

2014 IEEE 8th International Conference on Application of Information and Communication Technologies

(AICT 2014)

**Astana, Kazakhstan
15-17 October 2014**



**IEEE Catalog Number: CFP1456H-POD
ISBN: 978-1-4799-4118-6**

TABLE OF CONTENTS

SESSION 1 - CYBER SECURITY ISSUES	1
COMBINED SIDE-CHANNEL ATTACKS ON COMP128	
<i>Alla Levina, Mikhail Korovkin, Daria Sleptsova</i>	2
TOWARDS INTEGRATION OF RISK-DRIVEN AND EVIDENCE DRIVEN INFORMATION SECURITY MEASUREMENT	
<i>Reijo M. Savola</i>	5
CRYPTANALYSIS OF SECRET SHARING SCHEMES BASED ON SPHERICAL SPACES	
<i>Chervyakov N.I., Babenko M.G., Deryabin M.A., Nazarov A.S.</i>	11
A NEW ROBUST BINARY IMAGE EMBEDDING ALGORITHM IN DISCRETE WAVELET DOMAIN	
<i>Ahmed Mohammed, Hakan Hadi Maraş, Ersin Elbasi</i>	16
THE GEOMETRY OF FUZZY SETS IN THE SYSTEMS OF INFORMATION SECURITY	
<i>Lukina O., Majewski D., Kulagina E.</i>	23
ALGORITHM OF MULTITHRESHOLD DECODING FOR NON-BINARY SELF-ORTHOGONAL CONCATENATED CODES	
<i>Valery Zolotarev, Gennady Ovechkin, Yerzhan Seitkulov, Dina Satybaldina, Nurlan Tashatov, Vitaly Mishin</i>	27
SECURING SWARM INTELLECT ROBOTS WITH A POLICE OFFICE MODEL	
<i>I. A. Zikratov, I. S. Lebedev, E. V. Kuzmich, A. V. Gurtov</i>	32
ROBUST SECURITY NETWORK ASSOCIATION ADJUSTED HYBRID AUTHENTICATION SCHEMA	
<i>Viktors Gopejenko, Sergejs Bobrovskis</i>	37
SOFTWARE IMPLEMENTATION OF THE NONPOSITIONAL CRYPTOGRAPHY ALGORITHMS	
<i>Rustem Biyashev, Nursulu Kapalova, Rinat Khakimov, Saule Nyssanbayeva</i>	42
POLYALPHABETIC EUCLIDEAN CIPHERS	
<i>Vladimir D. Ten, Aizhan B. Dyussenbina</i>	47
DEVELOPMENT OF A HYBRID WEB APPLICATION FIREWALL TO PREVENT WEB BASED ATTACKS	
<i>Adem Tekerek, Cemal Gemci, Ömer Faruk Bay</i>	51
ANALYSIS OF SECURITY VULNERABILITIES AND THREAT ASSESSMENT IN COGNITIVE RADIO (CR) NETWORKS	
<i>Syed Rizvi, John Mitchell, Nathan Showan</i>	55
SCALABLE PROTOCOL FOR REMOTE INTEGRITY ATTESTATION OF CLOUD BASED DISTRIBUTED SERVICES	
<i>Siamak Azadiabad, Hossein Pedram, Mohammad Reza Abbasy</i>	61
TBOX: A SYSTEM TO PROTECT A “BAD” USER FROM TARGETED AND USER-ORIENTED ATTACKS	
<i>Arnur G. Tokhtabayev, Batyrulan Aimyshev, Yerzhan Seitkulov</i>	66
SESSION 2 - LATEST TRENDS IN ICT APPLICATION	72
SOLVING THE BI-DIMENSIONAL TWO-WAY NUMBER PARTITIONING PROBLEM WITH HEURISTIC ALGORITHMS	
<i>Mehmet Hacibeyoglu, Vahit Tongur, Kemal Alaykiran</i>	73
CONTROL SYSTEM FOR TECHNICAL OBJECTS WITH AUTOMATIC BACKLASH COMPENSATION	
<i>Gulyaev S.V., Pashchenko F.F., Pashchenko A.F.</i>	78
THE INFORMATION ENVIRONMENT FOR THE INTEGRATED LIFE CYCLE MODEL OF CONFIGURABLE INFORMATION SYSTEM	
<i>Yuri Rogozov, Alexander Sviridov, Alexey Degtyarev</i>	82
PERCEPTUAL MVDR-BASED UNSUPERVISED BUILT-IN SPEAKER NORMALIZATION FOR KAZAKH SPEECH RECOGNITION	
<i>Zhandos Yessenbayev, Umit Yapanel</i>	87
THE CONTROL IN THE STRUCTURE OF CONFIGURABLE INFORMATION SYSTEM	
<i>Yuri Rogozov, Julia Lipko, Oksana Schevchenko</i>	92

