International Conference WWW/Internet 2012

Co-located with CELDA 2012 and Applied Computing 2012

**Madrid, Spain
18 – 21 October 2012**

Editors:

**Bebo White
Pedro Isaias**

ISBN: 978-1-5108-1078-5

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2012) by the International Association for Development of the Information Society (IADIS)
All rights reserved.

Printed by Curran Associates, Inc. (2015)

For permission requests, please contact
the International Association for Development of the Information Society (IADIS)
at the address below.

International Association for Development of the Information Society (IADIS)
Rua Sao Sebastiao Da Pedreira
No. 100, 30, 1050-209
Lisbon, Portugal

Phone: 351 21 3151373
Fax: 351 21 3151244

secretariat@iadis.org

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2634
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

FOREWORD	xi
PROGRAM COMMITTEE	xv
KEYNOTE LECTURES	xix

FULL PAPERS

SEMANTIC RETRIEVAL OF DOCUMENTS FROM DIGITAL REPOSITORIES IN THE MOODLE ENVIRONMENT <i>Renan Rodrigues de Oliveira, Fábio Moreira Costa, Cedric Luiz de Carvalho and Ana Paula Ambrósio</i>	3
HTML SEGMENTATION USING ENTROPY GUIDED TRANSFORMATION LEARNING <i>Evelin Carvalho Freire de Amorim</i>	11
WPPS: A NOVEL AND COMPREHENSIVE FRAMEWORK FOR WEB PAGE UNDERSTANDING AND INFORMATION EXTRACTION <i>Ruslan R. Fayzrakhmanov</i>	19
AN APPROACH FOR EXTRACTING WEB FORM LABELS BASED ON DISTANCE ANALYSIS OF HTML COMPONENTS <i>Leonardo Bres dos Santos, Carina F. Dorneles and Ronaldo dos S. Mello</i>	27
EXTRACTING AND EXPOSING RELATIONAL DATABASE METADATA ON THE WEB <i>João Carlos da Silva, Elisabete Tomomi Kowata and Auri Marcelo Rizzo Vincenzi</i>	35
BUSINESS MODELS FOR MOBILE APPLICATIONS <i>Alexandra Chapko, Andreas Emrich, Marc Gräßle, Dirk Werth and Peter Loos</i>	43
AN INFLUENCE PERSPECTIVE: IS USER PARTICIPATION CRUCIAL IN THE WEB DEVELOPMENT PROCESS? <i>Tomayess Issa and Pedro Isaias</i>	51
AWARENESS OF OTHERS IN ACCESSIBLE COLLABORATIVE RICH INTERNET APPLICATIONS <i>Leonelo D. A. Almeida and M. Cecilia C. Baranauskas</i>	60
DATA QUALITY IN WEB PORTALS FOR INTERACTION WITH OTHER PEOPLE <i>Carmen Moraga, M^a Angeles Moraga, Angélica Caro, Rodrigo Romo Muñoz and Coral Calero</i>	68

