

2021 International Conference on Information Science and Communications Technologies (ICISCT 2021)

**Tashkent, Uzbekistan
3 – 5 November 2021**

Pages 1-594



**IEEE Catalog Number: CFP21H74-POD
ISBN: 978-1-6654-3259-7**

**Copyright © 2021 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:	CFP21H74-POD
ISBN (Print-On-Demand):	978-1-6654-3259-7
ISBN (Online):	978-1-6654-3258-0

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

MONITORING OF DEVELOPMENT OF INFORMATION AND MANAGEMENT COMPETENCIES OF MASTERS OF TECHNICAL HIGHER EDUCATIONAL INSTITUTIONS	1
<i>Ozoda Safibullaeva Abdullayeva, Anvarjon Inomjonovich Isomiddinov, Adhamjon Akramovich Hasanov</i>	
FORMANT SET AS A MAIN PARAMETER FOR RECOGNIZING VOWELS OF THE UZBEK LANGUAGE.....	6
<i>Malika Abdullaeva, Ilyos Khujayorov, Mannon Ochilov</i>	
EFFICIENT PORTFOLIOS COMPUTED VIA MOMENT-BASED BOUNDING-APPROXIMATIONS: PART II - DBFS.....	11
<i>Steftcho Dokov, Ivilina Popova, David P. Morton</i>	
RESULTS OF ANALYSIS OF MULTIMEDIA TRAFFIC OF ELEMENTS OF THE INTERNET OF THINGS	16
<i>Tuygun Nishanbayev, Alevtina Muradova, Kholisakhon Davletova</i>	
SELECTION OF BUILDING MATERIAL USING THE DECISION-MAKING SYSTEM.....	22
<i>Holida Primova, Qodir Gaybulov, Ismoil Isroilov</i>	
UNDERSTANDING OF DATA DE-IDENTIFICATION: ISSUES OF RELEVANCE AND PROBLEMS	25
<i>Abdukhaliq A. Ganiev, Kamil F. Kerimov, Zarina I. Azizova</i>	
SLR: A SYSTEMATIC LITERATURE REVIEW ON BLOCKCHAIN APPLICATIONS IN HEALTHCARE	29
<i>Sobiya Arsheen, Khaleel Ahmad</i>	
EXTRACTION INFORMATIVE FEATURES FOR MAKING DECISION.....	35
<i>Ignatev Nikolay Aleksandrovich, Mukhamadiev Abdivali Shukurovich, Mukhammadiev Ravshan Abduvali Ogli, Saida Safibullaeva Beknazarova</i>	
CALCULATION OF BUILDING DIMENSIONS IN THE METHOD OF COMPOSITION FRACTAL ANALYSIS	40
<i>Shahzoda Anarova, Shakhlo Sadullaeva, Golib Berdiev</i>	
MATHEMATICAL MODELING OF REGULATORY MECHANISMS FOR THE DISTRIBUTION OF EXCITATION IN THE CENTRAL NERVOUS SYSTEM	44
<i>Isroilov Shukhrat</i>	
MECHANISMS OF INFORMATION RELIABILITY IN BIGDATA AND BLOCKCHAIN TECHNOLOGIES.....	48
<i>Akmal Rustamovich Akhatov, Fayzullo Makhmadiyarovich Nazarov, Akbar Rashidov</i>	
DETECTING SPAM MESSAGES USING THE NAIVE BAYES ALGORITHM OF BASIC MACHINE LEARNING	52
<i>Khamdamov Rustam Khamdamovich, Haydarov Elshod</i>	
TECHNIQUES AND METHODS OF BLACK BOX IDENTIFYING VULNERABILITIES IN WEB SERVERS.....	55
<i>Khamdamov Rustam Khamdamovich, Ibrokhimov Aziz</i>	

