

2012 IV International Conference Problems of Cybernetics and Informatics

(PCI 2012)

**Baku, Azerbaijan
12 – 14 September 2012**



**IEEE Catalog Number: CFP1291T-PRT
ISBN: 978-1-4673-4500-2**

TABLE OF CONTENTS

Transfer Of Technologies To The Governmental Practice: Development, Usability And Challenges	1
<i>H. Skalska</i>	
Conceptual Architecture Of National Information Space Security System Of Azerbaijan	5
<i>R. Alguliyev, Y. Imamvediyev, E. Aliyev</i>	
System Of Speech Access In The Azerbaijani Language To Objects Of Electronic Map	9
<i>A. Abramnikov, N. Petuhova, M. Farkhadov</i>	
On Analytic-Information System Of Scientific Problems Register	11
<i>T. Fataliyev, M. Hajrahimova, M. Ismayilova</i>	
Towards An Integration Of Process-Modeling: From Business-Content To The Software Implementation	14
<i>G. Surguladze, E. Turkia, N. Topuria, T. Lominadze, M. Giutashvili</i>	
General View On The Notion Of Distant Education In Turkey	18
<i>R. Cevik, A. Onal</i>	
Study On QoS Frameworks For Mobile Ad-Hoc Networks	22
<i>R. Alguliev, S. Ghazani</i>	
Open Source Software Defined Radio	26
<i>A. Kapenkov</i>	
Problems Of Information Security In Georgia	28
<i>G. Gigushvili, T. Makasarashvili, N. Orjonikidze</i>	
Genetic Algorithm For Multi Bandpass Problem And Library Of Problems	31
<i>A. Gursoy, U. Nuriyev</i>	
Study On H.L.S. Systems Of Developing Countries And Its Outlook On The Bases Of HL7	36
<i>H. Asl, B. Sami, M. Mohammadi, L. Shahabi</i>	
Presentation Of Uncertain Information With Help Of Canonically Conjugate Fuzzy Subsets	39
<i>M. Tsintsadze</i>	
About Scientific And Technological Problems Of The Reconstruction Of Azsciencenet Network Based On Cloud-Oriented Architecture	44
<i>R. Alakbarov, M. Hashimov</i>	
Conceptual Challenges In Developing Azerbaijan Citation Index	48
<i>R. Alguliyev, R. Aliguliyev, T. Fataliyev, R. Hasanova</i>	
Effects Of Culture On Distance Learning In Higher Education In The Light Of Digital Divide And Multicultural: Curriculum And Design Strategies	52
<i>O. Tingoy, S. Gulluoglu</i>	
New Method For Community Detection In Social Networks Extracted From The Web	55
<i>F. Ganjaliyev</i>	
Development Of Mechanisms Of Electronic Participation On The Local Self-Government Web-Sites	57
<i>D. Zautashvili, N. Chanturia</i>	
Software Reliability	61
<i>M. Khalilov</i>	
Estimation Of Traffic Congestion Level Via FN-DBSCAN Algorithm By Using GPS Data	64
<i>A. Diker, E. Nasibov</i>	
About Methods For Visualizing Network Monitoring	68
<i>R. Shikhaliyev</i>	
Research Efficiency Of Integrated Communication Networks With User Of Signaling System	70
<i>B. Ibrahimov, S. Ismaylova</i>	
Role Of E-Government And E-Citizen In Society Management	74
<i>B. Sami, M. Kouhi, S. Safavi</i>	
Efficient Method For Single Machine Total Tardiness Problem	77
<i>S. Minukhin</i>	
On Necessity Of The Azerbaijan Citation Index (AzCI)	81
<i>R. Alguliyev, R. Aliguliyev, T. Fataliyev, R. Hasanova</i>	
About One Approach To The Development Of Fuzzy OLAP Cube In Decision Making Support System In The Sphere Of Foreign Policy	85
<i>G. Nabibayova</i>	
Study The Establishment Of Smart Schools	89
<i>M. Soltani, A. Aliyev</i>	

Reforming The Trees – C# And F# Comparison	92
<i>N. Archvadze, M. Pkhovelishvili</i>	
Development Of Credit Risk Management System For Non-Bank Credit Organizations	96
<i>E. Babaliyev</i>	
New Feature Vector Extraction Method For Speaker Recognition.....	98
<i>L. Sukhostat, Y. Imamverdiyev</i>	
