International Journal on Advances in Intelligent Systems

2015 vol. 8 nr. 3&4

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© (2015) by International Academy, Research, and Industry Association (IARIA)
Please refer to the Copyright Information page.

Printed by Curran Associates, Inc. (2016)

International Academy, Research, and Industry Association (IARIA)
412 Derby Way
Wilmington, DE 19810

Phone: (408) 893-6407
Fax: (408) 527-6351

petre@iaria.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

International Journal on Advances in Intelligent Systems
Volume 8, Numbers 3 & 4, 2015

CONTENTS

pages: 233 - 244
Pictogram Creation with Sensory Evaluation Method Based on Multiplex Sign Languages
Naotsune Hosono, Keio University, and Oki Consulting Solutions, Japan
Hiromitsu Inoue, Chiba Prefectural University of Health Sciences, Japan
Miwa Nakanishi, Keio University, Japan
Yutaka Tomita, Keio University, Japan

pages: 245 - 254
Effects of Boundary Damping on Natural Frequencies in Bending Vibrations of Intelligent Vibrissa Tactile Systems
Carsten Behn, Ilmenau University of Technology, Germany
Christoph Will, Ilmenau University of Technology, Germany
Joachim Steigenberger, Ilmenau University of Technology, Germany

pages: 255 - 265
On the Potential of Grammar Features for Automated Author Profiling
Michael Tschuggnall, Institute for Computer Science, University of Innsbruck, Austria
Günther Specht, Institute for Computer Science, University of Innsbruck, Austria

pages: 266 - 277
An Analysis to Improve Voltage Stability in Smart Grids by Regulating Active Power in Intelligent Buildings
Abid Ahmad Khan, University of Applied Sciences Darmstadt, Germany
Michael Massoth, University of Applied Sciences Darmstadt, Germany
Torsten Wiens, University of Applied Sciences Darmstadt, Germany

pages: 278 - 287
Practical Aspects of Ontology-Based Analysis and Reasoning for Law Information Represented in Textual Form
Raoul Schönhof, HLRS (High Performance Computing Center Stuttgart), Germany
Axel Tenschert, HLRS (High Performance Computing Center Stuttgart), Germany
Alexey Cheptsov, HLRS (High Performance Computing Center Stuttgart), Germany

pages: 288 - 299
Designing a Low-Cost Web-Controlled Mobile Robot for Ambient Assisted Living
Yvon Autret, University of Brest, France
David Espes, University of Brest, France
Jean Vareille, University of Brest, France
Philippe Le Parc, University of Brest, France

pages: 300 - 309
Innovation and Creativity in the HCI classroom
Alma Leora Culén, University of Oslo, Norway

pages: 310 - 323
Human-Machine Cooperation Loop in Game Playing
Maciej Świechowski, Systems Research Institute, Polish Academy of Sciences, Poland
Kathryn Merrick, School of Engineering and Information Technology, University of New South Wales, Australia
Jacek Mańdziuk, Faculty of Mathematics and Information Science, Warsaw University of Technology, Poland
Hussein Abbass, School of Engineering and Information Technology, University of New South Wales, Australia

pages: 324 - 338
Designing for Experienced Simplicity. Why Analytic and Imagined Simplicity Fail in Design of Assistive Technology
Suhas Govind Joshi, Department of Informatics, Faculty of Mathematics and Natural Sciences, University of Oslo, Norway

pages: 339 - 346
Predicative Recursion, Diagonalization, and Slow-growing Hierarchies of Time-bounded Programs
Emanuele Covino, Dipartimento di Informatica, Università di Bari, Italy
Giovanni Pani, Dipartimento di Informatica, Università di Bari, Italy

pages: 347 - 373
Service Recommendation Using Machine Learning Methods Based on Measured Consumer Experiences Within a Service Market
Jens Kirchner, Karlsruhe University of Applied Sciences, Linnaeus University, Germany/Sweden
Andreas Heberle, Karlsruhe University of Applied Sciences, Germany
Welf Löwe, Linnaeus University, Sweden

pages: 374 - 384
Simulation of Emergence of Local Common Languages Using Iterated Learning Model on Social Networks
Makoto Nakamura, Japan Legal Information Institute, Graduate School of Law, Nagoya University, Japan
Ryuchi Matoba, Department of Electronics and Computer Engineering, National Institute of Technology, Toyama College, Japan
Satoshi Tojo, School of Information Science, Japan Advanced Institute of Science and Technology, Japan

pages: 385 - 397
A Novel Chemistry-inspired Approach to Efficient Coordination of Multi-mission

Networked Objects
Mahmoud ElGammal, Virginia Polytechnic Institute and State University, USA
Mohamed Eltoweissy, Virginia Military Institute, USA

pages: 398 - 412
Unmanned Aerial Systems as Tools to Assist in Digitalized Decision Making
Tapio Saarelainen, Army Academy, Finland

pages: 413 - 425
Structural Adaptation for Self-Organizing Multi-Agent Systems: Engineering and Evaluation
Thomas Preisler, HAW Hamburg, Germany
Wolfgang Renz, HAW Hamburg, Deutschland
Tim Dethlefs, HAW Hamburg, Germany

pages: 426 - 436
Pedestrian Detection with Cascaded Part Model for Occlusion Handling
Yawar Rehman, Hanyang University, South Korea
Irfan Riaz, Hanyang University, South Korea
Fan Xue, Hanyang University, South Korea
Piao Jingchun, Hanyang University, South Korea
Jameel Ahmed Khan, Hanyang University, South Korea
Shin Hyunchul, Hanyang University, South Korea

pages: 437 - 447
Improving Energy Awareness Integrating Persuasive Game, Feedback, and Social Interaction into the Novel Ener-SCAPE Application
Diego Arnone, Engineering Ingegneria Informatica S.p.A., Italy
Alessandro Rossi, Engineering Ingegneria Informatica S.p.A., Italy
Marzia Mammina, Demetrix S.r.l., Italy
Enrico Gabriele Melodia, Pidiemme Consulting S.r.l., Italy
Sandra Elizabeth Jenkins, Massachusetts Institute of Technology, USA

pages: 448 - 457
Round-Trip Engineering Approach to Keep Activity Diagrams Synchronized with Source Code
Keinosuke Matsumoto, Osaka Prefecture University, Japan
Ryo Uenishi, Osaka Prefecture University, Japan
Naoki Mori, Osaka Prefecture University, Japan

pages: 458 - 466
Considerations for Proposed Compatibility Levels for 9-150 kHz Harmonic Emissions Based on Conducted Measurements and Limits in the United States
Elizabeth Devore, Auburn University, USA
Adam Birchfield, Auburn University, USA
Mark Halpin, Auburn University, USA

pages: 467 - 482
Evaluation of an Integrated Testbed Environment for the Web of Things
Mina Younan, Minia University, Egypt
Sherif Khattab, Cairo University, Egypt
Reem Bahgat, Cairo University, Egypt

pages: 483 - 493
Quality of Service Based Event Stream Processing Systems in Smart Grids
Orleant Epal Njamen, Grenoble INP, LIG, France
Lourdes Martinez, Grenoble INP, LIG, France
Christine Collet, Grenoble INP, LIG, France
Genoveva Vargas-Solar, CNRS, LIG-LAFMIA, France
Christophe Bobineau, Grenoble INP, LIG, France

pages: 494 - 506
Map-Cache Synchronization and Merged RLOC Probing Study for LISP
Vladimír Veselý, Brno University of Technology, Czech Republic
Ondřej Ryšavý, Brno University of Technology, Czech Republic