

2018 3rd Russian-Pacific Conference on Computer Technology and Applications (RPC 2018)

**Vladivostok, Russia
18 – 25 August 2018**



**IEEE Catalog Number: CFP18L42-POD
ISBN: 978-1-5386-7532-8**

**Copyright © 2018 by the Institute of Electrical and Electronics Engineers, Inc.
All Rights Reserved**

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

****** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP18L42-POD
ISBN (Print-On-Demand):	978-1-5386-7532-8
ISBN (Online):	978-1-5386-7531-1

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
E-mail: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

TABLE OF CONTENTS

A SOFTWARE SYSTEM FOR ACCEPTABILITY REGION CONSTRUCTION AND ANALYSIS	1
<i>Oleg V. Abramov ; Dmitry A. Nazarov</i>	
ANALYSIS AND CONTROL OF DYNAMIC DISTRIBUTED WORKFLOWS IN THE DESIGN AND REENGINEERING OF COMPLEX AUTOMATED SYSTEMS	7
<i>A. N. Afanasyev ; N. N. Voit ; A. G. Igonin</i>	
DEVELOPMENT OF EXPERT SYSTEM FOR THE EVALUATION OF STUDENT ACTION IN VIRTUAL WORLDS AND TRAINING SYSTEMS	13
<i>A. N. Afanasyev ; N. N. Voit ; D. S. Kanev ; S. L. Brigadnov</i>	
TREATMENT DESIGN-ENGINEERING WORKFLOWS IN LARGE ENTERPRISES	17
<i>A. N. Afanasyev ; N. N. Voit ; M. E. Ukhanova ; I. S. Ionova</i>	
ONTOLOGY MODELS FOR ACCESS CONTROL SYSTEMS	22
<i>Sergey Afonin</i>	
APPLICATION OF THE CASE-BASED REASONING APPROACH FOR IDENTIFICATION OF ACOUSTIC-EMISSION CONTROL SIGNALS OF COMPLEX TECHNICAL OBJECTS	28
<i>Roman Alekhin ; Pavel Varshavsky ; Alexander Eremeev ; Anton Kozhevnikov</i>	
DESIGN CONCEPT OF THE INTELLIGENT INFORMATION AND TELECOMMUNICATION SYSTEM OF UNIVERSITY SECURITY	32
<i>O. S. Amosov ; S. G. Baena</i>	
THE DEVELOPMENT OF SOFTWARE FOR FORECASTING INJURIES CAUSED TO PASSENGERS OF VEHICLES IN EMERGENCY SITUATIONS	37
<i>D. Antipin ; V. Kobishchanov ; S. Shorokhov</i>	
CPN-BASED VERIFYING LONG-RUNNING TRANSACTIONS ATOMICITY IN MICROSERVICE ENVIRONMENT	42
<i>Ivan Artamonov</i>	
ONTOLOGIES IN THE AUTOMATION PROBLEM FOR SITUATIONAL MODELLING	48
<i>Irina L. Artemieva ; Alexander Y. Fridman</i>	
ROBUST BLIND IMAGE WATERMARKING BASED ON A NEW MODULATION MODE OF LOW FREQUENCY DCT COEFFICIENTS	54
<i>Alexander Bahrushin ; Galina Bahrushina ; Ruslan Bazhenov</i>	
INTELLIGENT COMPONENT FOR BUILDING GIS SOLUTIONS IN LOGISTICS PROJECTS	60
<i>Stanislav Belyakov ; Paul Menyailov</i>	
INTELLECTUAL CARTOGRAPHIC VISUALIZATION PROCEDURE FOR GEOINFORMATION SYSTEM	63
<i>Stanislav Belyakov ; Marina Belyakova ; Andrey Glushkov</i>	
GEOINFORMATION MODELS IN SMART GRID MANAGEMENT	67
<i>Stanislav Belyakov ; Marina Savelyeva ; Leontiy Samoylov</i>	
INCREASING THE RESERVES OF AUTOMATIC CONTROL SYSTEM STABILITY BY USING FUZZY CONTROLLERS	72
<i>Vasiliy Berdnikov ; Nina Kazachek ; Valeriy Lokhin</i>	
AN APPROACH TO THE DEVELOPMENT OF SOFTWARE FOR EFFECTIVE SEARCH OF SCIENTIFIC ARTICLES	76
<i>Yuliya Bidulya</i>	
IMAGE-BASED NAVIGATION OF AUTONOMOUS UNDERWATER ROBOT AND 3D RECONSTRUCTION OF ENVIRONMENT	80
<i>V. A. Bobkov ; A. P. Kudryashov ; S. V. Melman ; V. P. May</i>	
MODEL SYNTHESIS AND MODEL-ORIENTED PROGRAMMING: A NEW TECHNOLOGY FOR HIGH PERFORMANCE AGENT-BASED MODELING	84
<i>Yury I. Brodsky</i>	
EXPERIMENTAL STUDY OF SYMMETRIC COMPUTER MODEL OF HTTP-FILTER	90
<i>K. I. Budnikov ; A. V. Kurochkin ; A. A. Lubkov ; A. V. Yakovlev</i>	
OBJECT IDENTIFICATION ON RASTER IMAGES BY USER QUERY	96
<i>I. V. Bychkov ; G. M. Rugnikov ; R. K. Fedorov ; Y. V. Avramenko</i>	
METHODS AND TOOLS FOR AUTOMATION OF DEVELOPMENT OF INFORMATION SYSTEMS USING SPECIFICATIONS OF DATABASE APPLICATIONS	101
<i>I. V. Bychkov ; A. E. Hmel'nov ; E. S. Fereferov ; G. M. Rugnikov ; A. S. Gachenko</i>	