Methods For Monitoring And Managing Computer Networks QoS.....	102
<i>R. Shikhaliyev</i>	
Survey Of ERP Systems Implementation	107
<i>A. Hatamizadeh, A. Aliyev</i>	
Integrated Analysis Technology Of Non-Stationary Time Series	110
<i>A. Hasanov, S. Abdullayev</i>	
Compare The Based On Demand Routing Protocols With Fuzzy Algorithm For Mobile Ad-Hoc Networks.....	114
<i>A. Hanifi, J. Amiri, T. Kazimov</i>	
Some Approaches To The Development Of Information Influence And Hidden Communications Detection Systems In Wiki-Environment.....	118
<i>I. Alekperova</i>	
Investigation Of Affects Of Some Parameters Of VoIP Networks On The Quality Of Transmitted Speech.....	120
<i>B. Agayev</i>	
Development Of An Educational Standard Of Higher Education For ICT Sphere.....	123
<i>F. Agayev, G. Mamedova</i>	
Three Way Handshaking Method: New Theoretical Way For Improving Distributed Computing.....	126
<i>H. Asl, B. Sami, M. Dashti, F. Nourmohammadzade</i>	
Importance Of Selection & Evaluation Stages In ERP Systems Implementation	128
<i>A. Hatamizadeh, A. Aliyev</i>	
About The Identification Of Categorical Registration Data Of Domain Names In The Data Warehouse.....	131
<i>R. Gasimova</i>	
Base Station Location For Energy Efficient In Wireless Sensor Network.....	134
<i>A. Hanifi, J. Amiri, T. Kazimov</i>	
Dynamic Decision Support Systems In A Multi-Agent Environment	138
<i>T. Hasanov, O. Motoyuki, O. Natsuki</i>	
Importance And Features Of Unified Database Development In Assessing The Quality Of Education	141
<i>R. Amiraslanova</i>	
Monitoring Of Condition Of The Cardiovascular System By Means Of Mobile Phones Using ECG Noise Variance	144
<i>T. Aliev, T. Babayev, E. Sabziev, A. Pashayev, T. Alizada</i>	
Noise Technology And System For Determining Of Flow Rate Of Oil Wells.....	148
<i>T. Aliev, G. Guluyev, A. Rzayev, F. Pashayev, R. Gadimov, I. Yusifov, I. Sattarov</i>	
Force Sensors Of Sucker Rod Oil Pumps	151
<i>G. Guluyev, A. Rzayev, Y. Aliyev, M. Rizvanov</i>	
Integrated Expert System Of Decision Making For Estimating Collector Properties And Oil-And-Gas Saturation Of Strata	154
<i>O. Nusratov, G. Abdullayeva, I. Ismayilov</i>	
Texture Analysis: Algorithm For Texture Features Computation.....	158
<i>M. Lukashevich, R. Sadykhov</i>	
Intelligent Reading System Based On Mobile Platform	161
<i>K. Aida-zade, E. Mustafayev, J. Hasanov</i>	
Architecture And Functioning Principles Of Diagnostic Test-Block Of Expert Tutoring System	165
<i>M. Mammadova, Z. Guliyeva, M. Manafli</i>	
Boundary Delimitation In The Elections	169
<i>M. Isayev, G. Yusufova-Agabalayeva, N. Rzayeva</i>	
Researches Of Methods Of Noiseproof Reception Of Optical Signals At Use WDM-Technology.....	172
<i>I. Mammadov, B. Ibrahimov</i>	
System Of Support Logistics And Transport Control For Routes In A Distribution Network	175
<i>A. Brilevski</i>	
Formalization And Knowledge Gaining Problems In Intellectual Systems	179
<i>T. Makasarashvili, T. Tatulashvili, T. Khorguashvili</i>	
Estimates Calculations Algorithms In Condition Of Huge Dimensions Of Features' Space.....	181
<i>M. Kamilov, S. Fazilov, N. Mirzaev, S. Radjabov</i>	

Origin-Destination Matrix Generation Using Smart Card Data: Case Study For Izmir	185
<i>E. Nasiboglu, U. Kuvvetli, M. Ozkilcik, U. Eliyi</i>	
New Algorithm Of Support Vector Machine By The Bezier Curve	189
<i>M. Hidayberdiev, G. Judakova, G. Landsmann</i>	
Mathematical Computer Games Based On Modular Arithmetic	191
<i>F. Nuriyeva, A. Guler, D. Tanir</i>	
