International Journal

"Information Technologies and Knowledge"

Volume 1 -:- 7, Year 2007 -:- 2013

Volume	Year	Numbers
1	2007	4
2	2008	4
3	2009	4
4	2010	4
5	2011	4
6	2012	4
7	2013	4

Number 1: pp. 001-100
Number 2: pp. 101-200
Number 3: pp. 201-300
Number 4: pp. 301-400

Table of contents of IJ ITK

VOL.1, NO.1, 2007 2
VOL.2, NO.1, 2008 6
VOL.3, NO.1, 2009 11
VOL.4, NO.1, 2010 13
VOL.5, NO.1 2011 15
VOL.5, NO.4 2011 16
VOL.6, NO.1 2012 17
VOL.7, NO.1 2013 20

TABLE OF CONTENT OF IJ ITK FROM VOL. 1 TO VOL. 7

CONTENT OF IJ ITK VOL.1, NO.1, 2007

Electronic Education in the Field of Electrical Engineering Disciplines. Combined Didactic Interactive Program System

Larisa Zaynutdinova, Maxim Polskiy,, ...5

Towards e+Learning, or How to Increase the Learning into e-Learning

Rositsa Doneva, Daniel Denev, George Totkov 13

Cognitive Approach to e-Learning in Sciences and Technologies

Safwan El Assad, Velina Slavova, Gilles Nachouki 19

Knowledge Testing in Algorithms – an Experimental Study

Irina Zheliazkova, Magdalena Andreeva, Rumen Kolev 26

Developing Collective Teaching Computer Software for the Course “Decision Theory”

Konstantin Berezovskiy, Olexy Voloshyn, Igor Drozdov,, ...33

Systems of Teaching Engineering Work on Base of Internet Technologies

Irina Petrova, Viktoriya Zaripova,, ...37

Electromagnetism: Interaction of Simulation and Real Lab Experiment

Aleksandrija Aleksandrova, Nadezhda Nancheva 44

Methodological Foundations of Fundamental Engineering Education

Yakov Shifrin,, ...51

About the Experience of Developing Interactive Dynamic Illustrations for Educational e-Materials

Evgeny Eremin,, ...53

Education Complex "Multi-agent Technologies for Parallel and Distributed Information Processing in Telecommunication Networks"

Adil Timofeev, Alexey Syrtzev, Anton Kolotaev,, ...58

The Principles of Creation of Teaching Materials and Organization of Ukrainian Language Learning Process using Distance Support in Senior Classes

Dina Rozhdestvenska 61

Exploring Linear Functions – Representational Relationship

Manfred Bauch, Valentyna Pikalova 67

Methodology for Training Teachers in Basic and Specific Computer Skills

Arsenia Grigorova, Desislava Dimkova, Monka Koceva, Milena Staneva, Boyanka Stefanova, Maria Shishkova.71

E-learning

Khaled Batiha, Safwan Al Salaimeh,, ...76

Mobile Communication Technology as a Tool of Educational Process

Victor Bondarenko 78

Developing a Mobile Distance Learning System

Petr Rogov, Nikolay Borisov 81

Investigating the Relations of Attacks, Methods and Objects in Regard to Information Security in Network TCP/IP Environment

Dimitrina Polimirova, Eugene Nickolov, Cecko Nikolov 85

Conceptual Model and Security Requirements for DRM Techniques Used for e-Learning Objects Protection

Maria Nickolova, Eugene Nickolov 93

CONTENT OF IJ ITK VOL.1, NO.2, 2007

Dimensioning of Telecommunication Network Based on Quality of Services Demand and Detailed Behaviour of Users

Emiliya Saranova,,.....103

Implications of Recent Trends in Telecommunications on Modeling and Simulation for the Telecommunication Industry

Gerta Köster, Stoyan Poryazov,, ...113

Requirements Management and Acquisition Management experiences in Spanish Public Administrations

Jose A. Calvo-Manzano, Gonzalo Cuevas, Ivan Garcia,Tomas San Feliu, Ariel Serrano, Magdalena Arcilla, Fernando Arboledas, Fernando Ruiz de Ojed,, ...116

A Practical Case of Software Localization after System Development

Jesus Cardenosa, Carolina Gallardo, Alvaro Martin.....121

Experiences on Application Generators

Hector Garcia, Carlos del Cuvillo, Diego Perez, Borja Lazaro.....128

Modeling and Annotating the Expressive Semantics of Dance Videos

Balakrishnan Ramadoss, Kannan Rajkumar 137

Digital Art and Design

Khaled Batiha, Safwan Al Salaimeh, Khaldoun A.A. Besoul,,.....147

Consciousness, Sub-consciousness and Emotions, Soul and KDS

Zinoviy Rabinovich, Yuriy Belov,, ...152

Decision–making Support Systems as Personal Intellectual Device of a Decision–maker

Alexey Voloshin,, ...159

Verification and Application of Conceptual Model and Security Requirements on Practical DRM Systems in e-Learning

Maria Nickolova, Eugene Nickolov,, ...163

A Multi-agent Framework for Distributed Decision-making Systems

Vira Lyubchenko,,.....169

Connection of Network Sensors to Distributed Information Measurement and Control System for Education and Research

Sergey Kiprushkin, Sergey Kurskov, Eugene Sukharev,,.....171

Procedure of Formalization of the Indices of Banks' Stable Functioning in Comparative Estimates of Their Development

Alexander Kuzemin, Vyacheslav Lyashenko,,.....175

An Algorithm for Fresnel Diffraction Computing Based on Fractional Fourier Transform

Georgi Stoilov,, ...181

Device for Counting of the Glass Bottles on the Conveyor Belt

Ventseslav Draganov, Georgi Toshkov, Dimcho Draganov, Daniela Toshkova 185

About Methods of Mathematical Modelling in the Development of Information Systems