MATHEMATICAL MODEL AND METHODS FOR FILTERING AN EMAIL MESSAGE	59
<i>Khamdamov Rustam Khamdamovich, Haydarov Elshod</i>	
WEB APPLICATION FIREWALL METHOD FOR DETECTING NETWORK ATTACKS	63
<i>Khamdamov Rustam Khamdamovich, Ibrokhimov Aziz</i>	
LINGUISTIC FUNCTIONALITY OF UZBEK ELECTRON CORPUS: UZBEKCORPUS.UZ	66
<i>Nilufar Abdurakhmonova, Ulugbek Tuliyev, Ayrat Gatiatullin</i>	
A METHOD TO IMPROVE THE QUALITY OF SERVICE AND OVERCOME THE LOSS OF NETWORK PACKETS	70
<i>Gulomov Sherzod Rajaboevich, Malikova Nodira Turgunovna, Qurbonova Kabira Erkinovna, Arzieva Jamila Tileubaeva</i>	
DIFFERENTIATED SERVICES CODE POINT (DSCP) TRAFFIC FILTERING METHOD TO PREVENT ATTACKS.....	73
<i>Karimov Madjid Malikovich, Gulomov Sherzod Rajaboevich, Tashmatova Shaxnoza Sobirovna, Elmurodov Temurmalik</i>	
RENFIS-MA: A RECURRENT NEURO-FUZZY INFERENCE SYSTEM FOR TIME SERIES WATER LEVEL PREDICTION.....	77
<i>Mohammad Sultan Mahmud, Kuanishbay Sadatdiyev, Bayram Fayzullaev</i>	
THE CONTEMPORARY LANGUAGE STUDIES WITH CORPUS AND COMPUTER LINGUISTICS	82
<i>Sharipova Aziza Abdumanapovna</i>	
MATHEMATICAL REPRESENTATION OF THE PROBLEM OF FORMING THE LESSON SCHEDULE OF HIGHER EDUCATION INSTITUTIONS IN THE CREDIT MODULE SYSTEM	86
<i>Mo'Minov Bahodir Boltayevich, Iskandarov Sanjar Quvondiqovich</i>	
ANALYSIS OF AUTOMATIC TEXT EDITING METHODS	89
<i>B. B. Muminov, U. B. Bekmurodov, Sh. A. Khusanov</i>	
INTER-ZONE LIGHT ABSORPTION IN A SIZE QUANTIZED WIRE	94
<i>Malik Ubaydullaev, Barat Eshpulatov</i>	
ANALYSIS OF CHROMATIC DISPERSION ON THE PERFORMANCE OF A STANDARD SINGLE MODE FIBER-OPTICS COMMUNICATION SYSTEMS	99
<i>Barno Fayzullayeva, Jabbor Mukhammadiev</i>	
ALGORITHM FOR CALCULATING VEGETATION INDICES NDVI FOR TIME SERIES OF LANDSAT 8 MULTISPECTRAL SATELLITE IMAGES ON GOOGLE EARTH ENGINE PLATFORM.....	105
<i>Rustam Khamdamov, Khoshim Rakhmanov, Dilafruz Fattaeva</i>	
NONSMOOTH OPTIMAL CONTROL PROBLEM FOR MODEL OF SYSTEM WITH DELAY UNDER CONDITIONS OF UNCERTAINTY EXTERNAL INFLUENCE.....	108
<i>Salim Otakulov, Feruza Kholiyarova</i>	
ANALYSIS OF DISCONNECTED NEURAL NETWORKS.....	111
<i>Abdimurod Eshmuradov, Aybek Khaytbaev</i>	
ANALYSIS OF METHODS FOR ENSURING RELIABILITY INDICATORS OF PON NETWORKS.....	117
<i>Rikhsa Isaev, Akbar Normurodov, Alisher Ganiev, Kamila Sherjanova</i>	