SERVICES AND CLOUD INFRASTRUCTURE TO SUPPORT INTERDISCIPLINARY SCIENTIFIC RESEARCH	107
<i>I. V. Bychkov ; G. M. Rugnikov ; R. K. Fedorov ; A. S. Shumilov</i>	
MULTISCALE APPROACH OF RETINAL BLOOD VESSELS SEGMENTATION BASED ON VESSELS SEGMENTATION WITH DIFFERENT SCALES.....	112
<i>Chernomorets Daria ; Mikhelev Vladimir ; Chernomorets Andrey</i>	
ONTOLOGY-BASED MODEL OF OBJECT FIELD CONCERNING INDIVIDUAL'S CAPABILITIES FOR SELF-DEVELOPMENT	118
<i>Valentina Chernyavskaya ; Oksana Kulikova</i>	
MODELING THE BEHAVIOR OF INTELLIGENT AGENTS BASED ON ADAPTIVE FUZZY SITUATIONAL NETWORKS	123
<i>Maxim Denisenkov ; Vadim Borisov</i>	
ONTOLOGY DRIVEN DEVELOPMENT OF RULE-BASED EXPERT SYSTEMS.....	128
<i>Nikita O. Dorodnykh ; Aleksandr Y. Yurin ; Alexander B. Stolbov</i>	
WEB-TECHNOLOGY FOR MEDICAL IMAGES SEGMENTATION.....	134
<i>Anna V. Doronicheva ; Sergey Z. Savin</i>	
USE OF AGENT-BASED MODELING FOR WILDFIRE SITUATIONS SIMULATION	140
<i>Georgy Dorrer ; Sergey Yarovoy</i>	
INSTRUMENTS OF CORPUS LINGUISTICS IN THE TERMINOLOGICAL EXERCISE “INTENTIONAL LEARNING”	144
<i>Viktoriya Dudko ; Valentina Chernyavskaya</i>	
USING NOSQL DATABASES AND MACHINE LEARNING FOR IMPLEMENTATION OF INTELLIGENT DECISION SYSTEM IN COMPLEX VISION PATALOGIES.....	150
<i>A. P. Ereemeev ; S. A. Ivliev ; V. N. Vagin</i>	
PARALLEL PROCESSING COMPUTATION OF MARKER MOVEMENT VELOCITIES ON SATELLITE IMAGES	154
<i>A. S. Eremenko ; A. I. Aleksanin ; M. G. Aleksanina ; P. V. Babyak</i>	
MICROFLUIDIC DEVICES FOR MOLECULAR DIAGNOSTICS IN MEDICAL AND BIOLOGICAL RESEARCH	157
<i>Anatoly Evstrapov ; Vladimir Kurochkin ; Dmitry Petrov ; Sergey Sheptunov</i>	
FUZZY MODEL AND METHOD OF RATING UNIVERSITY EVALUATION	161