Maria Eremina,, ...189

Parallel between Definition of Chess Playing Program and Definition of AI

Dimiter Dobrev,,.....196

CONTENT OF IJ ITK VOL.1, NO.3, 2007

Advergames: Overview
Eugenio Santos, Rafael Gonzalo, Francisco Gisbert.....203
Cognitive Bias in Knowledge Engineering Course
Tatiana Gavrilova, Seppo Puuronen,,.....209
Authors Support in the TM4L Environment
Darina Dicheva, Christo Dichev,,.....215
An Ontology-based Approach to Student Skills in Multiagent e-Learning Systems
Anatoly Gladun, Julia Rogushina,,.....219
Self-organization of Functioning Process of Expert System with the Use of Subject Domain Ontology
Elena Netavskaya,,.....226
Prototyping Adaptive Online Learning Courses
Tim Geleverya, Olga Malinovskaya, Tatiana Gavrilova, Vladimir Golenkov,, ...231
A Domain-Independent Otology-based Approach to Representation of Courseware Knowledge
Eleonora Stoyanova, Polina Valkova, Irina Zheliazkova,,.....237
Models, Techniques and Applications of e-Learning Personalization
Desislava Paneva, Yanislav Zhelev,,.....244
Production-frame Model of Representation of Data Domain
Alexander Kuzemin, Darya Fastova, Olesya Dyachenko,, ...251
Research of the Influence of Methods of Compression on the Co-efficient of Information Security of Objects Under Attacks
Dimitrina Polimirova, Eugene Nickolov, Cecko Nikolov,, ...255
Code Access Security in Microsoft's .NET
Petar Atanasov 261
Virtual Encyclopaedia of the Bulgarian Iconography
Lilia Pavlova-Draganova, Vladimir Georgiev, Lubomil Draganov 267
Software for Expert Information Processing During Carrying out the Examinations
Grigory Gnatienko,, ...272
Lecturer's Web-site and its Role in Distance Learning
Evgeny Zabudsky,, ...279
e-Course of Theoretical Mechanics
Elena Ponomaryova, Tatiana Nevenchannaya, Vladimir Pavlovsky,,.....281
Design Standardized Web-Components for e-Learning
Andrey Belonogov,, ...288
I&R Systems on the Internet/Intranet Cites as the Tool for Distance Learning
Andrii Donchenko,, ...293
Using Elements of Semantic Parsing in e-Learning Environments
Andrii Striuk,, ...297

CONTENT OF IJ ITK VOL.1, NO.4, 2007

Bulgarian National Ethnographic Museum – Meeting the Challenges of Digitisation
Detelin Luchev 303

Applying Genetic Algorithm In Query Improvement Problem
Abdelmgeid A. Aly,, ... 309

Systemological Knowledge-based Technology for Solving Complete Ill-structured Problems
Dmitriy Elchaninov, Mikhail Bondarenko, Kateryna Solovyova, Sergey Matorin, Vasy Matorin 317

Evolutionary Technique of Shorter Route Determination of Fire Brigade Following to Fire Place with the Optimized Space of Search
Vitaliy Snytyuk, Oleksandr Dghulay,, ... 325

Information Technologies of the Distributed Applications Design
Safwan Al Salaimeh,, ... 332

Use of Dynamic Technologies for Web-enabled Database Management Systems
Galina Bogdanova, Todor Todorov, Dimitar Blagoev, Mirena Todorova 335

Threat Model for User Security in e-Learning Systems
Maria Nickolova, Eugene Nickolov,, ... 341

Domain Modeling to Support Anti-cyber Crime Education
Yordan Penev, Svetlozar Markov 348

Application of Methods of Multi-criteria Evaluation in Choosing a Method of Compression as a Means of Heightening the Information Security of System and Applied Objects
Dimitrina Polimirova, Eugene Nickolov, Cecko Nikolov,, ... 352

Google - Security Testing Tool
Georgi Staykov 359

Use of the Maple System in Math Tuition at Universities
Tsvetanka Kovacheva,, ... 363

Adaptation of a Task-oriented Training Environment to its Users
Irina Zheliazkova, Georgi Georgiev, Rumen Kolev,, ... 369

The Automation of Adaptive Processes in the System of Distance Education and Knowledge Control
Pavlo Fedoruk,, ... 376

Remote Development of Distance Course Using Virtual Learning Space 'Web-Class Khpi'
Mykola Savchenko, Ganna Molodykh,, ... 380

E-Support for English Language Course to Enhance University Students' Learning
Ganna Molodykh,, ... 384

About Massachusetts Colleges Online June 2006 Sharing Best Practices Conference
Vincent Ialenti,, ... 389

About 60th Anniversary of Institute of Mathematics and Informatics, Bulgarian Academy of Science 393

About 15th Anniversary of Association of Developers and Users of Intellectualized Systems 394

About 10th Anniversary of Association of Developing of the Information Society 395

CONTENT OF IJ ITK VOL.2, NO.1, 2008

Informational Model of Natural Language Processing

Aleksandr Palagin, Viktor Gladun, Nikolay Petrenko, Vitalii Velychko, Aleksey Sevruk, Andrey Mikhailyuk 5

Hardware-based and Software-based Security in Digital Rights Management Solutions

Maria Nickolova, Eugene Nickolov,, ...7

Management of Information on Program Flow Analysis

Margarita Knyazeva, Dmitry Volkov,, ...11

Knowledge-Based Approach to Document Analysis

Elena Sidorova, Yury Zagorulko, Irina Kononenko 17

An Effective Method for Constructing Data Structures Solving an Array Maintenance Problem

Adriana Toni, Angel Herranz, Juan Castellanos,, ...23

Interval Prediction Based on Experts' Statements

Gennadiy Lbov, Maxim Gerasimov 29

The Experience of Development and Application Perspectives of Learning Integrated Expert Systems in the Educational Process

Galina Rybina, Victor Rybin,, ...33

A Circuit Implementing Massive Parallelism in Transition P Systems

Santiago Alonso, Luis Fernández, Fernando Arroyo, Javier Gil,, ...35

A Hierarchical Architecture with Parallel Comunication for Implementing P Systems

