



# **FUTURE COMPUTING 2016**

The Eighth International Conference on Future Computational Technologies and Applications

March 20 - 24, 2016

Rome, Italy

## **FUTURE COMPUTING 2016 Editors**

Rudolf Berrendorf, Bonn-Rhein-Sieg University, Germany

Kendall E. Nygard, North Dakota State University - Fargo, USA

**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© (4238) by International Academy, Research, and Industry Association (IARIA)  
Please refer to the Copyright Information page.

Printed by Curran Associates, Inc. (4238)

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

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

[petre@iaria.org](mailto: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: 845-758-2633  
Email: [curran@proceedings.com](mailto:curran@proceedings.com)  
Web: [www.proceedings.com](http://www.proceedings.com)

## Table of Contents

Multiobjective Power Loss Optimization Versus System Stability Assessment for Hydrocarbon Industrial Plant Using Differential Evolution Algorithm <i>Muhammad Al-Hajri, Mohamed Darwish, and Mohammed Abido</i>	1
SEEV-Effort - Is it Enough to Model Human Attentional Behavior in Public Display Settings <i>Benedikt Gollan and Alois Ferscha</i>	8
Unconventional Computing Using Evolution-in-Nanomaterio: Neural Networks meet Nanoparticle Networks <i>Klaus Greff, Ruud van Damme, Jan Koutnik, Hajo Broersma, Julia Mikhal, Celestine Lawrence, Wilfred van der Wiel, and Jurgen Schmidhuber</i>	15
Towards a Fuzzy Logic Environment for Android <i>Ramon Lujan, Gines Moreno, and Carlos Vazquez</i>	21
Evaluation of Jurisprudence Arguments Based on Annotations of Logical Structures and Speech Acts <i>Shumpei Kubosawa, Shogo Okada, and Katsumi Nitta</i>	28
Program Optimization Strategies to Improve the Performance of SpMV-Operations <i>Rudolf Berrendorf, Max Weierstall, and Florian Mannuss</i>	34
Use of RBM for Identifying Linkage Structures of Genetic Algorithms <i>Hisashi Handa</i>	41
Post Deployment Secure Key Management in Wireless Ad hoc Networks <i>Paul Loree and Kendall E. Nygard</i>	47
Studies on nVidia GPUs in Parallel Computing for Lattice Quantum Chromodynamics and Computational Fluid Dynamics Applications <i>Simone Coscetti</i>	54
Benchmarking Big Data Applications: A Review <i>Sayaka Akioka</i>	59