ALGEBRAIC STRUCTURE OF PARAMETRIC ELLIPTIC CURVES	120
<i>Oydin Ahmedova, Ulugbek Mardiyev, Otabek Tursunov, Iskandar Olimov</i>	
INCREASING THE EFFICIENCY OF NETWORK RESOURCES IN IP NETWORKS BASED ON FUZZY SETS	123
<i>Rustam Djurayev, Shukhrat Djabbarov, Dilshod Matkurbanov, Amir Lazarev, Orif Khasanov</i>	
STUDY ON AIRCRAFT LIGHTWEIGHT FUSELAGE STRUCTURE DESIGN USING FLEXIBLE SOLAR PANEL FOR SOLAR-POWERED AIRCRAFT	128
<i>Timur Khudaybergenov</i>	
PERSPECTIVES OF USING OF OWC IN DIGITAL STORYTELLING CONTENT DELIVERING IN MUSEUMS	131
<i>Timur Khudaybergenov</i>	
DESIGN OF ALTERNATIVE POWER SUPPLY SYSTEM BASED ON FLEXIBLE MOUNTABLE SMART SOLAR ROOF FOR MOVABLE SMART HOUSE	134
<i>Timur Khudaybergenov</i>	
THE CONTRIBUTION OF GATE AND DRAIN VOLTAGES TO TEMPERATURE DISTRIBUTION ALONG THE CHANNEL IN 2D MOS ₂ BASED MOSFET	137
<i>A. E. Atamuratov, X. Sh. Saparov, T. A. Atamuratov, A. Yusupov, F. Schwierz</i>	
MODEL OF TRAFFIC CONTROL SYSTEM IN THE ATM NETWORK	140
<i>Abdurakhmanov Rustam Pattakhovich, Tojieva Feruza Kobiljon Kizi</i>	
WORKLOAD CHARACTERISTICS IN CLOUD DATA CENTERS: A COMPUTATIONAL STUDY FROM ALIBABA CLOUD	145
<i>Y. Nasir Ahmed, S. Pakkir Mohideen</i>	
MINIMUM LOGICAL REPRESENTATION OF MICROCOMMANDS OF CRYPTOGRAPHIC ALGORITHMS (AES).....	150
<i>Anvar Kabulov, Islambek Saymanov, Mansur Berdimurodov</i>	
BLOCKCHAIN BASED E-VOTING SYSTEM: OPEN ISSUES AND CHALLENGES	155
<i>Zarif Khudoykulov, Umida Tojiakbarova, Suhrob Bozorov, Dilshoda Ourbonalieva</i>	
ESTIMATION OF THE RELIABILITY OF FIBER-OPTICAL COMMUNICATION LINES TAKING INTO ACCOUNT THE INFLUENCE OF EXTERNAL FACTORS USING THE SEMI- MARKOV MODEL	160
<i>Rikhsa Isaev, Saparniyaz Tursimuratov</i>	
TYPES AND FEATURES OF DATA EXCHANGE IN MICROCONTROLLERS THROUGH VARIOUS INTERFACES	164
<i>Gulomov Sherzod Rajabovich, Yusupov Bakhodir Karamatovich, Boboyev Nabi Tohir O'GLi</i>	
ALGORITHMS FOR INTELLIGENT DATA PROCESSING IN RESOURCE MANAGEMENT UNDER UNCERTAINTY AND DYNAMIC ENVIRONMENT	168
<i>Oripjon Olimovich Zaripov, Umidjon Sharabidinovich Khamrakov, Shavkat Ismatovich Fayziev, Saidkamol Babayevich Sadikov, Bexzod Numanovich Mamadjanov</i>	
COUPLED DYNAMIC THERMOELASTICITY PROBLEM FOR ISOTROPIC BODIES.....	173
<i>U. Z. Djumayozov, I. M. Mukhammadiev, A. A. Kayumov, R. Z. Makhmudov</i>	

MICROSERVICE APPROACH IN DESIGNING A SCALABLE ARCHITECTURE ON THE EXAMPLE OF AN ELECTRONIC INVOICE SYSTEM.....	181
<i>Ostonov Mukhriddin Bakhriddin Ugli, Akhmedov Jamshid Samadilla Ugli, Ziyodullayev Shakhobiddin G'Olib Ugli</i>	
ARTIFICIAL INTELLIGENCE-BASED METHODS FOR FILTERING SPAM MESSAGES IN EMAIL SERVICES.....	184
<i>Salim K. Ganiev, Sherzod J. Khamidov</i>	
FORMALIZATION AND ALGORITHM OF THE PROBLEM OF FORECASTING DECISIONS MADE IN SELF-GOVERNMENT BODIES	188
<i>Khikmat Rakhimboev Jumanazarovich, Khalmuratov Omonboy Utamuratovich, Davletboev Sardorbek Zokirjon Ugli</i>	
SOME WAYS TO SOLVE THE PROBLEM OF STOASTIC OPTIMIZATION DIRECT	192
<i>Jamila Arzieva</i>	
ANALYSIS OF EXISTING STANDARDS FOR INFORMATION SECURITY ASSESSMENT	196
<i>Olimov Iskandar, Boriyev Yusuf, Sadikov Mahmudjon, Xudoyberdiyev Azizbek, Ismanaliyev Javohir</i>	
PROBLEMS OF ALGORITHMIZATION OF CONTROL OF COMPLEX SYSTEMS BASED ON FUNCTIONING TABLES IN DYNAMIC CONTROL SYSTEMS	199
<i>Anvar Kabulov, Ilyos Kalandarov, Inomjon Yarashov</i>	
SIMULATION OF A TWO-LEVEL CONTROL SYSTEM FOR NONLINEAR DYNAMIC OBJECTS WITH A NEUROFUZZY ADAPTIVE REGULATOR.....	203
<i>Siddikov Isamiddin Xakimovich, Umurzakova Dilnoza Maxamadjonovna</i>	
DEVELOPMENT OF AN ALGORITHMIC MODEL AND METHODS FOR MANAGING PRODUCTION SYSTEMS BASED ON ALGEBRA OVER FUNCTIONING TABLES	208
<i>Anvar Kabulov, Ibrokhimali Normatov, Ilyos Kalandarov, Inomjon Yarashov</i>	
LIGHTWEIGHT CRYPTOGRAPHY ALGORITHMS FOR IOT DEVICES: OPEN ISSUES AND CHALLENGES.....	212
<i>Salim Ganiev, Zarif Khudoykulov</i>	
ON ONE METHOD FOR USING QUANTUM POLARIZATION FILTERS IN ENCRYPTION.....	216
<i>Bakhtiyor Abdurakhimov, Orif Allanov</i>	
METHOD OF DETECTION AND ELIMINATION OF TRACKS OF ATTACKS IN THE INFORMATION SYSTEM	220
<i>Bekmirzaev Obidjon Nuralievich, Muminov Bahodir Boltaevich</i>	
COMPARATIVE ANALYSIS OF THE RESULTS OF EMG SIGNAL CLASSIFICATION BASED ON MACHINE LEARNING ALGORITHMS	222
<i>Adilbek Turgunov, Kudratjon Zohirov, Rashid Nasimov, Sanjar Mirzakhalilov</i>	
STUDY OF THE SPECTRUM OF SIDE ELECTROMAGNETIC RADIATIONS OF VIDEO INTERFACE DVI	226
<i>Foziljonov Khojiakbar Ismoil Ogli</i>	
MATHEMATICAL MODEL AND ALGORITHM OF SIMPLE WORDS AND SIMPLE SENTENCES IN THE UZBEK LANGUAGE	229
<i>Elmira Nazirova, Shakhnoza Abidova, Shaxnoza Obidova</i>	