Ginés Bravo, Luis Fernández , Fernando Arroyo, Juan A. Frutos,, ...43

Static Analysis of Usefulness States in Transition P Systems

Juan Alberto Frutos, Luis Fernandez, Fernando Arroyo, Gines Bravo 49

Delimited Massively Parallel Algorithm Based on Rules Elimination for Application of Active Rules in Transition P Systems

Francisco Javier Gil, Luis Fernández, Fernando Arroyo, Jorge Tejedor,, ...56

Researching Framework for Simulating/Implementating P Systems

Sandra Gómez, Luis Fernández, Iván García, Fernando Arroyo 61

Grid Infrastructure for Satellite Data Processing in Ukraine

Nataliia Kussul, Andrii Shelestov, Mykhailo Korbakov, Oleksii Kravchenko, Serhiy Skakun, Mykola Ilin, Alina Rudakova, Volodymyr Pasechnik,, ...69

Distributed Visualization Systems in Remote Sensing Data Processing Grid

Andrii Shelestov, Oleksiy Kravchenko, Mykola Ilin,, ...76

Information Supply of Geo-information Systems for the Forecasting Problem of the Avalanche Danger

Alexander Kuzemin, Olesya Dyachenko, Darya Fastova,, ...82

Data Independence in the Multi-dimensional Numbered Information Spaces

Krassimir Markov,, ...87

How to Use a Desktop Version of a DBMS for Client-Server Applications

Julian Vasilev,, ...95

CONTENT OF IJ ITK VOL.2, NO.2, 2008

Analysis of Information Security of Objects under Attacks and Processed by Methods of Compression
Dimitrina Polimirova-Nickolova, Eugene Nickolov,, ... 103

ICT Security Management
Jeanne Schreurs, Rachel Moreau 110

Complex Protection System of Metadata-based Distributed Information Systems
Denis Kourilov, Lyudmila Lyadova,, ... 116

Advance of the Access Methods
Krassimir Markov, Krassimira Ivanova, Ilia Mitov, Stefan Karastanev 123

General Regression Neuro–Fuzzy Network for Identification of Nonstationary Plants
Yevgeniy Bodyanskiy, Nataliya Teslenko,, ... 136

Smart Portable Fluorometer for Express-Diagnostics of Photosynthesis: Principles of Operation and Results of Experimental Researches
Volodymyr Romanov, Volodimyr Sherer, Igor Galelyuka, Yevgeniya Sarakhan, Oleksandra Skrypnyk 142

Mathematical Model and Simulation of a Pneumatic Apparatus for In-Drilling Alignment of an Inertial Navigation Unit during Horizontal Well Drilling
Alexander Djurkov, Justin Cloutier, Martin P. Mintchev 147

Modeling Optical Response of Thin Films: Choice of the Refractive Index Dispersion Law
Peter Sharlandjiev, Georgi Stoilov,, ... 157

Formalization of Interaction Events in Multi-agent Systems
Dmitry Cheremisinov, Liudmila Cheremisinova 159

Intelligent Car Parking Locator Service
Ivan Ganchev, Máirtín O'Droma, Damien Meere 166

Traffic Offered Behaviour Regarding Target QOS Parameters in Network Dimensioning
Emiliya Saranova,, ... 173

VoIP Traffic Shaping Analyses in Metropolitan Area Networks
Rossitza Goleva, Mariya Goleva, Dimitar Atamian, Tashko Nikolov, Kostadin Golev 181

Study of Queueing Behaviour in IP Buffers
Seferin Mirtchev,, ... 187

Towards Useful Overall Network Teletraffic Definitions
Stoyan Poryazov,, ... 193

CONTENT OF IJ ITK VOL.2, NO.3, 2008

MultiDecision-2: A Multicriteria Decision Support System
Vassil Vassilev, Mariana Vassileva, Boris Staykov, Krassimira Genova, Filip Andonov, Plamena Chongova 203

Diagnostic Systems in Medicine as Personal Intellectual Tooling
Aleksej Voloshin, Maksim Zaporozhets, Pavel Mulesa,, ... 211

An Intelligent System for Investigations and Provision of Safety for Complex Constructions
Alexander Berman, Olga Nikolaychuk, Alexander Yurin, Alexander Pavlov 218

Optimization of the Investment Portfolio in the Conditions of Uncertainty
Yurii Zaychenko, Maliheh Esfandiyarfard,, ... 225

Analysis of Spatial-temporal Dynamics in the System of Economic Security of Different Subjects of Economic Management

Alexander Kuzemin, Vyacheslav Lyashenko,, ...234
The Problems of Forming the Inner Personal Conflict as a Factor which Influences Decision-making
Helen Shynkarenko,, ...239
A Small Settings Case Study using TSPi in a Software Project
Jose Calvo-Manzano, Gonzalo Cuevas, Tomás San Feliu, Edgar Caballero 245
Metadata and Geospatial Data Processing on the Base of XML and Grid
Andrii Shelestov, Mykhailo Korbakov, Mykhaylo Zynovyev 251
Using the Business Process Execution Language for Managing Scientific Processes
Anna Malinova, Snezhana Gocheva-Ilieva,, ...257
Development of the Combined Method for Designing Dataflow Systems
Nina Bakanova, Tatiana Atanasova,, ...262
Software Testing and Documenting Automation
Anton Tsybin, Lyudmila Lyadova 267
Architecture and Implementation of Reporting Means in Adaptive Dynamically Extended Information Systems
Vyacheslav Lanin,, ...273
An Approach to Representing the Process of Information Business Modeling
Nadezhda Filipova, Filcho Filipov,, ...277
Development of Database for Distributed Information Measurement and Control System
Sergey Kiprushkin, Sergey Kurskov, Vadim Semin,, ...283
An Approach to Designing the Interface of the Automated Documentary System
Arsenij Bakanov, Vladislava Grigorova,, ...287
The Strategical Impact of Knowledge Markets and Knowledge Management for Small and Medium Enterprises
Todorka Kovacheva,, ...290
Bivirtual Organization as a Queuing System
Tetiana Palonna, Iurii Palonnyi 293
Expert System for Decision-Making Problem in Economics
Aygun Alasgarova, Leyla Muradkhanli,, ...297