ACTUATION DESIGN METHODOLOGY FOR HAPTIC INTERFACES AND REHABILITATION SYSTEMS <i>Michele Folgheraiter</i>	97
METHODICAL APPROACHES FOR QUALITATIVE ANALYSIS OF DYNAMICAL SYSTEMS IN INTERACTIVE LEARNING OF APPLIED MATHEMATICS <i>S.T.Huseynov</i>	102
CONTAMINANT AND FOREIGN FIBER DETECTION IN COTTON USING GAUSSIAN MIXTURE MODEL <i>Kadir A. Peker, Gökhan Özşarı</i>	107
THE INTEGRATED MODEL OF REPRESENTATION MODEL OF REPRESENTATION ORIENTED KNOWLEDGE IN INFORMATION SYSTEMS <i>V. V. Bova, V. V. Kureichik, A. A. Lezhebokov</i>	111
DEVELOPMENT OF THE COMPLEX OF SOFTWARE APPLICATIONS TO CONTROL THE STATE OF TOTAL THERMAL ENERGY OF AN ELASTIC ROD <i>Kanat Amirtayev, Lyazat Naizabayeva, Akzhan Ibadullayeva, Zhazira Shermentayeva</i>	115
THE CONCEPT OF METHODOLOGICAL INFORMATION SYSTEMS DEVELOPMENT <i>Yury Rogozov, Alexander Sviridov</i>	120
MATHEMATICAL MODEL FOR OPTIMAL DESIGNING OF RELIABLE INFORMATION SYSTEMS <i>Seilkhan Boranbayev, Askar Boranbayev, Sanzhar Altayev, Askar Nurbekov</i>	123
THE METHOD OF AN AUDIT OF SOFTWARE CONTAINING IN DIGITAL DRIVES <i>Viktor Shved, Pavel Kuzmich, Viktoria Korzhuk</i>	128
ESTIMATION OF TRANSACTIONAL RELIABILITY OF OBJECT-ORIENTED SOFTWARE OF INFORMATION AND CONTROL SYSTEMS <i>Roman Yu. Tsarev, Renat V. Younousov</i>	133
AUGMENTED REALITY BASED ON KAZAKH INSTRUMENT "DOMBYRA" <i>Zhaparov M. K., Assanov U.</i>	138
THEORY OF BIOINSPIRED SEARCH FOR OPTIMAL SOLUTIONS AND ITS APPLICATION FOR THE PROCESSING OF PROBLEM-ORIENTED KNOWLEDGE <i>Sergey Rodzin, Lada Rodzina</i>	142
DESIGN OF EMBEDDED GESTURE RECOGNITION SYSTEM FOR ROBOTIC APPLICATIONS <i>Aimur Begalinova, Almas Shintemirov</i>	147
CLOUD COMPUTING: STATE OF THE ART RESEACH ISSUES <i>Babak Abbasov</i>	151
MAJORITY VOTING APPROACH AND FUZZY LOGIC RULES IN LICENSE PLATE RECOGNITION PROCESS <i>Dana Kassymkhanova, Dmitriy Kurochkin, Natalya Denissova, Saule Kumargazhanova, Aizhan Tlebalidinova</i>	155
TRAFFIC SPEED SIGN RECOGNITION WITH RFID SUPPORT <i>Bekircan Yavas, Metin Mete Özbilen, Yasemin Yilmaz</i>	160
AUTOMATED DESIGN AND RESEARCH OF THE THIN FILM ELECTROLUMINESCENT INDICATING DEVICES <i>Evsevichev D. , Maksimova O. , Samokhvalov M.</i>	164
PROVERBS AS A MODEL OF REAL-LIFE SITUATIONS <i>A.I.Mehdialiyeu</i>	N/A
CO-EVOLUTIONAL GENETIC ALGORITHM FOR WORKFLOW SCHEDULING IN HETEROGENEOUS DISTRIBUTED ENVIRONMENT <i>Nikolay Butakov, Denis Nasonov</i>	173
MAPPING OF SOFTWARE CONFIGURATION MANAGEMENT ISSUES WITH THE AREA OF RESPONSIBILITY <i>Shukor Sanim Mohd Fauzi</i>	178
THE INTEGRATED LIFE CYCLE MODEL OF CONFIGURABLE INFORMATION SYSTEM <i>Sergey Kuchеров, Julia Lipko, Oksana Schevchenko</i>	182
SESSION 3. BIG DATA, DATA MINING AND DATA ENGINEERING	187
INTEGRATION OF RESULTS FROM RECOGNITION ALGORITHMS AND ITS REALIZATION AT THE URANIUM PRODUCTION PROCESS <i>Gritsenko P., Iskakov S., Muhamediyev R., Yakinin K.</i>	188
STRUCTURE-INDEPENDENT DATABASES MODELLING <i>Yuri Rogozov, Segrey Kuchеров, Elena Borisova</i>	192
COGNITIVE ANALYSIS OF RELATIONS BETWEEN CONCEPTS OF THE PROBLEM AREA(THE EXAMPLE OF A SMALL ENTERPRISE) <i>O.N. Luchko, V.A. Marenko</i>	197