USE OF NEURAL NETWORKS IN THE EXCHANGE OF CRYPTOGRAPHIC KEYS	233
<i>Orif Allanov</i>	
A CREATION CRYPTOGRAPHIC PROTOCOL FOR THE DIVISION OF MUTUAL AUTHENTICATION AND SESSION KEY	236
<i>Sadikov Mahmudjon Akmuratovich, Olimov Iskandar Salimboyevich, Karimov Abduqodir Abdusalomovich, Tursunov Otobek Odiljon Ugli, Yusupova Shohida Botirboevna, Tojikabarova Umida Usmonjanovna</i>	
SPEECH RECOGNITION BASED ON TRANSFORMER NEURAL NETWORKS.....	242
<i>N. S. Mamatov, N. A. Niyozmatova, Sh. Sh. Abdullaev, A. N. Samijonov, K. K. Erejepov</i>	
METHODS FOR AUTOMATIC IDENTIFICATION OF VEHICLES IN THE ITS SYSTEM.....	247
<i>Khalimjon Khujamatov, Amir Lazarev, Nurshod Akhmedov, Ernazar Reypnazarov, Aybek Bekturdiev</i>	
DETERMINATION OF CHARACTERISTIC POINTS BASED ON WAVELET CHANGE OF ELECTROCARDIOGRAM SIGNAL	252
<i>Jamoljon Djumanov, Kamola Abdurashidova, Farkhat Rajabov, Shohida Akbarova</i>	
A NOVEL CLUSTERING PROTOCOL FOR OPTIMAL NODE PLACEMENT IN WIRELESS SENSOR NETWORKS.....	255
<i>Farruh Muzafarov, Abdimurod Eshmuradov, Glopova Kamola</i>	
MODELING OF PROBLEM RECONSTRUCTION FUNCTION BY ITS INTEGRAL DATA ON A FAMILY OF CIRCLES	263
<i>N. U. Uteuliev, G. M. Djaykov, Sh. A. Yadgarov</i>	
STAGES OF PROCESSING AN INFORMATION SECURITY INCIDENT.....	267
<i>Botirov Fayzullajon, Gafurov Azam</i>	
METHOD FOR FALSE ATTACK DETECTION IN FACE IDENTIFICATION SYSTEM	270
<i>N. S. Mamatov, B. A. Abdukadirov, A. N. Samijonov, B. N. Samijonov</i>	
CLASSIFICATION BASED ON DECISION TREES AND NEURAL NETWORKS.....	274
<i>N. A. Niyozmatova, N. S. Mamatov, B. I. Otaxonova, A. N. Samijonov, K. K. Erejepov</i>	
APPROACH FOR ESTIMATING DISTANCES BETWEEN CENTERS OF GEOMETRIC SHAPES BASED ON IMAGE ANALYSIS AND ITS EVALUATION	278
<i>Shakhzod Takhirov, Sultan Kudratov, Konstantin Kubantsev</i>	
CROSSOVER DESIGN BASED ON MICROSTRIP STRUCTURAL ELEMENTS.....	281
<i>Abdulmusavvir A. Karimov, Dilshod Ch. Ravshanov, Evgeniy B. Bablyuk, Olimdjon G. Bobiev</i>	
CONDITIONS FOR THE DEVELOPMENT OF STUDENTS' INFORMATION COMPETENCE IN THE ASPECT OF THE DEVELOPMENT OF DISTANCE LEARNING IN THE HUMANITIES	285
<i>Abduqayum Abdukadirov, Shakirdjan Zakirov, Odil Mamarajabov, Alibekov Sayfulla</i>	
ALGORITHM FOR SOLVING BOUNDARY VALUE PROBLEMS OF PARABOLIC EQUATIONS AND 3D VISUALIZATION OF RESULTS.....	289
<i>Elmira Nazirova, Abdugani Nematov, Mohiniso Mahmudova</i>	
USING OF R PARAMETER IN A MASSEY-OMURA PROTOCOL ON ELLIPTIC CURVES	294
<i>Ulugbek Mardiyev</i>	