CONTENT OF IJ ITK VOL.2, NO.4, 2008

Creation of a Digital Corpus of Bulgarian Dialects
Nikola Ikonomov, Milena Dobreva 303
Use of Knowledge Technologies for Presentation of Bulgarian Folklore Heritage Semantics
Detelin Luchev, Desislava Paneva, Konstantin Rangochev,, ...307
Towards Content-Sensitive Access to the Artefacts of the Bulgarian Iconography
Desislava Paneva, Lilia Pavlova-Draganova, Lubomil Draganov 313
Automatic Creation of Lexical Resources for an Interlingua-based System
Juan Bekios, Igor Boguslavsky, Jesús Cardeñosa, Carolina Gallardo 318
A Cognitive Science Reasoning in Recognition of Emotions in Audio-Visual Speech
Velina Slavova, Werner Verhelst, Hichem Sahli,, ...324
Culture Aspects of Inforaction
Krassimir Markov, Stoyan Poryazov, Krassimira Ivanova, Ilia Mitov, Vera Markova 335
Using a Query Expansion Technique to Improve Document Retrieval
Abdelmgeid Amin Aly,, ...343

Aplications of Neural Networks to Find the Impact of Water in Different Berry Components in Grapes
Angel Castellanos, Marita Esteban, Ana Martinez, Valentin Palencia,, ... 348

Self-organizing Map and Cellular Automata Combined Technique for Advanced Mesh Generation in Urban and Architectural Design
Álvaro Castro Castilla, Nuria Gómez Blas,, ... 354

Lack of Answer Estimation by Fuzzy Control
Jesús Cardeñosa, Pilar Rey 360

Integration Principles of Russian and Japanese Databases on Inorganic Materials
Nadezhda Kiselyova, Shuichi Iwata, Victor Dudarev, Ilya Prokoshev, Valentin Khorbenko, Victor Zemskov.366

Image Quotient Set Transforms in Segmentation Problems
Dmitry Kinoshenko, Sergey Mashtalir, Konstantin Shcherbinin, Elena Yegorova,, ... 372

VLSI Watermark Implementations and Applications
Yonatan Shoshan, Alexander Fish, Xin Li, Graham Jullien, Orly Yadid-Pecht,, ... 379

Systemological Bases of Management Consulting
Mikhail Bondarenko, Ekaterina Solovyova, Dmitriy Elchaninov 387

Automated System for Effective Internet Marketing Campaign (ASEIMC)
Todorka Kovacheva,, ... 391

The Model of Unreliable Elements (Human Resources) Intellectual Management System on the Basis of Their Psychological and Personal Characteristics
Timofey Ryabtsev, Elena Antonova,, ... 394

CONTENT OF IJ ITK VOL.2, NO.5, 2008

Web Interfaces Destined for People with Disabilities
Laura Ciocoiu, Ionuţ Petre, Dragoş Smada, Dragoş Nicolau 403

Electronic Presentation of Bulgarian Educational Archives: an Ontology-Based Approach
Anna Devreni–Koutsouki,, ... 407

Complex Adaptive On-line Learning System “Theory of Automatic Control"
Yuriy Bezgachnyuk, Leonid Zamikhovskyy, Roman Matviyenko, Larysa Savyuk..... 414

Automating Exersises Validation in e-Learning Environments
Antonio Ortega, Rubén Álvarez,, ... 421

Special Features of Musical Education in Distant Learning (Training of Intonation Thinking)
Larissa Kuzemina,, ... 426

Collaborative Learning and Authoring in the Frame of e-Projects
George Totkov, Daniel Denev, Rositsa Doneva, Mariana Sokolova,, ... 431

An eMathTeacher Tool for Active Learning Fleury’s Algorithm
Gloria Sánchez–Torrubia, Carmen Torres–Blanc, Víctor Giménez–Martínez,, ... 437

Using Physical Quantities in Applied Mathematical Problems with Maple
Tsvetanka Kovacheva,, ... 443

About Ontology Application to the Description of Syllabus
Evgeny Eremin,, ... 449

Innovation Educational Programme “Marine Engineer”
Larisa Zainutdinova, Anatoly Korablin, Roman Lidgi Goryayev,, ... 455

The Methods of Conducting Studies with the Application of Combined Didactic Interactive Programme Systems
Maxim Polskiy,, ... 459

Fuzzy Model of the Automated System of Module Knowledge Control
Elena Prisyazhnyuk,, ...465
Peculiarities of the Electronic Educational and Methodological Complex under the Point-rating Technology
Olga Lyubova, Natalia Luybova,, ...468
The Experience Software-based Design of Virtual Medical Intrascopy Systems for Simulation Study
Oleg Avrunin, Liliya Aver'yanova, Valery Golovenko, Olga Sklyar,, ...470
InfoStation-based Adaptable Provision of m-Learning Services: Main Scenarios
Ivan Ganchev, Stanimir Stojanov, Máirtín O'Droma, Damien Meere,, ...475
Technology of Satellite and Mobile Communication in Modern Distance Education
Viktor Bondarenko,, ...482
Implementation of Distant Learning Portals based on CASE-technology METAS
Ludmila Lyadova, Alexey Urezalov, Andrey Khlyzov,, ...489