PERFORMANCE ESTIMATION OF SELECTING AND INSERTING PROCEDURES IN THE STRUCTURE-INDEPENDENT DATABASE	
<i>Alexander Sviridov, Andrey Grishchenko, Svetlana Belousova</i>	202
PREPROCESSING OF EXPERIMENTAL SEISMIC DATA	
<i>Naila Allakhverdiyeva</i>	207
THE IMPLEMENTATION OF A KNOWLEDGE MANAGEMENT SYSTEM MODEL	
<i>Zhomartkyzy Gulnaz, Balova Tatiana</i>	211
BIG DATA: BIG PROMISES FOR INFORMATION SECURITY	
<i>Rasim Alguliyev, Yadigar Imamverdiyev</i>	216
RECOGNITION OF TRAFFIC SIGNS	
<i>Sagandykova Aigerim, Zhaparov Meirambek, Zhakenov Askar, Amirgaliyev Yedilkhan</i>	220
AN APPLICATION FRAMEWORK FOR SCHEDULING OPTIMIZATION PROBLEMS	
<i>Oğuzhan Kocatepe</i>	226
EFFECTIVE ALGORITHMS AND METHODS FOR AUTOMATIC NUMBER PLATE RECOGNITION	
<i>Amirgaliyev Beibut, Kairanbay Magzhan, Kenshimov Chingiz</i>	230
EVOLUTIONARY DATA REORGANIZATION FOR EFFICIENT WORKLOAD PROCESSING	
<i>Andrew Razumovskiy, Denis Nasonov, Anton Spivak, Alexander Boukhanovsky</i>	234
ON CERTAIN ASPECTS OF KAZAKH PART-OF-SPEECH TAGGING	
<i>Aibek Makazhanov, Zhandos Yessenbayev, Islam Sabyrgaliyev, Anuar Sharafudinov, Olzhas Makhambetov</i>	240
APPLICATION OF DIVERSITY METHOD FOR RELIABILITY OF CLOUD COMPUTING	
<i>Seilkhan Boranbayev, Sanzhar Altayev, Askar Boranbayev, Yerzhan Seitkulov</i>	244
A SURVEY ON COMPARISON OF FACE RECOGNITION ALGORITHMS	
<i>Ahmet Özdi, Metin Mete Özbilen</i>	249
AN APPLICATION OF DATA MINING AND KNOWLEDGE DISCOVERY PROCESS IN THE FIELD OF NATURAL GAS EXPLORATION	
<i>Mehmet Akif Acar, Mehmet R.Tolun, Ersin Elbaşı</i>	252
METHODOLOGIES OF INTERNET PORTALS USERS' SHORT MESSAGES TEXTS AUTHORSHIP IDENTIFICATION BASED ON THE METHODS OF MATHEMATICAL LINGUISTICS	
<i>Sukhoparov Milhail, Lebedev Ilya</i>	258
KNOWLEDGE MANAGEMENT BASED ON MULTI-AGENT SIMULATION IN INFORMATIONAL SYSTEMS	
<i>Yu. A. Kravchenko, V.V. Kureichik</i>	264
A PILOT STUDY ON AUTOMATIC INFERENCE RULE DISCOVERY FROM TURKISH TEXT	
<i>Gözde Gül İşgüder - Şahin, Eşref Adalı</i>	268
ORGANIZATION OF STANDARD CUBES AND ALGORITHMS IN TOFI TECHNOLOGY	
<i>Kuanov T.Zh., Turganbayev N.S., Abilkayeva Zh.N., Ismagulova F.E.</i>	273
TOFI TECHNOLOGY CAPABILITIES FOR DATA PROCESSING AND VISUALIZATION	
<i>M. Gabbasov</i>	276
DEVELOPMENT TECHNOLOGY OR3 FOR SOFTWARE PROGRAM AND INFORMATION SYSTEM	
<i>B. Berentayev, O. Denisenko, N.Issin</i>	278
SESSION 4. COMMUNICATION, NETWORK AND HARDWARE	282
DESIGN AND CONSTRUCTION A MODEL OF REMOTE CONTROL SOFTWARE MOBILE ROBOT FOR MAS	
<i>Abu A. Kuandykov, Olinzhon A. Baimuratov, Dinara K. Kozhamzharova, Nurlan B. Karimzhan</i>	283
DIMENSIONING TRAFFIC PERFORMANCE IN IMS NETWORK	
<i>BA Alassane, Boudal NIANG</i>	288
RATIONALE FOR THE METHOD OF FORMATION OF THE COMBINED SPEECH MASKING SIGNALS	
<i>Yerzhan Seitkulov, Seilkhan Boranbayev, Banu Yergaliyeva, Gennady Davydov, Alexander Patapoviche</i>	293
PROGRAMMABLE SYSTEMS-ON-CHIP FOR INFORMATION PROCESSING	
<i>Valery Sklyarov, Iouliia Skliarova</i>	297
THE ADVANTAGES OF CREATING AN APPLICATION TO ARCHIVE DATA FROM A MOBILE DEVICE IN LABVIEW ENVIRONMENT	
<i>Štefan Koprda, Zoltán Balogh, Milan Turčáni</i>	302
EVALUATION OF DIGITAL BROADCASTING AND THE MOBILE COMMUNICATION	
<i>Yelena Chaiko, Muratbek Dzhamanshalov</i>	307