<i>Yaroslav Alexandrovich Fedulov ; Vadim Vladimirovich Borisov ; Alexander Sergeevich Fedulov</i>	
EMOTION AND COGNITIVE ACTIVITY MONITORING SYSTEM.....	166
<i>Natalia N. Filatova ; Konstantina V. Sidorov ; Pavel D. Shemaev ; Igor A. Rebrun</i>	
ISOLATION AND TRACKING OF TRANSPLANTED MESENCHYMAL STEM CELLS ON MRI IMAGES.....	170
<i>Fralenko Vitaly Petrovich ; Shustova Maria Veniaminovna ; Khachumov Mikhail Vyacheslavovich ; Khachumov Vyacheslav Mikhailovich</i>	
MODELING THE ACTIVE CONSUMER BEHAVIOR BASED ON THE AGENT APPROACH.....	175
<i>Elena Gal'perova ; Vasilii Gal'perov</i>	
INTELLIGENT SYSTEM FOR RISK IDENTIFICATION OF CYBERSECURITY VIOLATIONS IN ENERGY FACILITY	179
<i>Gaskova Daria ; Aleksei Massel</i>	
AIRCRAFT & SPACE INTERFACES TESTING WITH NATIONAL INSTRUMENTS EQUIPMENT	184
<i>L. A. Ginis ; L. V. Gordienko ; S. V. Levoniuk</i>	
TECHNOLOGY FOR THE DEVELOPMENT OF INTELLIGENT SERVICE SHELLS BASED ON EXTENDED GENERATIVE GRAPH GRAMMARS	188
<i>Valeria Gribova ; Alexander Kleshev ; Philip Moskalenko ; Vadim Timchenko ; Leonid Fedorishchev ; Elena Shalfeeva ; Evgeny Zamburg</i>	
CONTROL OF VIRTUAL SCENES	193
<i>Valeriya Gribova ; Leonid Fedorishchev</i>	
SOFTWARE TOOLKIT FOR CREATING INTELLIGENT SYSTEMS IN PRACTICAL AND EDUCATIONAL MEDICINE.....	198
<i>Valeria V. Gribova ; Margaret V. Petryaeva ; Dmitry B. Okun ; Alexey V. Tarasov</i>	
AN APPROACH TO CREATION OF TERMINAL CLIENTS IN CNC SYSTEM	203
<i>S. N. Grigoriev ; G. M. Martinov</i>	
THE SYSTEM OF SEARCHING SIMILAR SOFTWARE PROJECTS, BASED ON THE ONTOLOGY CONSTRUCTED BY UML METAScheme AND DESIGN PATTERNS	207
<i>G. U. Guskov ; A. M. Namestnikov ; N. G. Yarushkina</i>	
INTERNET OF THINGS: SECURITY OF EMBEDDED DEVICES	211
<i>Sergey Iskhakov ; Alexander Shelupanov ; Artur Mitsel</i>	