CONTENT OF IJ ITK VOL.3, NO.1, 2009

Experimental Support of Syntactic Computation Based on Semantic Merge of Concepts
Velina Slavova, Alona Soschen 5
Adaptive Compartmental Wavelon with Robust Learning Algorithm
Yevgeniy Bodyanskiy, Oleksandr Pavlov, Olena Vynokurova 24
Information Transformation System Based on Mapping of Graph Structures
Margarita Knyazeva, Vadim Timchenko 37
Towards an Innovative Presentation and Creative Usage of the Bulgarian Folklore Wealth
Desislava Paneva-Marinova, Radoslav Pavlov, Konstantin Rangochev, Detelin Luchev, Maxim Goynov 56
Metamodelling and Multilevel Metadata as a Basis of Technology That is Intended for Development of Adaptable Information Systems
Lyudmila Lyadova 67
The Combined Approach to Presentation of Multimedia Content and Textual Annotation
Dmytro Nochevnov 82
The Integrative Structure of Multimedia Courseware of Electrotechnical Lecture Course
Larisa Zaynutdinova, Natalia Semyenova 91

CONTENT OF IJ ITK VOL.3, NO.2, 2009

Hardware Implementations of Video Watermarking
Xin Li, Yonatan Shoshan, Alexander Fish, Graham Jullien, Orly Yadid-Pecht 103
On the Feasibility of Steering Swallowable Microsystem Capsules Using Aided Magnetic Levitation
Billy Wu, Martin P. Mintchev 121
High-Performance Intelligent Computations for Environmental and Disaster Monitoring
Nataliia Kussul, Andrii Shelestov, Sergii Skakun, Oleksii Kravchenko 135
Structural Model of Halftone Image and Image Segmentation Experiments
Vitaly Vishnevsky, Vladimir Kalmykov, Tatyana Vlasova 159
An ontology-based approach TO the incomplete simulation model analysis and its automatic completion
Alexander Mikov, Elena Zamyatina, Evgenii Kubrak 169
Dual Problem of Fuzzy Portfolio Optimization
Yuriy Zaychenko, Maliheh Esfandiaryfard 186

CONTENT OF IJ ITK VOL.3, NO.3, 2009

Generalized Interval Estimations in Decision Making and Scenario Analysis
Gennady Shepelyov, Michael Sternin 203
Wireless Communication and Control System for Portable Micro-Electromechanical Device for Real-Time Blood Sampling and Glucose Analysis (Electronic Mosquito)
Tristan D. Jones, Karan Kaler, Michel Fattouche, Martin P. Mintchev 223
Improving of Recognition Accuracy of Ecg-Signal in Varios Disorders of Heart and Optimization of Treatment by Drugs
Nataliya Bilous, Elena Visotskaja, Olga Kozina, Andrey Porvan, Gleb Kobzar, Alexey Krasov 237
A Use Case Scenario for Technology-Enhanced Learning Through Semantic Web Services
Lilia Pavlova-Draganova, Desislava Paneva-Marinova, Lubomil Draganov 257

Modern Business Modeling Approaches and Tools for Management
Elena Serova *269*
A Model for the University Course Timetable Problem
Velin Kralev *276*
Mobile Search and Advertising
Vladimir Lovitskii, Colin McCaffery, Michael Thrasher, David Traynor, Peter Wright *290*

CONTENT OF IJ ITK VOL.3, NO.4, 2009

Hierarchical Three-level Ontology for Text Processing
Victor Gladun, Vitalii Velychko, Leonid Svyatogor *303*
Upgradable Tree-Level Editor of Metaontologies, Ontologies and Knowledge of Chemistry and its Development on the Basis of Multilevel Chemistry Ontology
Irene Artemieva *312*
Evolution by Choice in Ontologies
Stefan Kojnov, Vassil Sgurev *331*
Experience of Development and Application of Expert Systems for Economic Macroparameters Forecasting and Operation
Alexey Voloshyn, Victoria Satyr *339*
Multiagent System for Smart Document Analysis
Vyachslav Lanin, Elena Mozzherina *346*
On the Exterior Penalty Function Method for the Constrained Optimal Control Problem for Quasilinear Parabolic Equations
Mahmoud Farag *356*
Distributed Virtual Laboratories for Smart Sensor System Design
Oleksandr Palagin, Volodymyr Romanov, Vitalii Velychko, Igor Galelyuka, Volodymyr Fedak, Volodymyr Grusha, Dmytro Artemenko, Oksana Galelyuka *364*
Indirect Spatial Data Extraction from Web Documents
Dimitar Blagoev, George Totkov, Milena Staneva, Krassimira Ivanova, Krassimir Markov, Peter Stanchev *383*

CONTENT OF IJ ITK VOL.4, NO.1, 2010

Improving Active Rules Performance in New P System Communication Architectures
Juan Alberto de Frutos, Luis Fernández, Carmen Luengo, Alberto Arteta 3
Implementing Transition P Systems
Santiago Alonso, Luis Fernández, Víctor Martínez 18
Membrane Computing: Non Deterministic Technique to Calculate Extinguished Multisets of Objects
Alberto Arteta, Angel Castellanos, Ana Martinez 30
Linear Program Form for Ray Different Discrete Tomography
Hasmik Sahakyan, Levon Aslanyan 41
Pigmented Rat-based Vision for Artificial Intelligence Applications
Francisco J. Cisneros de los Rios , Isabel Martín Moreno-Cid , Abel Sanchez-Jimenez ,
Juan Castellanos, Fivos Panetsos 51
Varieties of Biological Information: A Molecular Recognition Approach to Systems Biology and Bioinformatics
Jorge Navarro, Ángel Goñi-Moreno & Pedro C. Marijuán 56
Self-Assembly Process for Integrated Circuits Based on Carbon Nanotubes Using Microfluidic Devices
David Moreno, Sandra Gómez, Paula Cordero 67
Large VLSI Arrays – Power and Architectural Perspectives
Adam Teman, Orly Yadid-Pecht and Alexander Fish 76
Research Portal “Regions’ Innovative Development”
Lyudmila Lyadova, Zhanna Mingaleva, Natalia Frolova 89
ITHEA International Scientific Society 95
ITHEA IJ and IBS Sample Sheet for Preparing the Manuscripts 96