INDEPENDENT SUBSETS SEARCH IN A DIRECTED GRAPH <i>V. Kureychik, A. Kazharov</i>	312
QOE-BASED NETWORK-CENTRIC RESOURCE ALLOCATION FOR ON-DEMAND UPLINK ADAPTIVE HTTP STREAMING OVER LTE NETWORK <i>Farhan Pervez, Muhammad Salman Raheel</i>	316
LOCALIZATION OF COMPUTER ACOUSTIC SIGNAL SOURCE <i>A. Spivak, A. Andreev, D. Sleptsova</i>	321
METHODOLOGY OF BUILDING INTELLIGENT SYSTEMS ON PARALLEL PROCESSOR <i>Yerzhan Seitkulov, Arnur Tokhtabayev, Sabyrzhan Atanov, Nikolai L. Verenik, Alexey I. Girel, Mikhail M. Tatur</i>	326
A FUZZY LOGIC BASED SCHEDULING APPROACH TO IMPROVE FAIRNESS IN OPPORTUNISTIC WIRELESS NETWORKS <i>Hakkı Soy, Ozgur Ozdemir</i>	331
CHANNEL ESTIMATION FOR SM SYSTEMS OVER TIME-VARYING RAYLEIGH FADING CHANNELS <i>Yusuf Acar, Dogan, Erdal Panayircı</i>	336
A REVIEW OF PROTOCOLS RELATED TO ENHANCEMENT OF TCP PERFORMANCE IN WIRELESS AND WLAN NETWORKS <i>Ahad Mammadov, Babak Abbasov</i>	340
WORD IMPLEMENTATION OF INTELLECTUAL IMMUNE NETWORK TECHNOLOGY CONTROLLING THE COMPLEX OBJECTS <i>Samigulina G.A., Samiguline Z.I.</i>	344
SESSION 5. ICT IN BUSINESS ADMINISTRATION, FINANCE AND ECONOMY	348
MULTI-FACTORIAL PREDICTIVE MODELLING OF DRUG ADDICTION FOR LARGE URBAN AREAS <i>Sergey A. Mityagin, Sergey V. Ivanov, Alexander V. Boukhanovsky</i>	349
SALES COMPANY WORKING CAPITAL ADJUSTMENT ON BASES OF FUZZY LOGIC MODEL <i>Dmitrii Nazarov, Gennady Smorodin</i>	356
ANALYSIS OF FINANCIAL RISK IN THE STOCK MARKET. PRICING MODELING OF KAZAKHMYS SHARES 2007-2014 <i>As.Prof. Kurenkeyeva Dariyash, Nussipbekova Gulmira, Amangaliyeva Shnara, MSc. Nussipbekov Abay</i>	360