AUTHORITYRANK: COGNITIVE AUTHORITY AND INFORMATION RETRIEVAL IN THE WEB <i>Filipe Roseiro Cogo, Sérgio Roberto P. da Silva and Roberto Pereira</i>	76
A WEB-BASED METHOD FOR ONTOLOGY POPULATION <i>Hilário Oliveira, Rinaldo Lima, João Emanuel and Fred Freitas</i>	85
DOMAIN ONTOLOGIES MODELING VIA SEMANTIC ANNOTATIONS OF UNSTRUCTURED WIKI KNOWLEDGE <i>Roberto Boselli, Mirko Cesarini, Fabio Mercorio and Mario Mezzanica</i>	93
SOCIAL LEARNING: DEFINING LEARNING OBJECTS FROM SOCIAL TOOL <i>André Luís Andrade Menolli, Sheila Reinehr and Andreia Malucelli</i>	101
A UBIQUITOUS ELECTRONIC TOURIST GUIDE FOR THE CAMINHOS DE PEDRA ITINERARY <i>Humberto Costa, Cristiano Costa, Eduardo Silva, Sandro Rigo, Jorge Barbosa, Luiz Silveira Jr. and Underlea Bruscato</i>	109
RECO – A FRAMEWORK FOR EXPERIMENTATION WITH RECOMMENDERS <i>Jakub Ševcech, Michal Kompan and Mária Bieliková</i>	117
TRANSLATING XML QUERIES INTO EQUIVALENT SQL STATEMENTS <i>Marta Breunig Loose and Deise de Brum Saccol</i>	125
A SURVEY ON SOCIAL NETWORK SITES' FUNCTIONAL FEATURES <i>Antonio Tapiador and Diego Carrera</i>	133
A STUDY OF THE CONDITIONS FOR A GOOD DIGITAL CITIZEN IN A NEW MEDIA ERA <i>Heein Yang, Misoo Kwon, Gilwoo Nam and Jongsoo Jeon</i>	141
WEB-BASED INFORMATION EXPLORATION OF SENSOR WEB USING THE HTML5/X3D INTEGRATION MODEL <i>Byounghyun Yoo</i>	149
A RUBY DOMAIN SPECIFIC LANGUAGE (DSL) FOR WEB MASHUPS <i>Richard J Barnett and Carianne Cowley</i>	157
A REAL-TIME WEB-BASED HEALTH MONITORING SYSTEM BASED ON ENTERPRISE SERVICE BUS <i>Yohanes Baptista Daffierianto Trinugroho, Kamyar Rasta, Trinh Hoang Nguyen, Rune Fensli and Frank Reichert</i>	165
HOW CAN A MOBILE VENDOR ENGENDER SHOPPER TRUST AND REDUCE PERCEIVED OPPORTUNISM? <i>Sonia San-Martín</i>	173
INFRASTRUCTURE TO NEXT-GEN PROACTIVE E-COMMERCE ENVIRONMENT THROUGH INTERNET: UBIQUITOUS COMMERCE FOR THE MASSES <i>Paulo H. Cazarotto, Cristiano André da Costa, Rodrigo da Rosa Righi and Jorge L. V. Barbosa</i>	180
ABANDONMENT IN WEB APPLICATIONS FOR PURCHASING AIRLINE TICKETS <i>Malcolm Mactavish and Lyndon Veale</i>	188
CYBERSQUATTING DETECTION BY AUTOMATIC DOMAIN NAME RE-ACCENTING <i>Jean Ceccato and Anthony Don</i>	195

WHAT DETERMINES E-LOYALTY? AN ANALYSIS OF FACTORS AFFECTING ON-LINE CUSTOMER RETENTION <i>Donnacha Clifford and Michael Lang</i>	203
INFLUENCE OF PERCEIVED QUALITY OF UNIVERSITY OFFICIAL WEBSITE TO PERCEIVED QUALITY OF UNIVERSITY EDUCATION AND ENROLLMENT INTENTION <i>Achmad Nizar Hidayanto, Fanny Rofalina and Putu Wuri Handayani</i>	211
AUTOMATIC AND CONTINUOUS MONITORING AND COMPOSITION OF NONDETERMINISTIC WEB SERVICES <i>Gustavo B. Valfre, Angelo E. M. Ciarlini and Sean W. M. Siqueira</i>	219
USABILITY EVALUATION OF ELECTRONIC SIGNATURE BASED E-GOVERNMENT SOLUTIONS <i>Thomas Zefferer and Vesna Krnjic</i>	227
A SEMANTIC WEB APPROACH FOR AUTOMATED TEST GENERATION <i>Bogdan Drăgulescu, Marian Bucos and Radu Vasiu</i>	235
EXPLORING PARTICIPATORY DESIGN FOR SNS-BASED AEH SYSTEMS <i>Lei Shi, Dana Al Qudah and Alexandra I. Cristea</i>	242
DEAF LITERACY: A COMPUTATIONAL PROCESS TO DESIGN SIGN LANGUAGE/PORTUGUESE ARTIFACTS FOR INTERNET <i>Cayley Guimarães, Diego R. Antunes, Laura S. García, Leticia M. Peres and Sueli Fernandes</i>	250
PARALLEL HIGHER-ORDER SVD FOR TAG-RECOMMENDATIONS <i>Philipp Shah, Christoph Wieser and François Bry</i>	257
A TRAVEL SEQUENCE RECOMMENDATION APPROACH BASED ON MARKOV MODEL <i>Dalu Guo, Richong Zhang, Xudong Liu and Hailong Sun</i>	266
LEARNING SYNONYM RELATIONS FROM FOLKSONOMIES <i>Alex Rêgo, Leandro Marinho and Carlos Eduardo Pires</i>	273
EXPLORING THE EFFECTS OF SOCIAL INFLUENCE ON USER BEHAVIOR TARGETED TO FEEDBACK SHARING <i>Agnis Stibe and Harri Oinas-Kukkonen</i>	281
USABILITY EVALUATION OF FACEBOOK'S PRIVACY FEATURES: COMPARISON OF EXPERTS AND USERS <i>Marcos H. Kimura, Marcio J. Mantau, Avanilde Kemczinski, Isabela Gasparini and Carla D. Medeiros Berkenbrock</i>	290
SUBJECT CLASSIFICATION OF WEB PAGES <i>Ludger Martin</i>	298
USATASKER: A TASK DEFINITION TOOL FOR SUPPORTING THE USABILITY EVALUATION OF WEB APPLICATIONS <i>Leandro Guarino de Vasconcelos and Laércio Augusto Baldochi Jr.</i>	307
ASSESSING THE PERFORMANCE OF JAVA AND ERLANG IN WEB 2.0 APPLICATIONS <i>Jucimar Maia da Silva Jr., Rafael Dueire Lins and Lanier Menezes dos Santos</i>	315