CONTENT OF IJ ITK VOL.4, NO.2, 2010

Frequency Effects on the Emergence of Polysemy and Homophony
Gertraud Fenk-Oczlon, August Fenk 103
Conceptual Modeling in Specialized Knowledge Resources
Pamela Faber, Antonio San Martín 110
Context-BASED Modelling of Specialized Knowledge
Pilar León Araúz, Arianne Reimerink, Alejandro G. Aragón 122
Cognitive Model of Time and Analysis of Natural Language Texts
Xenia A. Naidenova, Marina I. Garina. 143
A Formal Representation of Concept Composition
Daniel Schulzek, Christian Horn, Tanja Osswald 155
The Argument Based Computation: Solving the Binding Problem
Alona Soschen, Velina Slavova 169
Multilingual Reduced *N*-gram Models
Tran Thi Thu Van and Le Quan Ha 184

CONTENT OF IJ ITK VOL.4, NO.3, 2010

Grammatical Priming does Facilitate Visual Word Naming, at least in Serbian

Dejan Lalović 203

Spam and Phishing Detection in Various Languages

Liana Ermakova 216

Comparative Analysis of Phylogenic Algorithms

Valery Solovyev, Renat Faskhutdinov 233

Analyzing the Localization of Language Features with Complex Systems Tools and Predicting Language Vitality

Samuel Omlin 242

The Experience of Developing Software for Typological Databases (on the Example of DB “Languages of the World”)

Vladimir Polyakov 257

Model Research of Interaction Processes of Text Spaces

Konstantin I. Belousov, Tatyana N. Galinskaya 273

Application of Mathematical Induction for Inheritance Law Inerpretations

Assen Tochev, Vassil Guliashki 287

Optimisation of route-planning under indefinite risk conditions

Kuzemin Oleksandr, Berezhnoy Sergey, Dayub Yasir 292

CONTENT OF IJ ITK VOL.4, NO.4, 2010

Обнаружение знаний на основе сетевых структур

Гладун В.П.,,303

Инструменты поддержки процессов аналитической деятельности эксперта при тематическом исследовании информационных ресурсов и источников

А.В. Палагин, В.Ю. Величко, А.Е. Стрижак, М.А. Попова,,329

Система предоставления дистанционных услуг в образовании – Характерные технологические особенности

Востров Г.Н., Годынский М.Г., Кальной С.П., Лысенко М.И., Павлов О.А, Стрижак О.Е,, ...348

Проблемы современного рынка знаний

Крассимир Марков,,373

CONTENT OF IJ ITK VOL.5, NO.1 2011

Design, Implementation, and Testing of a Miniature Self-Stabilizing Capsule Endoscope With Wireless Image Transmission Capabilities.

Dobromir Filip, OrlyYadid-Pecht, Christopher N. Andrews, and Martin P. Mintchev 3

Evolving Cascade Neural Network Based on Multidimesnional Epanechnikov's Kernels and its Learning Algorithm

Yevgeniy Bodyanskiy, Paul Grimm, Nataliya Teslenko 25

Regions of Sufficiency for Metrical Data Retrieval

Vladimir Mashtalir, Konstantin Shcherbinin, Vladislav Shlyakhov, Elena Yegorova 31

Method for Evaluating of Discrepancy Between Regularities Systems in Different Groups

Oleg Senko, Anna Kuznetsova, Natalia Malygina, Irina Kostomarova 46

Evaluation of Greedy Algorithm of Constructing (0,1)-Matrices With Different Rows1

Hasmik Sahakyan, Levon Aslanyan 55

Histology Image Segmentation

Francisco J. Cisneros, Paula Cordero, Alejandro Figueroa, Juan Castellanos 67

Differential Evolution – Particle Swarm Optimization

Nuria Gómez Blas, Alberto Arteta, Luis F. de Mingo 77

Computational Model for Serendipity

A. Anguera, M.A. Diaz, A. Gutierrez 85

Two Approaches to One Optimization Problem in Recognition Theory

Nataliya Katerinochkina 92

CONTENT OF IJ ITK VOL.5, NO.2 2011

Data Acqisition Systems for Precision Farming

Oleksandr Palagin, Volodymyr Romanov, Igor Galelyuka, Vitalii Velychko, Volodymyr Hrusha, Oksana Galelyuka 103

Terminological Annotation of the Document in a Retrieval Context on the Basis of Technologies of System "Ontointegrator"

Olga Nevzorova, Vladimir Nevzorov 110

Towards Linguistics Analysis of the Bulgarian Folklore Domain

Galina Bogdanova, Konstantin Rangochev, Desislava Paneva-Marinova, Nikolay Noev 119

Environmental Risk Assessment Using Geospatial Data and Intelligent Methods

Nataliia Kussul, Sergii Skakun, Oleksii Kravchenko 129

Self-Organizing Routing Algorithm for Wireless Sensors Networks (WSN) Using Ant Colony Optimization (ACO) With Tinyos

Nuria Gómez Blas, Luis F. de Mingo, Levon Aslanyan, Vladimir Ryazanov 142

Safety Operations of the Complex Engineering Objects

Nataliya Pankratova 152

Indirect Approach of Determination of Collective Alternative Ranking on the Basis of Fuzzy Expert Judgements

Pavlo P. Antosiak, Oleksij F. Voloshin 168

Selective Evolution Control Method for Evolution Strategies with Neural Network Metamodels

Pavel Afonin 176

Computer Simulation of MiMa Algorithm for Input Buffered Crossbar Switch

Tasho Tashev, Tatiana Atanasova 183

Prediction of Educational Data Mining by Means of a Postprocessor Tool

Oktay Kir, Irina Zheliazkova 190

CONTENT OF IJ ITK VOL.5, NO.3 2011

Евклидовы пространства числовых векторов и матриц: конструктивные методы описания базовых структур и их использование

Владимир Донченко 203

Экспертные модели многокритериальной оптимизации

Альберт Воронин 217

Многоосновные алгебры, абстрактные типы данных и трансфинитная рекурсия

Крывый С.Л 224

Принципы построения интегрированных систем мульти-агентной навигации и интеллектуального управления мехатронными роботами

