ICONS 2019

The Fourteenth International Conference on Systems

March 24 - 28, 2019

Valencia, Spain

ICONS 2019 Editors

Sandra Sendra Compte, University of Granada, Spain

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© (2019) by International Academy, Research, and Industry Association (IARIA)
Please refer to the Copyright Information page.

Printed by Curran Associates, Inc. (2019)

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: 845-758-2633
Email: curran@proceedings.com
Web: www.proceedings.com

Table of Contents

Algorithm for Dealing with Complaints Data from the Use Phase 1
Marius Heinrichsmeyer, Nadine Schluter, and Amirbabak Ansari

Resonance Thinking and Inductive Machine Learning 7
Yves Kodratoff and Marta Franova

Automated Irrigation System 14
Maryam Al kaabi, Ali Al-Humairi, Nafaa Jabeur, Aydin Azizi, Poorya Ghafoorpoor, Ali Fakhrulddin, and Hayat El Asri

papagenoPCB: An Automated Printed Circuit Board Generation Approach for Embedded Systems Prototyping 20
Tobias Scheipel and Marcel Baunach

A Security Aware Design Space Exploration Framework 26
Lukas Gressl, Christian Steger, and Ulrich Neffe

Cellular Automata-based Wear Leveling in Resistive Memory 32
Sutapa Sarkar

Development of Extended-STIL Pattern Compiler for Test Programming Environment 39
Seong-Jin Kim and Kwang-Man Ko

Method for Classification of Textures Based on Histogram and Random Events Analysis 45
Vladimir Iliev, Tzanko Georgiev, Alexander Tzokev, and Anton Mihaylov

The Use of Image Processing Techniques for Detection of Weed in Lawns 50
Lorena Parra, Virginia Torices, Jose Marin, Pedro Vicente Mauri, and Jaime Lloret

Automatic Ship Detection on Inland Waters: Problems and a Preliminary Solution 56
Tomasz Hyla and Natalia Wawrzyniak

Monte Carlo Tree Search for Optimizing Hyperparameters of Neural Network Training 61
Karolina Polanska, Wiktoria Dywan, Piotr Labuda, Leszek Koszalka, Iwona Pozniak-Koszalka, and Andrzej Kasprzak

Automatic Ship Identification Approach for Video Survelience Systems 65
Natalia Wawrzyniak and Tomasz Hyla

Investigating the Feasibility to Estimate System Performance Based Upon Limited Data of the Taipei Metro System 69
Snow Tseng and Tzu-Chia Kao

Low-Cost Virtual Coach for Diagnosis and Guidance in Baseball/Softball Batting Training 73
Hou-Chin Liu and Chung-Ta King

Octopus Algorithm as a New Support in Solving TSP 81
Marek Sosnicki, Iwona Pozniak-Koszalka, Leszek Koszalka, and Andrzej Kasprzak