Using Corrective Filters To Improve The Accuracy Of Seismic Data	194
<i>N. Allahverdiyeva</i>	
Automation Of Working Drawings And Calculation Of Reinforcement Weight In Concrete Structures	197
<i>Z. Amiraslanova</i>	
Application Of Adaptive Genetic Algorithm In Mining Industry	201
<i>G. Besiashvili, M. Khachidze, D. Chokhoniidze</i>	
Process Optimization Of Pointing Of The Onboard Weapon Of A Robotics Complex With Use Of Intellectual Optical-Electronic Station	204
<i>P. Khrustalev</i>	
Self-Configured Optical-Electronic Station	207
<i>P. Khrustalev</i>	
On An Understanding System That Supports Human-Computer Dialogue	210
<i>S. Rustamov</i>	
Application Of Neuro-Fuzzy Model For Text And Speech Understanding Systems	214
<i>S. Rustamov</i>	
Autonomous System "Car Robot"	218
<i>D. Varabin, D. Bagaev</i>	
Research Of A Class Of Smooth Membership Functions And Its Application In Recognition Systems	220
<i>N. Ismayilova, E. Ismayilov</i>	
Investigations Of Cascade Neo-Fuzzy Neural Networks In The Problem Of Forecasting At The Stock Exchange	224
<i>Y. Zaychenko, A. Gasanov</i>	
Conceptual Analysis Of Fire Fighting Robots' Control Systems	227
<i>E. Krasnov, D. Bagaev</i>	
Pyramidal Algorithm For SVM-Classification	230
<i>I. Frolov, R. Sadykhov</i>	
Provision Of Throw-Over Manipulator And Step Conveyer With Sensor Controls	234
<i>F. Mamedov, T. Ahmedova</i>	
On The Search System For Selection Of Plants According To Environment Conditions	237
<i>S. Abiyeva</i>	
Valuing Processes Of Flood On The Coastal Regions Of The Kur On The Basis Of Data Remote Sensing	239
<i>S. Muttalibova, N. Pashayev, R. Ragimov</i>	
Estimation Of The Impact Of Geometrical Characteristics On The Recognition To Identify A Human Face On The Basis Of Photo Portraits	243
<i>T. Kazimov, S. Mahmudova</i>	
Description Of Encoding And Decoding Of Binary Cyclic Codes In A Class Sequential Machines	246
<i>F. Feyziyev, L. Ramazanova, M. Aslan</i>	
Processing Of Electrocardiogram File In Mobile Phones On Symbian Operating System	249
<i>Y. Pashayeva</i>	
Automated Processing Of EEG Recorded During Dichotic Listening Session: Problems Of Single Response Recognition	251
<i>E. Wasserman, N. Kartashev</i>	
Results Analysis Of Experimental Studies Of Correcting Filters	254
<i>R. Nabiyev</i>	
Application Of Neural Networks To Diagnostics Of Pumping-Rod Units	256
<i>Y. Habashi</i>	
Technology And System Of Robust Noise Monitoring Of Anomalous Seismic Processes	258
<i>A. Abbasov, T. Aliev, G. Guluyev, F. Pashayev</i>	
Technologies And Systems For Minimization Of Damage From Destructive Earthquakes	275
<i>T. Aliev, A. Abbasov, G. Guluyev, F. Pashayev, U. Sattarova</i>	
Technology For Determining Time Of Origin And Coordinates Of Anomalous Seismic Processes	291
<i>T. Aliev, A. Abbasov, G. Guluyev, F. Pashayev, A. Pashayev, E. Sabziev, U. Sattarova</i>	
Early Warning System And Man-Made Noise	307
<i>K. Kislov, F. Vinberg, A. Kushnir, V. Gravirov</i>	

Seismicity, Seismological Network And Seismic Protection In Ukraine	311
<i>O. Kendzera</i>	
Seismic Assessment Of Existing Engineering Structures Using Ambient Vibrations	316
<i>A. Bayraktar, B. Sevim, A. Altunishik, T. Turker</i>	
Seismic Studies From Small Aperture Accelerometric Network In Izmir Metropolitan City, Turkey	321
<i>O. Polat, E. Gok, U. Ceken, M. Kuruoglu</i>	
Dynamic Properties Of Soils In The Northern Coast Of Izmir Bay Area	326
<i>M. Kuruoglu, T. Eskisar</i>	
The Eigensensitivity–Based Finite Element Model Updating For Structural Parameter Identification	332