Тимофеев Адиль Васильевич, Юсупов Рафаэль Мидхатович..... 237

Симметрия в записи генетической информации в ДНК

Анатолий Гупал, Александра Вагис 245

Проблемы создания жизнеспособных интеллектуальных систем и методы их решения

Валерия Грибова, Александр Клещев 250

Физико-онтологический подход к построению целостной картины мира

Мержвинский Анатолий Александрович 259

Интеграция гетерогенных источников данных на основе рекурсивной декомпозиции

Алексей Кашников, Людмила Лядова 274

Экспериментальное изучение целостности знаний студентов

Евгений А. Еремин 285

CONTENT OF IJ ITK VOL.5, NO.4 2011

Content Analyzing and Synthesizing Services in a Digital Library

Desislava Paneva-Marinova, Maxim Goynov, Radoslav Pavlov 303

Automated Conference CD-ROM Builder – An Open Source Approach

Stefan Karastanev 319

Overall QoS Referencing in Telecommunication Systems – Some Current Concepts and Open Issues

Stoyan Poryazov, Emiliya Saranova 327

Search Algorithm for Shortest Synchronizing Sequences Using Boolean Satisfiability

Liudmila Cheremisinova 359

Comparative Analysis for Estimating of the Hurst Exponet for Stationary and Nonstationary Time Series

Ludmila Kirichenko, Tamara Radivilova, Zhanna Deineko 371

Informational-parametric Model of Sign Language Fingerspelling Units

Iurii Krak, Bogdan Trotsenko, Julia Barchukova 389

CONTENT OF IJ ITK VOL.6, NO.1 2012

К вопросу визуализации онтографов при разработке онтологий предметных дисциплин большого объема
Палагин А.В., Петренко Н.Г., Величко В.Ю., Тихонов Ю.Л. 3
Целостность образов: о моделировании смысла и понимания
Юрий Валькман 14
О применения системологического классификационного анализа знаний в процессе построения нишевых социальных сетей.
Екатерина Соловьева, Андрей Данилов 26
Реформа украиского национального образования, основанная на мышлении
Александр Сосницкий 35
Универсальная система программ морфологического анализа научно-технических текстов на флективных и агглютинативных языках
Надежда Мищенко 46
Аппроксимация функции яркости объекта полутонового изображения
Владимир Калмыков, Виталий Вишневский, Татьяна Романенко, Татьяна Власова 55
Мультиагентные технологии интеллектуального управления в телекоммуникационных системах и grid-сетях
Адиль Тимофеев 66
Результаты экспериментального исследования эффективности алгоритма последовательного анализа вариантов для задачи линейного упорядочения альтернатив
Павел П. Антосяк 75
Нечеткие процедуры последовательного анализа вариантов в комбинаторных оптимизационных задачах и их применение
Николай Маляр, Оксана Швалагин 81
Структуризация пространства факторов для установления предварительного диагноза урологических заболеваний
Николай Маляр, Павел Мулеса 88
Разработка текстовой базы на основе анализа структуры научного текста
Анастасия Дыбина 93

CONTENT OF IJ ITK VOL.6, NO.2 2012

Комплексный анализ риска банкротства корпораций в условиях неопределенности
Михаил Згуровский, Юрий Зайченко 103
Анализ возможности использования модели балансных сетей при проектировании сетей доступа
Антон Бондаренко, Виталий Величко 126
Синтез и анализ диофантовых регуляторов систем управления программным движением
Адиль Тимофеев 131
Ресурсный подход к моделированию человеко-компьютерного взаимодействия с интеллектуальной

информационной средой
Баканов А. С. 139
Выбор сценария создания сети доступа
Галина Гайворонская, Светлана Сахарова, Александра Котова 143
Сужение множества парето на основе нечёткой информации
Владимир Ногин 157
Подход к разработке обобщенной модели взаимодействия внешней информационной метаструктуры и конвергентной телекоммуникационной сети
Максим Соломицкий 169
Разработка имитационной модели для оптимизации функционирования полностью оптических сетей
Юрий Гриньков 178
Технология Создания документ-ориентированных систем, основанных на метамоделировании
Вячеслав Ланин, Людмила Лядова, Антон Цыбин 184

CONTENT OF IJ ITK VOL.6, NO.3 2012

Формализация проблемы извлечения знаний из естественно языковых текстов
Александр Палагин, Сергей Крывый, Николай Петренко, Дмитрий Бибиков 203
Компромиссное решение задач условной оптимизации
Альберт Воронин 219
Моделирование временных зависимостей в интеллектуальных системах поддержки принятия решений на основе прецедентов
Александр Еремеев, Павел Варшавский, Иван Куриленко 227
Последовательный анализ конечно малых возмущений линейных моделей при компьютерном моделировании
Алексей Волошин, Владимир Кудин 240
К построению модели «демократического капитализма»
Алексей Волошин, Анна Сидорук 250
Исследование и моделирование нейросетевого метода обнаружения и классификации сетевых атак
Адиль Тимофеев, Александр Браницкий 257
Моделирование интеллектуальных систем в процессах эволюционного обучения.
Ирина Трегубенко 266
Информационная технология применения семантически ориентированных методов классификации задачи opinion mining
Нина Хайрова, Наталья Шаронова 273
Концепция реформы системы национального образования основанная на мышлении
Александр Сосницкий, Виталий Хоменко, Денис Кравченко, Мария Сосницкая, Наталья Сосницкая, Наталья Кравченко 283

CONTENT OF IJ ITK VOL.6, NO.4 2012

An Architecture and Empirical Research of Dedicated Knowledge Processing Interpreter
Ivan V. Savchenko 303
Spectral Coefficient of Consistency of Fuzzy Expert Information and Estimation of its Sensitivity to Fuzzy Scales