MATHEMATICAL AND INFORMATION MODEL OF ELECTRONIC DOCUMENT MANAGEMENT SYSTEM.....	297
<i>Bahodir Muminov, Adilbek Dauletov</i>	
A HYBRID RAT-RACE COUPLER WHOSE DIMENSIONS ARE REDUCED WITH THE HELP OF ARTIFICIAL LINES.....	301
<i>Chorshanbe B. Ravshanov, Dilshod Ch. Ravshanov, Abdulmusavvir A. Karimov, Olimdjon G. Bobiev</i>	
DIRECTIONAL COUPLER WITH SMALL PHYSICAL DIMENSIONS	305
<i>Dilshod Ch. Ravshanov, Abdulmusavvir A. Karimov, Evgeniy B. Bablyuk, Chorshanbe B. Ravshanov</i>	
MONITORING OF GROUNDWATER STATUS BASED ON GEOINFORMATION SYSTEMS AND TECHNOLOGIES	309
<i>Diumanov Jamoljon, Abduvaitov Akmal</i>	
AUTOMATIC LIQUID LEVEL FOR EXPLOSIVE AREAS	313
<i>Sultonali Abduraxmonov, Obbos Kuldashov, Shavkat Sayitov</i>	
SELECTING A SUITABLE INITIAL APPROXIMATION OF MULTI-COMPONENT CROSS-DIFFUSION SYSTEMS	316
<i>Ortik Ruzibaev, Dildora Muhamediyeva, Ilhom Ismailov</i>	
PROBLEMS OF BUILDING A MATHEMATICAL MODEL OF EPIDEMIC TAKING INTO ACCOUNT VACCINATION	320
<i>Dildora Muhamediyeva, Yulduz Baxromova</i>	
CAUCHY PROBLEM AND BOUNDARY- VALUE PROBLEMS FOR MULTICOMPONENT CROSS-DIFFUSION SYSTEMS	324
<i>Dildora Muhamediyeva, Aziza Nurumova, Sohib Muminov</i>	
SOLVING FUZZY TRANSPORTATION PROBLEM	329
<i>Dilnoz Muhamediyeva, Madina Fozilova, Aziza Mirzarakhmedova</i>	
MATHEMATICAL MODELING OF TRANSPORT DEMAND DISTRIBUTION	333
<i>Dilnoz Muhamediyeva, Usmon Khasanov, Sanjar Mirzarakhmedov</i>	
ALGORITHM FOR DETECTING EYE DISEASES USING CONVOLUTIONAL NEURAL NETWORK.....	336
<i>Dilnoz Muhamediyeva, Dilshodbek Sotvoldiyev, Abdulla Arifjanov</i>	
DEVELOPMENT OF A METHODOLOGY FOR PROTECTING A SOFTWARE PACKAGE FOR ELECTRONIC DOCUMENT MANAGEMENT	340
<i>Shavkat Ismatovich Fayziev, Umidjon Sharabidinovich Khamrakulov, Saidkamol Babayevich Sadikov, Bexzod Numanovich Mamadjanov, Shukhrat Xayrullaevich Mamadoliev</i>	
SYNTHESIS OF MULTIDIMENSIONAL AUTOMATIC CONTROL SYSTEMS.....	345
<i>Shavkat Ismatovich Fayziev, Umidjon Sharabidinovich Khamrakulov, Saidkamol Babayevich Sadikov, Bexzod Numanovich Mamadjanov, Shukhrat Xayrullaevich Mamadoliev</i>	
TRAFFIC AND THROUGHPUT FOR 4G PACKET CORE NETWORKS	350
<i>Svetlana Sadchikova, Mubarak Abdujapparova</i>	
RESULTS OF THE WORKING OF THE HIGH-PRECISION ITERATIVE DECODING SYSTEM IN THE CODE EFFICIENCY COMPARISON MODE.....	356
<i>Atadjanov Sherzod Shukhratovich</i>	