<i>A. Kasimzade, S. Tuhta</i>	
Seismometric Monitoring Of Toktogul Hydroelectric Power Station	336
<i>V. Dovgan</i>	
Local Seismicity Of Reservoir Areas Based On Digital Seismometric Observations	340
<i>L. Hamidov</i>	
Experience And Prediction Of Seismic Studies In Azerbaijan	344
<i>G. Yetirmishli, S. Kazimova, R. Kerimova, S. Ismaylova</i>	
Effect Of “Supermoon” On Earth Seismotectonics	347
<i>B. Aslanov</i>	
Analysis Of Horizontal To Vertical Spectra Of Microseisms For Baku City	351
<i>F. Kadirov, G. Babayev, A. Gadirov</i>	
Registration System Of Sea Seismic Geophysics Data With Correction Channels	354
<i>R. Mayilov, E. Khanmammadova</i>	
Prediction Of Signal Characteristics Using Autoregressive Moving Average Method	357
<i>G. Guluyev, F. Pashayev, M. Pakdel, U. Sattarova</i>	
Methods, Technologies And Means Of Control Of Seismic Stability Of Complexes Of Construction Structures In Operation	360
<i>N. Musaeva, G. Mammadova, E. Aliyev, U. Sattarova</i>	
Technology And Algorithms For Monitoring Of The Technical Condition Of High-Rise Buildings, Construction And Strategic Objects In Seismically Active Regions By Means Of Sets Of Informative Attributes	364
<i>N. Musaeva, E. Aliyev, U. Sattarova, R. Gadimov</i>	
Correlation Matrices In Problems Of Identification Of Seismic Stability And Technical Condition Of High-Rise Buildings And Building Structures	371
<i>N. Musaeva, E. Aliyev, U. Sattarova, N. Rzayeva</i>	
Integral Model Of Monitoring The Oil-Trunk Pipelines In Earthquake-Prone Regions	379
<i>V. Makarov, T. Alizade, L. Ebert</i>	
Technologies Of Robust Noise Monitoring Of The Latent Period Of Change In Seismic Stability Of Offshore Stationary Platforms And Piers	382
<i>T. Aliev, T. Babayev, T. Alizade, U. Sattarova</i>	
Concept Of Fractals In Mathematical Modeling On Management Of Adsorption Processes	390
<i>A. Nagiev, F. Alekperli, J. Mamedov</i>	
Computer Experiment For The Spray Drying Process Considering Concomitant Coalescence	394
<i>A. Nagiev, Z. Maharramov, M. Salmanov</i>	
Rang Correlation Of Spirmen That Uses For Determining Oil Well Interaction	398
<i>T. Aliev, A. Rzayev, G. Guluyev</i>	
To The Problem Of Mathematical Modeling Of The Oil Deposit Processes	400
<i>T. Aliev, A. Rzayev, G. Guluyev, I. Yusifov</i>	
Indirect Method Measuring Oil Well Debit	403
<i>A. Rzayev, G. Guluyev, A. Abdurrachmanova</i>	
Building The Dynamometer Card Of Sucker Rod Pump Using Power Consumption Of The Eclectic Motor Of Pumping Unit	406
<i>G. Guluyev, A. Pashayev, F. Pashayev, A. Rzayev, E. Sabziev</i>	
Modeling And Optimization Of Adsorption Processes	409
<i>A. Aliyev, F. Yusubov, R. Babayev, A. Guliyeva</i>	
On Identification Of Nonlinear Binary Dynamic Systems	411
<i>Y. Haci</i>	
Method Of Numeral Modeling Of Elastic Water Drive Mode Of Development Of Layer	413
<i>K. Hamzayev, A. Babaev, S. Huseynzade</i>	
Investigation Of Free Vibrations Of Viscoelastic Bodies	416
<i>A. Hasanov, N. Kurbanov, N. Mikhailova</i>	
Application Of Viscoelastic Model For Investigating Nanocomposites	419
<i>A. Hasanov</i>	

Modeling Of Motion Problems Based On Graph Theory In Maths	422
<i>A. Erumit, V. Nabiyeu, A. Cebi</i>	
Hydrodynamic Model Of De-Emulsification Processes Of Layer' Fluids Flow	425
<i>Y. Rzayev, E. Ismayilov</i>	
Identification And Modeling Of The Nonlinear Dynamic Open Loop Systems	429
<i>B. Shanshiashvili, G. Bolkvadzame</i>	
Simulation Of Animals' Heat Balance	433
<i>V. Mikhailov</i>	