When Solving Foresight Problems
Nataliya Pankratova, Nadezhda Nedashkovskaya 316
Methods for Solving of Some Tasks within the Problem of Optimal Synthesis of Information Networks in the Course of Their Evolution
Galyna Gayvoronska, Svetlana Sakharova, Maxim Solomitsky 330
Some Features of Information Technology Development of Expert Systems Used in Ukraine
Olena Domaskina, Oleg Domaskin 346
Convolution Networks as a Method of Realisation of Customs Risk-Management
Boris Moroz, Sergii Konovalenko 350
Using of Process Ontologies for Decision Support in Information Management Systems
T. Atanasova 357
Resource Approach to Data Mining Based on Network Traffic
Vochkov D.B., Bakanov A.S., Tashev T.D. 363
An Integrated Framework of Designing a Decision Support System for Engineering Predictive Maintenance
Daniela Borissova, Ivan Mustakerov 366
Multi-Objective Decision Making Under Conditions of Uncertainty and Risk of Knowledge Quantum Engineering Means
Sirodgea I. B., Kuzomin O., Ya. Shtukin M.V. 377
Источники Неопределенности Человеческого Фактора в Дидактике
Владимир Камышин 385

CONTENT OF IJ ITK VOL.7, NO.1 2013

Genetic Network Representation USING a Suitable IDE Software Tool to the BacilLus *Mycobacterium Tuberculosis*
Pablo del Moral, Sandra María Gómez, Jorge Navarro, Fernando Arroyo 3
Modeling, Simulation and Application of Bacterial Transduction in Genetic Algorithms
Carlos Perales-Gravan, Javier de Vicente Buendia, Juan Castellanos,R. Lahoz-Beltra 11
Biological Processes Studies through Software Tools: Development and Optimization in the Simulation of Synthetic Biological Constructions
Perceval Vellosillo, Roberto Tomé, Verónica Llorens-Rico, Juan B. Castellanos 23
DNA Strand Displacement for Stochastic Decision Making based on Immune's Clonal Selection Algorithm
Rizki Mardian, Kosuke Sekiyama, Toshio Fukuda 34
Simulation of Biological Models Using Cad Tools: Needs and Future
Víctor de la Hoz, César Pumar, Nicolás Quintero, Paula Cordero 46
A Web Implemetation of a Generalized Nep
David Batard, Sandra María Gómez and Abraham Gutiérrez 55
Solving Combinatorial Problems with Networks of Genetic Processors
Marcelino Campos, José M. Sempere 65
Genetic Based Spot Detection Method in Two-Dimensional Electrophoresis Images
CarlosFernandez-Lozano,Jose A. Seoane, Daniel Rivero, Julian Dorado 72
Algebra Describing Software Static Models
Elena Chebanyuk 83
Ordering Multiattribute Estimating Methods from the Utility Point of View
Stanislav Mikoni 94

CONTENT OF IJ ITK VOL.7, NO.2 2013

Applications of Knowledge Discovery Methods in Education
Vladimir Jotsov, Stefan Kojnov 103
Social Networks: Children and Parents
Diana Bogdanova 118
One Way to Eliminate an Educational System Defect
Andrei Fedoseev 123
Deep Knowledge Application for Knowledge Management Instruments Progress
Mikhail Bondarenko, Nikolay Slipchenko, Kateryna Solovyova, Andrey Danilov, Alla El Moutahid 127
Developing a Model of Human Interaction with the System of Decision-Support in Document Management
Arseniy Bakanov 135
Introduction to the Natural Language Addressing
Krassimira B. Ivanova, Koen Vanhoof, Krassimir Markov, Vitalii Velychko 139
Методы оценки деятельности подразделений организации на основе данных информационных систем
Нина Баканова 147
Оптимизация управляемых электромагнитных реакторов на основе математического моделирования магнитного поля
Евгений Забудский 152

Intellectual Analysis of Visual Information
Михаил Буртной, Александр Куземин 172
Исследование верхней границы пропускной способности коммутационного узла при входящем трафике типа "Горячей точки"
Ташо Ташев, Нина Баканова, Радостина Ташева 182
Framework for Creating Single Information Windows
Volodymyr Kazymyr, Maryna Kharchenko 190

CONTENT OF IJ ITK VOL.7, NO.3 2013

Application of Satellite Optical and SAR Images for Crop MApping and Erea Estimation in Ukraine
N. Kussul, S. Skakun, O. Kravchenko, A. Shelestov, Javier Francisco Gallego, O. Kussul 203
Temporal Video Segmentation via Spatial Image Segmentation
Dmitry Kinoshenko, Sergii Mashtalir, Vladislav Shlyakhov 212
Generalized Enteprise Function Framework (Geff) for Augmented and Actionable Knowledge Management
Paul Christian van Wely 220
Using Schema Matching in Data Transformationfor Warehousing Web Data
Abdelmgeid A. Ali, Tarek A. Abdelrahman, Waleed M. Mohamed..... 230
Grid Workflow Design and Management System
Volodymyr Kazymyr, Olga Prila, Volodymyr Rudyi 241
Agent-Based Document Management within the Whole Lifecycle of Information System
Viacheslav Lanin, George Sokolov 256
Архитектурно-структурные особенности средств автоматизации процесса извлечения знаний из естественно-языковых текстов
Александр Палагин, Сергей Крывый, Николай Петренко 261
Методы автоматизированного дискурсивного анализа неструктурированных текстов в заданном контексте
Дмитрий Тонконогов, Ирина Артемиева 272
Инструментальный сервис для создания виртуальных интерактивных облачных сред
В.В. Грибова, Л.А. Федорищев 277
Мульти-агентное управление и интеллектуальный анализ потоков данных
А.В. Тимофеев 282
Анализ эффективности нечетких нейронных сетей в задаче оценки кредитного риска
Шовгун Наталия 286
Модель оптимального экономического роста с линейной производственной функцией физического и интеллектуального капиталов
Игорь Ляшенко, Юрий Тадеев 294

CONTENT OF IJ ITK VOL.7, NO.4 2013