THE ROLE OF ARTIFICIAL INTELLIGENCE IN EDUCATION: CURRENT TRENDS AND FUTURE PROSPECTS.....	363
<i>Mohd Yousuf, Abdul Wahid</i>	
AGGREGATION OF METEOROLOGICAL AND SPATIAL DATA FOR AIR POLLUTION MODELING.....	370
<i>Daler Sharipov, Dilshot Akhmedov</i>	
AUTOMATION OF KPI CALCULATION FOR LEADERSHIP PERSONNEL OF HIGHER EDUCATIONAL INSTITUTIONS	374
<i>Karimova Venera Arkinovna</i>	
STUDY OF NEURAL NETWORKS IN TELECOMMUNICATION SYSTEMS.....	378
<i>Mirzaeva Malika Bakhadirovna, Sobirov Muzaffar Azatovich, Bafoyev Mirzo Ulug'Bek O'Tkir Ugli</i>	
STATISTICAL MODELS FOR FORECAST OF “QUALITY OF THE DAY” FOR THE CATEGORY OF FACILITIES OF METEO-DEPENDENT PEOPLE	382
<i>Kabiljanov Aleksandr Sabitovich, Nazarov Alisher Iskenderovich, Umerov Hikmet Useinovich, Ibrokhimov Bakhrom Sobirjonovich</i>	
INTELLIGENT MANAGEMENT MODEL OF BUSINESS PROCESSES OF PRODUCTION WITH THE USE OF FUZZY LOGIC APPARATUS	389
<i>Abdul-Azalova Makhina Yashnarovna</i>	
ALGORITHM FOR STEGANOGRAPHIC HIDING OF INFORMATION USING A FILE SYSTEM	392
<i>Ganiyev Abdurhalil, Mavlonov Obid, Yusupov Rakhmatulla</i>	
MODEL AND RESEARCH OF TIME PARAMETERS OF SERVICE TRAFFIC OF A WIRELESS SENSOR NETWORK	397
<i>Abdimurod Eshmuradov, Aybek Khaytbaev, Dilbar Normatova</i>	
STATEMENT OF THE PROBLEM OF FORMING AND SETTING THE PARAMETERS OF THE TERMS LINGUISTIC VARIABLE.....	401
<i>Ziyoda Pulatova, Jonibek Usmonov</i>	
3D TENSOR-BASED DEEP LEARNING MODELS FOR PREDICTING OPTION PRICE.....	404
<i>Muyang Ge, Shen Zhou, Shijun Luo, Boping Tian</i>	
ANALYSIS AND IMPLEMENTATION OF COURSE QUALITY OPTIMIZATION BASED ON CLOUD COMPUTING.....	410
<i>Bahodir Zaripov, Sanjar Mirzaliyev, Kudratjon Zohirov, Asliddin Abdullayev</i>	
DEVELOPMENT OF A DATABASE OF HIGHER EDUCATION PROCESS MANAGEMENT INFORMATION SYSTEM BASED ON THE RELATIONAL MODEL.....	414
<i>Jamshid Elov, Utkir Khamdamov, Alisher Abdullayev, Inomjon Narzullayev, Djamshid Sultanov</i>	
OPTIMAL REPRESENTATION IN THE FORM OF LOGICAL FUNCTIONS OF MICROINSTRUCTIONS OF CRYPTOGRAPHIC ALGORITHMS (RSA, EL-GAMAL).....	419
<i>Anvar Kabulov, Mansur Berdimurodov</i>	
ORGANIZATION OF INITIAL TEXT PROCESSING IN THE UZBEK LANGUAGE SYNTHESIZER	423
<i>Bakhtiyor Akmuradov, Utkir Khamdamov, Jamshid Elov, Djamshid Sultanov, Inomjon Narzullayev</i>	