Identification Of Parameters Of Mathematical Model Non-Isothermal Processes Of Adsorption Surface-Active Substances In A Porous Medium Oil-Bearing Rock	437
<i>G. Aliyev, C. Ibrahimov, E. Mammadov</i>	
Modeling Of A Generalized Brownian Motion Based On Wavelet – Computer Technology	439
<i>I. Chkheidze, L. Tokadze, S. Okromchedlishvili</i>	
About Physical Informatics	441
<i>I. Gurevich</i>	
Informatics Laws Restrict And Define Physical Laws	445
<i>I. Gurevich</i>	
Identification Of Heterogeneous Stratum Parameters In Gas-Condensate Mixture Filtration	449
<i>K. Feyzullayev, M. Khalilov</i>	
Graph Representation Of Locked Numbers And Sequences	453
<i>V. Sozeri, U. Nuriyev</i>	
Modeling Of Appearance Of Instability Of Complex Systems	457
<i>A. Sadigov</i>	
On A Class Of Inverse Problems For Loaded Equations With Nonlocal Conditions	461
<i>K. Aida-zade, V. Abdullayev</i>	
Numerical Method Of Parametrical Identification For Nonlocal Parabolic Problems	465
<i>K. Aida-zade, A. Rahimov</i>	
Modeling And Technology Of Management With Processors Of Separation Oil And Liquid On The Oil-Trades	469
<i>R. Jalilova</i>	
Investigation Of The Process Of Localization Of Disturbances In Unlinear Equations	472
<i>R. Jalilova</i>	
Detection Of Hopf Bifurcation Using Eigenvalue Identification	475
<i>A. Mohammadi</i>	
Repetitive And 2-D Systems Theory Approach For Modeling In Gas Networks	480
<i>M. Dymkov, S. Dymkou</i>	
About Information Model Of Soil Classification	484
<i>S. Hasanova</i>	
Inter-Inductive Primary Converters	486
<i>O. Labadze</i>	
Qualitative Precursory Seismicity Pattern In Greece: Practical Tool For An Impending Strong Assessment	488
<i>I. Baskoutas, G. Papadopoulos, P. Karvelis</i>	
On One Investigation Of Numerical Solution Of Integro-Differential Equations Of Volterra Type	492
<i>G. Mehdiyeva, V. Ibrahimov, M. Imanova</i>	
On An Application Of Hybrid Method To The Solution Of Volterra Nonlinear Integro-Differential Equation	496
<i>G. Mehdiyeva, V. Ibrahimov, M. Imanova</i>	
Numerical Solution One Nonlocal Problem	500
<i>G. Mehdiyeva, A. Aliyev</i>	
On The Separability Of The Parameter Space Of Dynamical Systems In Terms Of Types Of Phase Portraits	504
<i>A. Nagiev, F. Imranov, H. Nagiev</i>	
Computational Aspects Of The Method Of Bilateral Narrowing Of The Boundaries Of The Optimum And The Variables In The Mixed-Integer Knapsack Problem	507
<i>K. Mammadov</i>	
Numerical Modeling Of Annual Mean Hydrophysical Fields In The Caspian Sea	510
<i>A. Girgylani</i>	
Numerical Study Of Vortex Nucleation In Two-Band Superconductors	514
<i>I. Askerbeyli, I. Hashimoglu</i>	
Methods Of Computing Epsilon Thresholds In The Estimates' Calculation's Algorithms	518
<i>M. Kamilov, M. Hudayberdiev, A. Khamroev</i>	

Numerical Modeling Of Development Of Oil Deposit With System Of Wells Taking Into Account The Relaxation Of Deformation Of Rocks	520
<i>A. Guliyev, B. Kazimov</i>	
Comparison Study On Smoothing Parameter And Sample Size In Nonparametric Fuzzy Local Polynomial Regression Models	524
<i>M. Memmedli, M. Yildiz</i>	
Numerical Approach To Analysis Of Queuing Models With Priority Jumps	527
<i>A. Melikov, T. Jafar-zade</i>	
Research Of Efficiency Functioning Common Channel Signaling Systems	530
<i>B. Ibrahimov, F. Huseynov</i>	
Measurement Of QoS In Wireless Sensor Networks With Single Multimedia Traffic-Class.....	533
<i>A. Rustamov</i>	
Probabilistic – Timing Performances Of A Wireless Local Network With A Controlled Access Protocol.....	537