EMULATION OF COMPLEX NETWORK INFRASTRUCTURES FOR LARGE-SCALE TESTING OF DISTRIBUTED SYSTEMS <i>Robert Lübke, Robin Lungwitz, Daniel Schuster and Alexander Schill</i>	323
A CLIQUE BASED WEB GRAPH MODEL <i>Zhiming Chen and Andrés Faragó</i>	331
INTEGRATING PROCESS AND SERVICES THROUGH META-MODELS <i>Patricia Bazán, Roxana Giandini, Gabriela Perez, Elsa Estevez and Javier Diaz</i>	339
AN ADAPTIVE APPROACH FOR IDENTIFYING REPUTATION OF RESEARCHERS <i>Cristiano Roberto Cervi, Renata Galante and José Palazzo Moreira de Oliveira</i>	347
STRATEGIES AND MOTIVATIONS BEHIND ARTIFICIAL TRENDING TOPICS IN TWITTER <i>Raquel Recuero and Ricardo Araujo</i>	355
GUIDE OF ACCESSIBILITY AND USABILITY RECOMMENDATIONS AIMING FOR THE DEVELOPMENT OF HYPERMEDIA FOR DEAF <i>Vanessa Tavares de Oliveira Barros, Kátia Tavares Meserlian, Rodolfo Miranda de Barros, Flávio Ogawa and Francisco Antônio Pereira Fialho</i>	363
COMPARISON OF USABILITY TESTING TOOLS FOR WEB GRAPHICAL INTERFACES <i>Bernardo Santos, Carlos Teixeira and Ana Respício</i>	371
IDENTIFYING PRAGMATIC PATTERNS OF COLLABORATIVE PROBLEM SOLVING <i>Heiko Hornung, Roberto Pereira, M. Cecilia C. Baranauskas, Rodrigo Bonacin and Julio Cesar Dos Reis</i>	379
INTERPRETATION OF WEB SITE USER INTERACTION AS A BASE FOR CONTEXT-AWARE PAGE ADAPTATION <i>Pascal Bihler</i>	388

SHORT PAPERS

HEURISTIC AND AI APPROACH TO OPTIMIZE PLAGIARISM DETECTION TOOL USING A PUBLIC SEARCH ENGINE <i>Ondrej Vesely, Jan Kolomaznik and Tomas Foltyněk</i>	399
ONTOLOGY ON THE LEVEL G OF THE SOFTWARE PROCESS MODEL MPS.BR TO ASSIST BUSINESS PROCESSES MODELING <i>Alessandro Viola Pizzoleto, Hilda Carvalho de Oliveira and Celso Socorro Oliveira</i>	404
A MULTI-TOOL SCHEME FOR SUMMARIZING TEXTUAL DOCUMENTS <i>Rafael Dueire Lins, Steven J. Simske, Luciano de Souza Cabral, Gabriel de França Silva, Rinaldo Lima, Rafael F. Mello and Luciano Favaro</i>	409
AUTOMATION OF A VENDING SYSTEM USING SMARTPHONES <i>Tiago Jost, Cristiano Costa, Rodrigo Righi and Alexandre Andrade</i>	415