MODELING OF THE HUMAN DIGESTIVE SYSTEM IN THE DIET STRUCTURAL OPTIMIZATION	215
<i>Y. A. Ivashkin ; M. A. Nikitina</i>	
THE ARCHITECTURE OF ONBOARD INTELLECTUAL CONTROL SYSTEM FOR AUTONOMOUS RESEARCHING DEVICES.....	221
<i>S. Kabak Il'ya ; A. Sheptunov Sergey ; M. Solomentsev Jury ; V. Sukhanova Nataly ; S. Sannikov Aleksandr ; S. Nakhushev Rakhim</i>	
INTELLIGENT COMPUTING BASED ON NEURAL NETWORK MODEL IN PROBLEMS OF KINEMATICS AND CONTROL OF PARALLEL ROBOT	225
<i>Sergey Yuriyevich Khalapyan ; Anton Igorevich Glushchenko ; Larisa Alexandrovna Rybak ; Elena Vladimirovna Gaponenko ; Dmitry Ivanovich Malyshev</i>	
SPARSE APPROXIMATION METHODS AND THEIR PARALLEL IMPLEMENTATION	230
<i>A. A. Kim ; O. O. Lukovenkova ; Y. V. Marapulets ; A. B. Tristanov</i>	
THE MODEL OF INFORMATIZATION OF THE RUSSIAN SOCIETY	235
<i>Vladimir Kim</i>	
DYNAMIC SIMULATION OF URANYL NITRATE CRYSTALLIZATION PROCESS	240
<i>Andrey V. Klimenko ; Igor S. Nadezhdin ; Alexey G. Goryunov ; Flavio Manenti</i>	
USING "UNIT-FUNCTION-OBJECT" APPROACH TO SOLVE MAIN PROBLEMS IN ONTOLOGY ENGINEERING	245
<i>Anna A. Kondratenko ; Sergei I. Matorin</i>	
FUNCTIONAL SCHEME OF THE PROCESS OF ACCESS CONTROL: METHODOLOGY FOR THE FORMATION OF NORMATIVE DOCUMENTS ON THE ACCESS CONTROL.....	249
<i>Konev Anton ; Shelupanov Aleksandr ; Egoshin Nikolay</i>	
IMPROVING WEB APPLICATIONS SECURITY USING PATH-BASED ROLE ACCESS CONTROL MODEL	256
<i>Dmitry Kononov ; Sergey Isaev</i>	
ONTOLOGY-BASED DECISION SUPPORT SYSTEM FOR FORECASTING OF ENERGY INFRASTRUCTURE DEVELOPMENT	260
<i>Alex Kopaygorodsky</i>	
ALGORITHM OF INTERFACE GENERATION FOR MODEL-DRIVEN DATA CONSOLIDATION SYSTEM.....	265
<i>Aleksei Aleksandrovich Korobko</i>	
A CONVOLUTIONAL FUZZY NEURAL NETWORK FOR IMAGE CLASSIFICATION	269
<i>Kseniya P. Korshunova</i>	
USER IDENTIFICATION BY THE FREE-TEXT KEYSTROKE DYNAMICS	273
<i>Evgeny Yuriyevich Kostyuchenko ; Ivan Viktorovich ; Botna Renko ; Alexander Alexandrovich Shelupanov</i>	
MULTI-AGENT SIMULATION MODELLING WITH INTELLECTUAL AGENTS FOR CITY TRAFFIC CONTROL	277
<i>Nina Krapukhina ; Roman Senchenko</i>	
THE DETECTION OF ISCHEMIA MARKERS IN IMAGE OF HUMAN BIOLOGICAL FLUID FACIES	283
<i>Victor R. Krashennnikov ; Olga E. Malenova ; Anna S. Yashina</i>	
MODELS UPDATING FOR TECHNICAL OBJECTS STATE FORECASTING.....	287
<i>Victor R. Krashennnikov ; Vladimir N. Klyachkin ; Yulia E. Kuvayskova</i>	
THE SYSTEM OF SPATIAL INTERPRETATION OF HYDROLOGICAL INFORMATION FOR AUTOMATED INFORMATION SYSTEM OF HYDROLOGICAL MONITORING AND DATA MANAGEMENT OF PRIMHYDROMET	291
<i>S. M. Krasnopeyev ; E. V. Shulkin ; S. S. Pashinskiy</i>	
ON THE APPROACHES TO THE DEVELOPMENT OF A SCIENTIFIC ORGANIZATION WEBSITE.....	296
<i>Sergey Kratov</i>	
LOGIC-PROBABILISTIC ANALYSIS OF INFORMATION WITH UNCERTAINTIES	301
<i>Boris A. Kulik ; Alexander Y. Fridman</i>	
DEVELOPMENT AND RESEARCH OF ALGORITHMS OF ADAPTIVE CHOICE OF PARAMETERS OF NOISE PROTECTION CODES IN DATA TRANSMISSION SYSTEMS.....	307
<i>O. V. Kupriyanova ; A. V. Levenets ; En Un Chye</i>	
THE PEDAGOGICAL INTERACTION IMPLEMENTATION WITHIN THE UNIVERSITY INFORMATIONAL-EDUCATIONAL ENVIRONMENT FOR STUDENT'S INFORMATION COMPETENCE DEVELOPMENT.....	313
<i>Luchaninov Dmitry ; Bazhenov Ruslan ; Bazhenova Natalia ; Rector Bogachenko Natalia</i>	
LANGUAGE EVOLUTION MODELING SYSTEM	318
<i>Natalia V. Makusheva ; Irina L. Artemieva ; Viktoriya L. Zavyalova</i>	