<i>F. Mammadov, M. Orudjeva</i>	
Anomalous Diffusion Influence On Chaotic Systems By Observation	540
<i>S. Mustafayeva</i>	
Investigation Of High Intensive General Flow	543
<i>A. Moiseev, A. Nazarov</i>	
Asymptotic Analysis Of RQ-Systems M M 1 On Heavy Load Condition	546
<i>E. Moiseeva, A. Nazarov</i>	
Consistent Criteria In Metric Space.....	549
<i>Z. Zerakidze, M. Mumladze, L. Eliauri, L. Aleksidze</i>	
One Nonparametric Estimation Of The Bernoulli Regression	551
<i>E. Nadaraya, P. Babilua, G. Sokhadze</i>	
One Model Of Risky Asset Price Evolution Described By Gaussian Martingale	553
<i>O. Glonti, Z. Khechinashvili</i>	
Sobolev-Poincare Type Inequalities For Poisson Functionals.....	555
<i>O. Purtukhia, V. Jaoshvili</i>	
On The Convergence Of Payoffs	560
<i>P. Babilua, B. Dochviri, O. Purtukhia</i>	
Investigation Of Output Flows In The System With Parallel Service Of Multiple Requests	562
<i>I. Sinyakova, S. Moiseeva</i>	
Regression Analysis Of Time Series Vs Cross Section Data.....	564
<i>V. Gorbachuk, A. Gasanov</i>	
Strong Laws Of Large Numbers For Hilbert Space-Valued Dependent Random Fields	567
<i>O. Sharipov, A. Qushmuradov</i>	
Asymptotic Properties Of The Branching Processes With State – Dependent Immigrations	569
<i>J. Azimov</i>	
Evident Form Of The Laplace Transformation Of The Distribution Of The First Moment Reaching The Positive Delaying Screen With The Semi-Markovian Process.....	571
<i>E. Ibayev, T. Aliyeva, T. Aliyev</i>	
Definition Of The Probability Characteristic Of The System From Given Region For Case $(2^+, 1^-)$.....	574
<i>R. Sadigova</i>	
About One Forecast Model Of Stochastic Programming Based On Time Series And Genetic Algorithms.....	577
<i>A. Kerimov, S. Abdul-zade, M. Azadova, T. Aliyeva, R. Huseynova, U. Rzayeva, J. Khalilova</i>	
Stochastic Maximum Principle For Switching Systems	580
<i>C. Aghayeva, G. Abushov</i>	
Stable Distributions Conforming To Kinetic Equations.....	584
<i>V. Makarov, T. Alizada</i>	
Investigation Of Quasi-Singular Controls In Optimal Control Problem Described By Volterra Type Integro-Differential Equations	587
<i>M. Mardanov, K. Mansimov</i>	
Polyhedral Methodology Of Optimization Of Control Processes	589
<i>N. Filimonov</i>	
Algorithms For Solving The Optimal Stabilization Problem In Gaslift Process	592
<i>F. Aliev, M. Mutallimov, N. Velieva</i>	
Ranking Efficient DMUs By Bootstrapping Method	595
<i>F. Aliev, S. Ebadi</i>	
On The Rational Placing Of Land Remote Sensing Network Of Urban Air Baku	598
<i>F. Ismailov, Z. Zabidov, C. Abdurahmanov</i>	

On Local Elimination Algorithms For Sparse Discrete Optimization Problems.....	602
<i>D. Lemtyuzhnikova, A. Sviridenko, O. Shcherbina</i>	
Invariant Control Systems Of Second Order	606
<i>G. Rustamov</i>	
Some Approaches To Solve Feedback Control Problems For Nonlinear Dynamic Systems.....	609
<i>K. Aida-zade, S. Guliyev</i>	
Numerical Solution To An Inverse Problem For Quasilinear Parabolic Equation.....	613
<i>K. Aida-zade, S. Guliyev</i>	
Problem Of Determination Of Leakages In Oil Pipeline Networks.....	616
<i>K. Aida-zade, Y. Ashrafova</i>	
Problem Of Optimal Control Of The Processes With Unknown Initial Conditions	619
<i>Y. Ashrafova</i>	
Existence Of The Optimal Trajectories Of The Controllable System Described By An Affine Integral Equation	622
<i>N. Huseyin, A. Huseyin, K. Guseinov</i>	
Optimal Control Problem For Impulsive Systems With Integral Boundary Conditions	625
<i>Y. Sharifov, N. Mammadova</i>	