ANALYSIS FOR COMPARISON OF FRAMEWORK FOR 5G CORE IMPLEMENTATION	428
<i>Francisco Joaquim De Souza Neto, Edson Amatucci, Nadia Adel Nassif, Pedro Augusto Marques Farias</i>	
DDOS ATTACK DETECTION VIA IDS: OPEN CHALLENGES AND PROBLEMS	433
<i>Suhrobjon Bozorov</i>	
COMPUTER SIMULATION OF THREE-DIMENSIONAL GAS FILTRATION PROCESS IN POROUS MEDIA	437
<i>Nozim Kurbonov</i>	
SEMICONDUCTOR SOLID SOLUTIONS $GE_{1-x}SN_x$ AS A NEW MATERIAL FOR ELECTRONICS	442
<i>A. S. Saidov, Sh. K. Ismailov, U. P. Asatova</i>	
DETERMINATION OF THE RELIABILITY OF USING COMPUTING IN AUTOMATION AND TELEMECHANIC SYSTEMS.....	445
<i>Ravshan Aliev, Marat Aliev</i>	
INFLUENCE OF COMMUNICATION LINES ON RELIABILITY IN MOBILE COMMUNICATION SYSTEMS	449
<i>D. A. Davronbekov, U. K. Matyokubov</i>	
ALGORITHMS FOR CALCULATING THE STRUCTURAL RELIABILITY OF A MOBILE COMMUNICATION SYSTEM.....	453
<i>D. A. Davronbekov, U. K. Matyokubov</i>	
THE IMPACT OF PRECIPITATION ON COMMUNICATION FAILURE IN FSO	457
<i>Refsat Ibraimov, Maxbuba Sultonova, Aliyev Ulugbek</i>	
APPROACHES AND METHODS FOR ASSESSING THE INFORMATION SECURITY OF DATA TRANSMISSION NETWORKS	462
<i>Rustam Djurayev, Shukhrat Djabbarov, Dilshod Matkurbanov, Orifjon Khasanov</i>	
IOT AND 5G TECHNOLOGY IN AGRICULTURE.....	466
<i>Kh. E Khujamatov, T K Toshtemirov, A. P. Lazarev, Q. T. Raximjonov</i>	
CONVERSION OF THE DIFFIE-HELLMAN KEY EXCHANGE ALGORITHM BASED ON ELLIPTIC CURVE EQUATIONS TO ELLIPTIC CURVE EQUATIONS WITH PRIVATE PARAMETERS.....	472
<i>Oydin Ahmedova, Zarif Khudoykulov, Ulugbek Mardiyev, Akbar Ortiqboyev</i>	
IMPROVING THE EFFICIENCY OF ANTENNA DEVICES OF BASE STATIONS FOR SUBURBAN AND MOUNTAIN ROUTES.....	476
<i>Sherzod Pulatov, Jamshid Isroilov, Asror Gafurov, Shokhzod Gaynullaev</i>	
MODEL OF AUTOMATION OF GROWTH CARP FISH POND WARM-WATER ECONOMY	481
<i>Barno Ergashevna Elmurodova, Maksadxon Sultaniyazovich Yakubov, Saida Safibullaevna Beknazarova</i>	
DEVELOPMENT OF ICT CREATIVITY OF TEACHERS OF HEU' WITH HELPING INFOGRAPHICS	486
<i>Pozilova Shakhnoza Khaydaraliyevna</i>	
SECURITY SCHEME AND CONCEPTUAL MODEL OF INTERNET BANKING SYSTEM	489
<i>Tashev Komil Akhmatovich, Gulomov Sherzod Rajaboevich, Yuldasheva Nafisa Salimovna</i>	