AUTOMATION OF MACHINE-BUILDING PRODUCTION ACCORDING TO INDUSTRY 4.0	324
<i>L. I. Martinova ; G. M. Martinov</i>	
ONTOLOGICAL ENGINEERING OF KNOWLEDGE SPACE FOR SITUATIONAL MANAGEMENT IN RUSSIAN ENERGY SECTOR	328
<i>L. V. Massel ; T. N. Vorozhtsova</i>	
SITUATION CALCULUS APPLICATION IN TASKS OF INTELLIGENT DECISION-MAKING SUPPORT	333
<i>Liudmila Massel ; Vladimir Kuzmin</i>	
FRACTAL APPROACH TO CONSTRUCTING ONTOLOGICAL KNOWLEDGE SPACE	337
<i>L. V. Massel</i>	
MODERN CHALLENGES IN BIBLIOGRAPHIC METADATA IDENTIFICATION	342
<i>Nikolay A. Mazov ; Vadim N. Gureyev</i>	
IMAGE ANALYSIS BASED ON SALIENT POINTS OF WAVELET TRANSFORM	346
<i>M. V. Medvedev ; M. P. Shleymovich ; S. A. Lyasheva</i>	
THE CRITERIA OF ONTOLOGY QUALITY ANALYSIS BASED ON FONNAL CONCEPT ANALYSIS	351
<i>Bato Merdygeev ; Sesegma Dambaeva</i>	
METHOD OF AUTOMATIC DETECTION OF NEW MOTIONLESS OBJECTS ON THE BASIS OF COMPARISON OF IMAGES OF THE AREA	356
<i>Dinar Miftakhutdinov ; Ildus Rizaev ; Michael Shleymovich</i>	
PARALLEL METHODS FOR NETWORK RELIABILITY CALCULATION AND CUMULATIVE UPDATING OF NETWORK RELIABILITY BOUNDS	362
<i>Denis A. Migov</i>	
RECOGNITION ALGORITHMS BASED ON RADIAL FUNCTIONS	367
<i>N. Mirzaev ; E. Saliev</i>	
AN APPROACH TO LOGICAL MODELING OF MANAGEMENT ACCOUNTING INFORMATION SYSTEMS FOR INSURANCE ACTIVITIES	373
<i>Sergey Mkrtichev ; Oksana Gushchina ; Andrey Ochepovsky ; Oksana Enik</i>	
EVALUATION OF THE SIMILARITY COEFFICIENT OF THE ONTOSEMANTIC GRAPHS AND ITS APPLICATION FOR THE PROBLEM OF QUESTION-ANSWERING SEARCH	377
<i>Anastasia Mochalova ; Vladimir Mochalov</i>	
ENERGY EFFICIENCY AND PERFORMANCE OF AUTO-VECTORIZED LOOPS ON INTEL XEON PROCESSORS	383
<i>Olga V. Moldovanova ; Mikhail G. Kurnosov ; Aleksey Mel'nikov</i>	
DEVELOPMENT OF AN AUTOMATED INFORMATION SYSTEM FOR CONTROLLING THE INDUCTION SOLDERING OF ALUMINUM ALLOYS WAVEGUIDE PATHS	389
<i>Murygin Alexander Vladimirovich ; Laptinok Valeriy Dmitrievich ; Tynchenko Vadim Sergeevich ; Emilova Olesya Andreevna ; Seregin Yuriy Nikolaevich</i>	
CREATION OF TOOLS FOR SCIENTIFIC AND EDUCATIONAL ORGANIZATIONS FOR IDENTIFICATION AND CLARIFICATION OF THE SCIENTIFIC AND TECHNOLOGICAL PRIORITIES BASED ON THE SEARCH AND ANALYSIS OF PATENT DATA	394
<i>O. Neretin</i>	
WEB-ORIENTED SOFTWARE SYSTEM FOR AGENT-BASED MODELING DRIVEN BY DECLARATIVE SPECIFICATION OF IMPLEMENTATION PROCESS	398
<i>Olga A. Nikolaychuk ; Alexander I. Pavlov ; Alexander B. Stolbov</i>	
COMMAND AND SOFTWARE MANAGEMENT SIMULATION FOR THE SPACECRAFT EQUIPMENT TESTING	403
<i>Ludmila Nozhenkova ; Olga Isaeva ; Rodion Vogorovskiy</i>	
FEATURES OF SPECTRAL ANALYSIS METHODS APPLICATION FOR SOLVING PROBLEMS OF ACOUSTIC EMISSION SIGNALS PROCESSING	407
<i>Valery Ovcharuk ; Maksim Kutsenko</i>	
PREDICTING SALES PRICES OF THE HOUSES USING REGRESSION METHODS OF MACHINE LEARNING	412
<i>Parasich Andrey Viktorovich ; Parasich Viktor Aleksandrovich ; Kaftannikov Igor Leopoldovich ; Parasich Irina Vasilevna</i>	
MULTI-METHOD TECHNOLOGY FOR GROUP MULTI-ATTRIBUTE CHOICE	417
<i>Alexey B. Petrovsky</i>	
CREATION OF INFORMATION PORTRAITS USING 'POLAR' SYSTEM	422
<i>Y. Platonov ; E. Artamonova</i>	