Problem Of Optimal Control Of Moving Sources For Systems With Distributed Parameters	628
<i>R. Teymurov</i>	
Necessary Optimality Conditions Of The First And Second Orders In The Problem Of Control Of Processes Described By Difference Analogy Of Volterra Equation Under Equality And Inequality Type Functional Constraints	631
<i>K. Mansimov</i>	
Necessary Optimality Conditions Of Second Order In A Discrete Problem On Control Of Fornazini-Markezini Systems.....	633
<i>S. Aliyeva, K. Mansimov</i>	
Necessary Optimality Conditions Of First And Second Orders In The Problem Of Control Of Difference Analogy Of Barbashin Type Integro-Differential Equation.....	636
<i>Z. Ahmadova, S. Gadirova, K. Mansimov</i>	
Linearized And Quadratic Necessary Optimality Conditions In One 2-D Discrete Optimal Control Problem Involving Functional Constraints Of Inequality Type	639
<i>M. Nasiyati</i>	
Investigation Of Singular Controls In Moiseev's Control Problem	642
<i>I. Nagiyeva</i>	
On One Non-Smooth Optimal Control Problem Described By Volterra Type Of Two-Dimensional Difference Equation.....	644
<i>R. Amirova</i>	
Necessary Optimality Conditions In One Discrete Problem Of Optimal Control Involving Inequality Type Functional Constraints On The Right End Of The Trajectory.....	646
<i>R. Mastaliyev</i>	
Experimental Analysis Of New Heuristics For The TSP.....	648
<i>F. Nuriyeva, G. Kizilates, M. Berberler</i>	
New Heuristic Algorithm For Unweighted Minimum Vertex Cover	653
<i>O. Ugurlu</i>	
Problem Of Corporate Service In Communication Systems In Non-Stationary Conditions	657
<i>T. Rzayev, A. Iskandarova</i>	
Information Approach To The Analysis Of Chaotic And Stochastic Processes In Nonlinear Control Systems	661
<i>T. Rzayev</i>	
Stability Gradient Algorithm On Jordan-Dedekind Structures	664
<i>A. Ramazanov</i>	
Control Of Powdery Superphosphate Granulation Process	666
<i>A. Huseynov</i>	
Adaptive Control And Identification Of Powdery Materials Granulation Process	668
<i>A. Huseynov</i>	
Numerical Solution To Optimal Control Problem For A Quasi-Nonlinear Parabolic Equation.....	670
<i>S. Huseynov, S. Karimova</i>	
Interactive System For Solving Vector Optimization Problems And Its Applications	673
<i>M. Khoroshko</i>	
Multicriterion Problem Of The Control Of Large Systems Under The Limited Resources	677
<i>K. Kutkhashvili, L. Karalashvili</i>	

Regulation Of Water Reservoir Resources Using Alternative Sensors	678
<i>A. Aliyeva, N. Rasulova</i>	
Optimization Of The Transients In Oil Pipelines On A Class Of Piecewise Constant Functions	681
<i>J. Asadova</i>	
Control Of Loaded Parabolic System With Minimal Energy	685
<i>R. Mammadov, G. Gasimov</i>	
Optimization Of Interval Length For Neural Network Based Fuzzy Time Series	688
<i>O. Ozdemir, M. Memmedli</i>	
Switching Discrete Control Problem	690
<i>R. Akbarov, S. Mecherrem, Y. Cingillioglu</i>	
Indirect Indexes Of The Operational Regimes Of Gaslift Wells.....	693
<i>S. Yusifov, E. Allahverdiyev</i>	
Hybrid Heuristic Algorithm For The Multidimensional Knapsack Problem.....	695
<i>C. Atilgan, U. Nuriyev</i>	
About Extremum Problems With Constraints In A Metric Space	699
<i>M. Sadygov</i>	
Automatic Control System Of Discrete Dosage Process.....	703
<i>S. Jafarov, R. Nabyev</i>	
Existence Of Solution Of Fuzzy Differential Equation.....	705
<i>A. Niftiyev, G. Mammadova, R. Shikhlinskaya</i>	
Control Problem Of Elastic Rod Oscillations.....	708
<i>V. Nazarova</i>	