BARRIERS FACING THE DIFFUSION OF INNOVATION IN ICT SECTOR IN SUDAN <i>Prof. Nader Nada, Nadir Ahmed Gaylani, Abusfian Elgelany</i>	363
DEVELOPING HIGH RESOLUTION REMOTE SENSING TECHNOLOGY INTO AN ADVANCED KNOWLEDGE MANAGEMENT SYSTEM TO MONITOR AND ASSESS WATER RESOURCES <i>Kaskina D., Bradshaw R.A., James A., Kho Y.H., Kabiyeve M.</i>	368
FLEXIBLE DATABASE FOR CONFIGURABLE INFORMATION SYSTEMS. THE RELATIONAL APPROACH <i>Sergey Kucherov, Alexey Samoylov, Andrei Grishchenko</i>	374
DEVELOPMENT OF INFORMATION SUPPORT SYSTEMS FOR MANAGEMENT OF INNOVATIVE STRUCTURES <i>Rasim M. Alguliyev, Shafa T. Aliyev, Alovzat G. Aliyev, Roza O. Shahverdiyeva</i>	378
APPROACH TO AUTOMATIZED FORMATION OF WORKPLACES STRUCTURE IN CONFIGURABLE INFORMATION SYSTEMS <i>Alexander Sviridov, Julia Lipko, Alexander Belikov</i>	383
EVALUATION OF SPATIAL BRUCellosIS DISTRIBUTION USING THE GEOGRAPHIC INFORMATION SYSTEM. TOWARDS BUILDING A HIGH PERFORMANCE SPATIAL EPIDEMIOLOGY SYSTEM FOR SUPERVISION ON ZOONOTIC INFECTIONS <i>Andrey N. Kuznetsov, Marat S. Syzdykov</i>	386
USING A KNOWLEDGE BASE IN DEVELOPING MODIFICATION FOR MS DYNAMICS AX <i>Viktor Mokerov</i>	389
THE METHOD OF FORMAL BUSINESS PROCESSES REPRESENTATION FOR CONFIGURABLE INFORMATION SYSTEMS. THE METACOMPUTATION APPROACH <i>Yuri Rogozov, Alexander Sviridov, Vladimir Lebedev</i>	392
OPTIMIZATION OF INTELLIGENT FUZZY CONTROLLERS FOR INDUSTRIAL FACILITIES <i>Y.I. Kudinov, A.Y. Kelina, A.F. Pashchenko, F.F. Pashchenko</i>	395
PREMISES FOR THE CREATION OF RENEWABLE ENERGY SOURCES GIS MONITORING <i>Ravil I. Muhamedyev, Andrey D. Giyenko, Victor T. Pyagai, Kairat Bostanbekov</i>	398
E-GOVERNMENT SERVICES VULNERABILITY <i>Ali Shahintash, Yashar Hajiyeve</i>	403