SCALE OF BINARY VARIABLES FOR PREDICTING CARDIOVASCULAR RISK SCALE FOR PREDICTING CARDIOVASCULAR RISK	426
<i>N. G. Plekhova ; V. A. Nevzorova ; L. V. Rodionova ; T. V. Brodskaya ; V. B. Shumatov ; K. V. Grunberg ; S. V. Dolzhikov</i>	
THE DESIGN PROCESS DATA REPRESENTATION BASED ON SEMANTIC FEATURES GENERALIZATION	430
<i>Alexander Pokhilko</i>	
NEURO-FUZZY MODELING OF COMPRESSOR UNIT PERFORMANCE	434
<i>Daria Popova</i>	
RESEARCH AND FORECASTING OF CHANGES IN THE PARAMETERS OF TIME SERIES AND CONTINUOUS FUNCTIONS IN INFORMATION SYSTEMS	437
<i>Aleksander Yurievich Proskuryakov ; Yuriy Anatolievich Kropotov</i>	
MODELING OF FUZZY BUSINESS PROCESSES IN SOLVING OPERATIONAL PLANNING TASKS	441
<i>A. V. Senkov ; M. S. Margolin</i>	
THE SEARCH DEFECTS ALGORITHM IN CONTINUOUS DYNAMICAL SYSTEMS BY VECTORS OF TOPOLOGICAL RELATIONS	445
<i>Sergey V. Shalobanov ; Sergey S. Shalobanov</i>	
MATHEMATICAL MODELING OF HARBOR SCRAP METAL LOGISTIC	449
<i>Natalia Shamray</i>	
MODELING OF A SOLAR ARRAYS DEPLOYMENT PROCESS AT GROUND TESTS OF MECHANICAL DEVICES ON ACTIVE GRAVITY COMPENSATION SYSTEMS	453
<i>Ivan Shpyakin ; Aleksandr Voronin ; Alexander Malysenko ; Stepan Majkov</i>	
ANT COLONY OPTIMIZATION ALGORITHM FOR BUILDING VIRTUAL MACHINE IMAGES IN CLOUD SYSTEMS	457
<i>Alexander E. Shukhman ; Petr N. Polezhaev ; Leonid V. Legashev ; Yury A. Ushakov ; Irina P. Bolodurina</i>	
UNSUPERVISED CLASSIFICATION OF THE EARTH'S SURFACE DATA	461
<i>V. Sidorova</i>	
ONTOLOGY-DRIVEN HUMAN-COMPUTER CLOUD FOR DECISION SUPPORT	465
<i>Alexander Smirnov ; Andrew Ponomarev ; Nikolay Shilov</i>	
AUTOMATIC ERROR DETECTION AND HINT GENERATION IN THE TEACHING OF FORMAL LANGUAGES SYNTAX USING CORRECTWRITING QUESTION TYPE FOR MOODLE LMS	470
<i>O. A. Sychev ; D. P. Mamontov</i>	
NEURAL NETWORKS FOR THE MOVING OBJECTS CONTROL	474
<i>Elza Takhavova ; Galina Kosjukhina</i>	
ACCESS CONTROL MODEL FOR COLLABORATIVE ENVIRONMENTS IN ECM	478
<i>I. A. Tarkhanov</i>	
STORAGE AND PROCESSING TECHNOLOGIES OF COGNITIVE CONTENT FOR ELEARNING SYSTEMS	484
<i>S. V. Tarkhov ; N. S. Minasova ; S. M. Minasov ; L. M. Tarkhova</i>	
SOFTWARE FOR BANKRUPTCY RISK ASSESSMENT OF THE ENTERPRISE	490
<i>E. V. Telipenko ; S. P. Sopova</i>	
THE USE OF THE AGGREGATOR FOR CHOOSING THE METHOD OF FORECASTING TIME SERIES	494
<i>I. A. Timina ; E. N. Egov ; N. G. Yarushkina ; D. V. Yashin</i>	
INTEGRATION OF SITUATION SEMANTIC MODELS BASED ON ONTOLOGY SYSTEM	499
<i>Vadim Tiuriumin ; Aleksei Massel</i>	
DECISION SUPPORT SYSTEM FOR DESIGNING AN EFFECTIVE CONFIGURATION OF A COMPUTING NETWORK FOR DISTRIBUTED COMPLEX PROBLEM SOLVING	504
<i>Tynchenko Vadim Sergeevich ; Tynchenko Valeriya Valerievna ; Bukhtoyarov Vladimir Viktorovich ; Agafonov Evgeniy Dmitrievich</i>	
MODELS, METHODS AND INFORMATION TECHNOLOGIES FOR CREATING, PROCESSING AND ANALYZING SPATIALLY DISTRIBUTED DATA IN GIS	510
<i>Yuri Vasin</i>	
SIMULATION SOFTWARE FOR MULTICOMMODITY FLOWS MODEL OF INTERREGIONAL TRADE	516
<i>Andrey Velichko ; Valeriya Gribova ; Leonid Fedorishchev</i>	
MODELING OF SUBJECTIVE CHOICE IN AN UNCERTAIN AND POORLY STRUCTURED ENVIRONMENT	521
<i>G. P. Vinogradov ; N. V. Kirsanova</i>	