Existence Of The Solution Of A Discrete Optimal Control Problem For Linear Concentrated Systems With Lions Special Quality Test.....	709
<i>V. Salmanov, N. Mahmudov</i>	
Optimal Control For Schrodinger's Equation With Pure Imaginary Coefficient In The Nonlinear Part Of The Equation.....	713
<i>N. Mahmudov</i>	
About One Task Of Optimal Location Of Service Centers Of Municipal Transport By Fuzzy Graphs.....	716
<i>P. Ibadova, J. Garayev</i>	
Algorithm For Finding Guaranteed Solution In Knapsack Problem.....	718
<i>K. Mammadov, N. Mammadov</i>	
Methods Of Constructing Suboptimal Solution Of Multiple Mixed-Boolean Programming Problems	723
<i>K. Mammadov, S. Nagiyeva, H. Veliyev</i>	
New Mathematical Model For Finding Minimum Vertex Cut Set	727
<i>T. Sevim, H. Kutucu, M. Berberler</i>	
New Algorithm For Finding Minimum Vertex Cut Set.....	729
<i>O. Ugurlu, M. Berberler, G. Kizilates, M. Kurt</i>	
Neumann Problem In The Non-Classical Treatment For A Fourth Order Pseudoparabolic Equation	733
<i>I. Mamedov</i>	
Nonlocal Problem With Bitsadze-Samarsky And Samarsky-Ionkin Type Conditions For A System Of Pseudoparabolic Equations.....	736
<i>I. Mamedov</i>	
Main Principles Of Decision Making In Conflict Theory.....	739
<i>H. Shimiyev</i>	
Mathematical And Computer Modelling Of Adaptive Systems Identification And Control With Power Objects On The Basis Of Wiener-Hammerstein Model.....	743
<i>G. Bolkvadze, B. Shanshiashvili</i>	
Impact Of Elements That Contribute To The Public Administration For Tourism Development Of Determined Area.....	747
<i>A. Lafuente, Y. Oh</i>	
Forgotten Effects In The Comparative Economic Analysis For Spain And Russia In Conditions Of Globalization	752
<i>A. Lafuente, A. Kilmova, K. Imanov</i>	
Fuzzy Approach To Analysis And Forecast Of Social Mobility	756
<i>G. Imanov, M. Murtuzayeva, R. Akperov</i>	
Investigation In Stability Of Markowitz's Multicriterial Portfolio Optimization Problem With Wald's Maximin Criteria In Euclidean Metric	760
<i>V. Emelichev, V. Korotkov</i>	
Random Set Decomposition Of Discrete-Continuous Random Variables	762
<i>D. Semenova, N. Lukyanova</i>	

Gradient Methods To Solve Integer Vector Optimization Problems	766
<i>V. Semenov</i>	
Actuarial Risk Modeling Using Bayesian Approach.....	767
<i>P. Bidiuk, A. Gasanov, O. Kozhukhivska</i>	
Research Of Synergetic Models Of Non-Linear Economy	769
<i>V. Vitlinsky, Y. Kolyada, V. Tukalo</i>	
Teaching Some Issues Of Problem Solving And Decision Making In The Social Science	771
<i>N. Akhalaia, D. Jalagonia, N. Liparteliani</i>	
Imitation Model Of Optimal Tax Rate For Company	774
<i>K. Bardavelidze, A. Bardavelidze</i>	
Application of TOPSIS Method in Decision-Making Support of Personnel Management Problems.....	777
<i>M. Mammadova, Z. Jabrailova, S. Nobari</i>	
Formation Of Supply And Demand For IT Specialists On The Base Of Competency Model.....	781
<i>M. Mammadova, F. Mammadzadeh</i>	
Evaluation Of A Regional Investment Projects.....	784
<i>A. Pashayev, E. Sabziev, Z. Husseynov</i>	
About The Development Of The Algorithm To Evaluate The Efficiency Of ICT Techno Parks	788
<i>A. Aliyev, R. Shahverdiyeva</i>	
Commercialization Issues Of ICT-Directed Innovative Processes	792
<i>A. Aliyev, R. Shahverdiyeva</i>	
Application Saaty Pair Comparisons Method To The Investments Distribution In Parameters Of Ecological Sustainability	796
<i>S. Riza, M. Murtuzayeva</i>	
Innovations In Industrial Manufacture Of Azerbaijan.....	799
<i>A. Huseynova</i>	
Author Index	