

## TABLE OF CONTENTS OF IJ ITA VOL. 24, NO.:1, 2017

<i>Unraveling Bi-Lingual Multi-Feature Based Text Classification: A Case Study</i>	
Aziz Yarahmadi, Mathijs Creemers, Hamzah Qabbaah, Koen Vanhoof .....	3
<i>Wireless Sensor Network for Precision Farming and Environmental Protection</i>	
Oleksandr Palagin, Volodymyr Romanov, Igor Galelyuka, Oleksandr Voronenko, Yuriy Brayko, Roza Imamutdinova .....	19
<i>Deep Hybrid System of Computational Intelligence for Time Series Prediction</i>	
Yevgeniy Bodyanskiy, Iryna Pliss, Dmytro Peleshko, Olena Vynokurova .....	35
<i>Video Shot Boundary Detection via Sequential Clustering</i>	
Sergii Mashtalir, Volodymyr Mashtalir, Mykhailo Stolbovyi .....	50
<i>An Approach for Design of Architectural Solutions Based on Software Model-To-Model Transformation</i>	
Elena Chebanyuk, Kyryl Shestakov .....	60
<i>Incorrect Moves and Testable States</i>	
Dimiter Dobrev .....	85
<i>Future of Artificial Intelligence: Treats and Possibility.</i>	
Volodymyr Hrytsyk .....	91

## TABLE OF CONTENTS OF IJ ITA VOL. 24, NO.:2, 2017

<i>Comparison Software Systems Based on Information Quality Measuring</i>	
Krassimir Markov, Krassimira Ivanova, Stefan Karastanov .....	103
<i>Application of Biosensors for Plants Monitoring</i>	
Oleksandr Palagin, Volodymyr Grusha, Hanna Antonova, Oleksandra Kovyrova, Vasyl Lavrentjev	115
<i>Toward Measuring Linguistic Complexity: Grammatical Homonymy in The Russian Language</i>	
Olga Nevzorova, Alfiya Galieva, Vladimir Nevzorov .....	127
<i>Use of At-Technology Workbench for Construction of Tutoring Integrated Expert Systems</i>	

Galina V. Rybina, Victor M. Rybin, Yuri M. Blohin, Elena S. Sergienko .....	141
<i>Research on the Property "Avalanche Effect" in IDA Cryptographic Algorithm</i>	
Ivan Ivanov, Stella Vetova, Krassimira Ivanova, Neli Maneva.....	150
<i>Inductive Modeling Method GMDH in the Problems of Data Mining</i>	
Yuriy Zaychenko, Galib Hamidov .....	156
<i>Cross-Platform Environment for Application Life Cycle Management</i>	
Elena Chebanyuk, Oleksii Hlukhov .....	177
<i>In memoriam: Prof. Volodimir Stepanovich Donchenko (1947-2017)</i> .....	
	199

## **TABLE OF CONTENTS OF IJ ITA VOL. 24, NO.:3, 2017**

<i>Cube-Split Technique in Quantitative Association Rule Mining</i>	
Levon Aslanyan, Hasmik Sahakyan.....	203
<i>Eye Evolution Simulation with a Genetic Algorithm Based on the Hypothesis of Nilsson And Pelger</i>	
R. Salas Machado, A. Castellanos, R. Lahoz-Beltra .....	221
<i>On Efficiency of P Systems with Symport/Antiport and Membrane Division</i>	
Luis F. Macías-Ramos, Bosheng Song, Tao Song, Linqiang Pan, Mario J. Pérez-Jiménez .....	229
<i>Discrete Tomography Overview: Constraints, Complexity, Approximation</i>	
Hasmik Sahakyan, Ani Margaryan .....	246
<i>Multiclass Detector for Modern Steganographic Methods</i>	
Dmytro Progonov .....	255
<i>Conjunctive Boolean Query as a Logic-Objective Recognition Problem</i>	
Tatiana Kosovskaya.....	272
<i>Examples of Np-Complete Essential Restrictions of the Subset Sum Problem</i>	
Nikolay K. Kosovskii, Tatiana Kosovskaya, Michail Starchak.....	279
<i>Computer-based Business Games' Result Analysis</i>	
O. Vikenteva, A. Deriabin, N. Krasilich, L. Shestakova .....	283

## TABLE OF CONTENTS OF IJ ITA VOL.24, NO.:4, 2017

### *Data versus Information*

- Krassimir Markov, Christophe Menant, Stanley N Salthe, Yixin Zhong, Karl Javorszky, Alex Hankey,  
Loet Leydesdorff, Guy A Hoelzer, Jose Javier Blanco Rivero, Robert K. Logan, Sungchul Ji,  
Mark Johnson, David Kirkland, Gordana Dodig-Crnkovic ..... 303

### *Fractal Image Compression of Grayscale and RGB Images using DCT WITH Quadtree Decomposition and Huffman Coding*

- Moheb R. Girgis and Mohammed M. Talaat ..... 322

### *How does the AI understand what's going on*

- Dimitter Dobrev ..... 345

### *Application of Biosensors for Plants Monitoring*

- Oleksandr Palagin, Volodymyr Grusha, Hanna Antonova,  
Oleksandra Kovyrova, Vasyl Lavrentyev ..... 370

### *Automaton Model of One Statistical Rule*

- Tariel Khvedelidze ..... 383

### *Vision-Based Approach to UAV Vibration Analysis*

- David Asatryan, Samvel Hovsepyan ..... 391

### *Erratum*

- David Asatryan, Karen Egiazarian, Vardan Kurkchiyan ..... 397

### *Table of contents of IJ ITA Vol. 24, No.:1, 2017*

- ..... 398

### *Table of contents of IJ ITA Vol. 24, No.:2, 2017*

- ..... 398

### *Table of contents of IJ ITA Vol. 24, No.:3, 2017*

- ..... 399

### *Table of contents of IJ ITA Vol.24, No.:4, 2017*

- ..... 400