COMPUTER MODELING AND SIMULATION OF MPC CONTROL FOR GRID CONNECTED RENEWABLE POWER SOURCES	
<i>A. Khakimova, A. Bermukhambetova, D. Sharipova, F. Muratov</i>	408
SESSION 6. ICT IN EDUCATION, HUMANITIES, SOCIAL SCIENCES AND RESEARCH	413
SYSTEM FOR SIGN LANGUAGE MODELING AND LEARNING	
<i>Iu.V.Krak, M.P.Lisnyak, G.N. Ermagambetova, S.A.Kudubayeva</i>	414
ICT SUPPORTED VOCATIONAL TRAINING IN THE MOTOR-CAR REPAIR AREA	
<i>Alena Hašková, Martin Zatkalík</i>	419
FAST-FMI: NON-REFERENCE IMAGE FUSION METRIC	
<i>Mohammad Haghighat, Masoud Amirkabiri Razian</i>	424
E-LEARNING ASSISTED TEACHING OF TECHNICAL SUBJECTS	
<i>Gabriel Bánesz, Alena Hašková</i>	427
INTERACTIVE AUDITORIUM RESPONSE AND STUDENT PROGRESS EVALUATION SYSTEM	
<i>Yashar Hajiyeu, Khatira Salimova</i>	432
NEW PROPOSALS ABOUT EVALUATION OF COMPLETE E-LEARNING COURSE DIGESTION	
<i>Evgeny A. Eremin</i>	437
A PERSONAL ONTOLOGY OF AN INDIVIDUAL OCCUPATIONAL EXPERIENCE	
<i>Petr Sosnin</i>	441
AN AUTOMATIC EVALUATION OF MACHINE TRANSLATION AND SLAVIC LANGUAGES	
<i>Dasa Munkova, Michal Munk</i>	447
SOFTWARE MODULE “VIRTUAL PHYSICS LABORATORY” IN HIGHER EDUCATION	
<i>Yevgeniya Daineko, Viktor Dmitriyev</i>	452
USING COMPUTATIONAL MODELS FOR DEVELOPMENT OF THE THREE-DIMENSIONAL VISUALIZATION IN MOLECULAR BIOLOGY	
<i>Ravil I. Muhamedyev, Y. Daineko, D. Bari, Alma T. Mansharipova</i>	455
DOES YOUR UNIVERSITY HAVE AN INSTRUCTIONAL TECHNOLOGY STRATEGY? KNOWING WHERE YOU ARE GOING	
<i>Dina Vyorkina</i>	459
COMPUTER SIMULATION OF CONFORMATIONAL BEHAVIOUR OF HUMAN AND RAT/MOUSE HEMOKININ-1 MOLECULES	
<i>U.T.Agaeva, G.A. Agaeva, N.M.Godjaev</i>	464
3D VIRTUAL ENVIRONMENT FOR PROJECT-BASED LEARNING	
<i>Andrey Karsakov, Anna Bilyatdinova, A.G. Hoekstra, A.G. Hoekstra</i>	468
SELECTING AN EFFECTIVE INFORMATION AND COMMUNICATION TECHNOLOGY ARCHITECTURE FOR AN EDUCATION SYSTEM BASED ON NON-FUNCTIONAL REQUIREMENTS	
<i>Mujtaba B Ila, Hasan Kitapci</i>	473
EVALUATION OF EDUCATION IN THE FIELD OF DATABASE SYSTEMS AND TECHNOLOGIES WITHIN THE STUDY PROGRAMS OF ECONOMIC AND MANAGERIAL FOCUS	
<i>Ján Záhorec, Marcela Hallová, Roderik Virágh, Adriana Nagyová</i>	476
SUPPORT SYSTEM FOR QR-CODE-BASED EDUCATIONAL PROCESSES	
<i>A.A. Lezhebokov, Yu. A. Kravchenko, V. V. Bova</i>	482
EFFECTIVE EDUCATIONAL AUGMENTED REALITY APPLICATIONS: POINTS TO CONSIDER	
<i>Sevda Kucuk, Rabia M. Yilmaz, Yuksel Goktas</i>	486
PARALLEL MERGE SORT WITH DOUBLE MERGING	
<i>Ahmet Uyar</i>	490
A STUDY OF CERTAIN MORPHOLOGICAL STRUCTURES OF KAZAKH AND THEIR IMPACT ON THE MACHINE TRANSLATION QUALITY	
<i>Eldar Bekbulatov, Amandyk Kartbayev</i>	495
DISTANCE EDUCATION APPLICATION ARCHITECTURE AND CLOUD COMPUTING	
<i>Muammer Akcay, Hasan Armutlu</i>	500
PROBLEM OF QUALITY ASSESSMENT OF THE MEDIACOURSE	
<i>Beknazarova Saida Safibullaevna</i>	505
E-LEARNING COURSE DESIGN BASED ON THE VIRTUAL SIMULATION OBJECTS CONCEPT	
<i>Alexey Dukhanov, Pavel Smirnov, Maria Karpova, Sergey Kovalchuk</i>	508
MOBILE TECHNOLOGIES IN RUSSIAN HIGHER EDUCATION: GLOBAL TRENDS AND REGIONAL PRACTICES	
<i>Anatoly L. Gavrikov, Tamara A. Lisitsyna</i>	514