THE ACHIEVEMENTS OF INFORMATION TECHNOLOGY IN THE RUSSIAN FAR EAST HEAT POWER INDUSTRY	526
<i>Eugene Voloshin ; Valeri Chipulis ; Roman Kuznetsov</i>	
ANYLOGIC, EXTENDSIM AND SIMULINK OVERVIEW: COMPARISON OF STRUCTURAL AND SIMULATION MODELLING SYSTEMS	531
<i>Igor M. Yakimov ; Mikhail V. Trusfus ; Vladimir V. Mokshin ; Alexander P. Kirpichnikov</i>	
CREATION OF TOOLS AND ALGORITHMS FOR ASSESSING THE RELEVANCE OF DOCUMENTS	536
<i>Aigerim Sembekovna Yerimbetova ; Saule Kairollivevna Sagnayeva ; Feodor Alexandrovich Murzin ; Jamalbek Aliaskarovich Tussupov</i>	
THE ANALYSIS AND MONITORING OF ECOLOGICAL RISKS ON THE BASIS OF FUZZY PETRI NETS	540
<i>Sergey Zakharov ; Alexandr Taganov ; Sergei Gusev ; Aleksandr Kolesenkov</i>	
A MODEL OF ESTIMATING THE STRATEGIC DEVELOPMENT OF A COMPANY ON THE BASE OF EXPERT KNOWLEDGE	545
<i>A. A. Zakharova ; T. Y. Chernysheva ; O. A. Kolegova ; E. V. Molnina ; E. Knauss</i>	
FUZZY ONTOLOGY-BASED APPROACH TO ANALYZING THE FREE-FORM ANSWERS	552
<i>A. A. Zarubin ; A. R. Koval ; A. A. Filippov ; V. S. Moshkin</i>	
REIMAGINE TEACHER TRAINING FOR PERFORMING IN INFORMATION-ORIENTED SOCIETY (FABLAB)	558
<i>Olga P. Zhigalova ; Tatiana L. Kopus</i>	
HETEROGENEOUS INFORMATION SYSTEMS INTERACTION	562
<i>Dmitry Zhuchkov ; Roman Morozov</i>	
MATRIX-LIKE STRUCTURES IN SOLUTION OF CONSTRAINT SATISFACTION PROBLEMS	566
<i>Alexander A. Zuenko</i>	
Author Index	