RERANKING IMAGE SEARCH RESULT BASED ON PHOTOGRAPHIC QUALITY ASSESSMENT WITHOUT IMAGE FEATURES <i>Masaharu Hirota, Shohei Yokoyama, Naoki Fukuta and Hiroshi Ishikawa</i>	420
TOPIC PAGE MINING BASED ON PHRASERANK FOR ADVERTISEMENT IMAGE <i>Jian Sun, Siyuan Chen, Yingju Xia and Jun Sun</i>	425
ON THE USE OF SOCIAL MEDIA FOR IMPORTANT THINGS: FACEBOOK AS A COPING TOOL <i>Felix S. Hussenoeder</i>	431
GENAPI: A GENERIC SOCIAL-NETWORKING API <i>Richard J. Barnett and Simon de la Rouviere</i>	436
DISTINCTION BETWEEN OPINION AND INFORMATION SPEADING IN SOCIAL NETWORKS <i>Igor Kanovsky and Omer Yaari</i>	442
A MODELING APPROACH FOR KNOWLEDGE MANAGEMENT IN COMPLEX BUSINESS SYSTEMS <i>Abdussalam Ali and Igor Hawryszkiewwycz</i>	447
AN INCREMENTAL APPROACH TO TECHNOLOGY-SUPPORTED CURRICULUM DESIGN AND APPROVAL <i>Jim Everett, George Macgregor and Rehman Mohamed</i>	453
MEANINGFUL LEARNING IN MATHEMATICS EDUCATION: A PROPOSAL OF DEVELOPING A PROTOTYPE OF AN AUGMENTED REALITY TOOL TO SUPPORT THE TEACHING OF CALCULATION <i>Edson Pacheco and Rodolfo Miranda de Barros</i>	458
SOCIAL NETWORK ENGINEERING AND ONTOLOGY ENGINEERING FOR E-LEARNING: HOW DO THESE WORK TOGETHER? <i>Seid Maglajlic</i>	463
DETERMINATION OF TOPIC DESCRIPTION TERMS IN TOPIC MODELS <i>Kota Kamura, Hung-Hsuan Huang and Kyoji Kawagoe</i>	468
METROPOLITALIA: A CROWDSOURCING PLATFORM FOR LINGUISTIC FIELD RESEARCH <i>Fabian Kneissl and François Bry</i>	473
INVESTIGATING COLLABORATION AND EFFECTIVENESS OF VIRTUAL TEAMS WITH DISTINCT ORGANIZATION TYPES <i>Juliana de Melo Bezerra, Celso Massaki Hirata and André Antônio Battagello</i>	477
WEB ANALYTICS AS ONE OF THE FEEDBACK MECHANISMS IN ELECTRONIC GOVERNMENT MANAGEMENT <i>Rasim Alguliev, Hana Skalska, Farhad Yusifov and Mahammad Sharifov</i>	483
BRICK: A LINKED DATA EXPERIENCE <i>Nadia Catenazzi, Lorenzo Sommaruga and Ingrid Domenighetti</i>	487
LESSONS LEARNED FROM CREATING A TRUST SYSTEM FOR P2P MARKETPLACES <i>Mauro Nunes and João Correia</i>	492

REFLECTION PAPERS

EDUCA REPOSITORY SERVICE: API TO SUPPORT DIFERENTES DIGITAL REPOSITORIES <i>Jorge Rocha, Ana Caixinha, Joaquim Arnaldo Martins and Marco Fernandes</i>	499
INTERACTION DESIGN ISSUES FOR MOBILE MULTI-TOUCH APPS <i>Huberta Kritzenberger</i>	503
BUILDING TEST SUITES FROM TEST RECORDINGS OF WEB APPLICATIONS: REFLECTION PAPER <i>Martin Filipisky, Miroslav Bures and Ivan Jelinek</i>	507
PEOPLE'S HISTORY APPLICATIONS: USING THE WWW TO RE-WRITE HISTORY <i>Lorie Loeb and Sang Jin Lee</i>	511
DATA PROTECTION AND EMPLOYEE BEHAVIOUR: THE ROLE OF INFORMATION SYSTEMS SECURITY CULTURE <i>Lena Connolly and Michael Lang</i>	516

POSTERS

E-LEARNING IN INFORMATICS TEACHING <i>Olga Mironova, Irina Amitan and Jüri Vilipõld</i>	523
SOCIAL CHEESECAKE: AN UX-DRIVEN INTERFACE FOR MANAGING CONTACTS <i>Alicia Díez and Antonio Tapiador</i>	526
DESCRIPTION STANDARDS: CROSSWALK PROPOSAL FOR EDUCA <i>Ana Caixinha, Joaquim Arnaldo Martins, Jorge Rocha and Marco Fernandes</i>	529
CAREER EDUCATION SUPPORT UTILIZING MOBILE DEVICES <i>Rumiko Kurita, Motoo Kusano, Asahiro Arai, Shoichi Nakamura, Setsuo Yokoyama and Youzou Miyadera</i>	533
TOWARDS AN APPROACH BASED ON ELECTRONIC CONTRACT TO ADDRESS THE VENDOR LOCK-IN IN CLOUD COMPUTING <i>Gabriel Costa Silva and Itana Maria de Souza Gimenes</i>	537

AUTHOR INDEX