Contents

Invited Contributions

Big Data: Opportunities, Challenges and Solutions ......................... 3
Vladimir Gorodetsky

Collecting University Rankings for Comparison Using Web Extraction and Entity Linking Techniques .................... 23
Nick Bassiliades

Frameworks and Tools

Soft Computing Algorithm for Arithmetic Multiplication of Fuzzy Sets Based on Universal Analytic Models ......................... 49
Yuriy Kondratenko and Volodymyr Kondratenko

On a Decidable Formal Theory for Abstract Continuous-Time Dynamical Systems .................................................. 78
Ievgen Ivanov, Mykola Nikitchenko, and Uri Abraham

Pre-automata and Complex Event Processing ......................... 100
Grygoriy Zholtkevych, Boris Novikov, and Volodymyr Dorozhinsky

On Algebraic Properties of Nominative Data and Functions .............. 117
Volodymyr G. Skobelev, Mykola Nikitchenko, and Ievgen Ivanov

TuningGenie: Auto-Tuning Framework Based on Rewriting Rules ........ 139
Pavlo A. Ivanenko, Anatoliy Y. Doroshenko, and Kostiantyn A. Zhereb

ICT in Teaching and Learning

A Demo Processor as an Educational Tool ......................... 161
Leo van Moergestel, Lukas Vermond, Kasper van Nieuwland, and John-Jules Meyer

Challenges and Confusions in Learning Version Control with Git ........ 178
Ville Isomöttönen and Michael Cochez

Information Competence of University Students in Ukraine: Development Status and Prospects ......................... 194
Eugenia Spivakovska, Nataliya Osipova, Maksim Vinnik, and Yulia Tarasich
Future and Experienced Teachers Should Collaborate on ICT Integration

Nataliya Kushnir, Anna Manzhula, and Nataliya Valko

Efficiency Assessment of Computer-Oriented Learning Environment of an Institute of Postgraduate Pedagogical Education: Factors, Criteria, Characteristics

Kateryna R. Kolos

Design of Electronic Learning Courses for IT Students Considering the Dominant Learning Style

Nataliia V. Morze and Olena G. Glazunova

ICT in Research and Industrial Applications

On Industrial Strength Bio-design Automation

Wolf-Ekkehard Matzke, Chris P. Barnes, Eyck Jentzsch, Thorsten Mascher, and Michael Stumpf

Availability Assessment of Information and Control Systems with Online Software Update and Verification

Vyacheslav Kharchenko, Yuriy Ponochovnyi, and Artem Boyarchuk

Evolutionary Game of N Competing AIMD Connections

Oleksii Ignatenko and Oleksandr Synetskyi

Forming an Evolutionarily Stable Firm Strategy Under Cournot Competition Using Social Preferences

Vitaliy Kobets and Maksim Poltoratskiy

Plagiarism Detection Tools for Scientific e-Journals Publishing

Liliia Luparenko

Author Index
Information and Communication Technologies in Education, Research, and Industrial Applications
10th International Conference, ICTERI 2014, Kherson, Ukraine, June 9–12, 2014, Revised Selected Papers
Ermolayev, V.; Mayr, H.C.; Nikitchenko, M.; Spivakovsky, A.; Zholtkevych, G. (Eds.)
2014, XIV, 371 p. 106 illus., Softcover
ISBN: 978-3-319-13205-1