RESEARCH OUTPUT AND PERFORMANCE IN CENTRAL ASIA A BIBLIOMETRIC STUDY <i>Philip J Purnell, Thomson Reuters</i>	519
STRATEGIC PLANNING OF E-LEARNING INNOVATION: INTERPLAY BETWEEN NATIONAL AND INSTITUTIONAL LEVELS <i>Ulkar Bayramova, Peeter Normak, Mart Laanpere</i>	523
DEVELOPMENT OF DECISION SUPPORT SYSTEM TO CONTROL THE QUALITY OF EDUCATION <i>Indira Uvalieva, Saule Smailova</i>	528
HYDRODYNAMIC OF THE DUST STORM OF THE ARAL SEA ON THE BASE OF REMOTE SENSING DATA <i>S.K. Kunakov, Y. Daineko, B.N. Alipova</i>	534

Additional Papers

InternetScopy: Current State, Problems and Perspectives <i>R. Alekberli, R. Alguliev</i>	538
Data Mining and Analysis in Depth. Case Study of Qafqaz University HTTP Server Log Analysis <i>A. Adamov</i>	545
Good Practice of Data Modeling and Database Design for UMIS. Course Registration System Implementation <i>A. Adamov, S. Mehdiyev, E. Seyidzade</i>	549
Measurement of Edge Detection Algorithms in Clean and Noisy Environment <i>A. Mahmood, H. Maras, E. Elbasi</i>	553
Complex System State Generalized Presentation Based on Concepts <i>M. Khachidze, M. Tsintsadze, M. Archuadze, G. Besiashvili</i>	559