ANTENNA ARRAY POWER SUPPLY CIRCUIT IN MARINE COMMUNICATION SYSTEMS USING THE TOPOLOGY OF A COMPACT COUPLER	493
<i>Nguyen Khac Khiem, Luu Quang Hung</i>	
MARINE MATV SYSTEMS USE A 3 DB REDUCTION COUPLER WITH BROADBAND	496
<i>Luu Quang Hung</i>	
INFORMATION AND MEASUREMENT CONTROL SYSTEMS FOR TECHNOLOGICAL PROCESSES IN THE GRAIN PROCESSING INDUSTRY	500
<i>Kalandarov Palvan Iskandarovich, Mukimov Zieviddin Mamurovich, Avezov Nodirbek Egambergenovich, Abdullaev Husniddin Hussein Ugli</i>	
PROBLEMS OF BUILDING GLOBAL CORPORATE INFORMATION SYSTEMS	505
<i>Dadabaeva Rano, Botirov Fayzullajon</i>	
DEVELOPMENT TREND OF MODERN SATELLITE TELEVISION	509
<i>Sherzod Pulatov, Jamshid Isroilov, Asror Gafurov, Munisa Azamova, Khakimov Zafar</i>	
SUPERPIXEL BASED FACE SKETCH RECOGNITION SCHEME	514
<i>Durdona Irgasheva, Lola Davronova</i>	
FEATURES OF TECHNOLOGIES FOR TRANSMISSION OF RADIO AND TELEVISION IN 4G / 5G NETWORKS	517
<i>D. A. Davronbekov, U. T. Aliev, Sh. U. Pulatov, J. D. Isroilov, F. X. Fayzullaev</i>	
MATHEMATICAL MODEL AND SOFTWARE PACKAGE FOR CALCULATING THE BALANCE OF INFORMATION FLOW	522
<i>Jamoljon Djumanov, Rustam Yakhshibaev, Saydulla Khushvaktov, Nargiza Sayfullaeva</i>	
THE MARINE INFORMATION SYSTEM USES MINIATURE DIAGRAM-FARMING SCHEME.....	528
<i>Luu Quang Hung</i>	
ORGANIZATION OF LESSONS BY CREATING EDUCATIONAL PROJECTS IN SMALL GROUPS	532
<i>Yusupova Shohida Botirboyevna, Ishmetov Bahrom Yangibaevich, Sabirova Zebinisa Ozatovna</i>	
THE PROCESS OF EXTENSIVE USE OF COMPUTER GRAPHICS IN THE DIAGNOSIS OF RENAL FUNCTION.....	535
<i>Kurbanov Sultanboy Kazakbayevich, Saida Safibullaevna Beknazarova</i>	
NEUTROSOPHIC SETS AND THEIR DECISION-MAKING METHODS ON THE EXAMPLE OF DIAGNOSING CATTLE DISEASE	540
<i>Dilnoz Muhamediyeva, Lola Safarova, Nozir Tukhtamurodov</i>	
DEVELOPMENT AND APPLICATION OF COMPUTER GRAPHICS TRAINING SOFTWARE IN INFORMATION TECHNOLOGY	545
<i>Uktam Madaminov Ataxanovich, Sadikov Mahmudjon Akmuratovich, Kutliev Sardor Pulatovich, Allaberganova Muyassar Rimberganovna, Ashirova Anorgul Ismoilovna</i>	
ANALYSIS OF THE FREQUENCY OF LETTERS OF THE UZBEK LANGUAGE BASED ON THE CYRILLIC ALPHABET	548
<i>Nodir Rasulovich Zaynalov, Ulugbek Khayrullaevich Narzullaev, Ilhom Rahmatullayevich Rahmatullayev, Asliddin Shakarov Abduhamid O'G'Li, Abdinabi Nuralievich Muhamadiev, Dusmurod Qilichev</i>	

REFLEXIVE AND ADIABATIC BOUNDARY 2D LINEAR CELLULAR AUTOMATA AND EVOLUTION OF IMAGE PATTERNS.....	552
<i>Selman Uguz, Shovkat Redjepov</i>	
MODELING OF AXISYMMETRIC JET FLOW AND COMBUSTION OF PROPANE IN FREE SPACE BASED ON A MODIFIED TURBULENCE MODEL $k - \varepsilon$	559
<i>Akmal Mirzoev Muzaffar Hamdamovich, Yaxshibayev Doniyor Sultonbayevich</i>	
METHODS AND ALGORITHMS OF GEOMETRIC MODELING OF FRACTAL STRUCTURED OBJECTS	564
<i>Nuraliyev Faxriddin Murodillaevich, Anarova Shahzoda Amanbayevna, Narzulloyev Oybek Mirzayevich, Nabiyev Ilhom Sharifovich</i>	
CONCEPTUAL MODEL OF EDUCATIONAL BLOCKCHAIN SYSTEM FOR DIPLOMA INDISPUTABILITY	569
<i>Goran Skondric, Indira Hamulic, Eugen Mudnic</i>	
INCREASING DATA RELIABILITY BY USING BIGDATA PARALLELIZATION MECHANISMS	573
<i>Akmal Rustamovich Akhatov, Fayzullo Makhmadiyarovich Nazarov, Akbar Rashidov</i>	
FEATURES APPLICATION OF SENSOR NETWORKS FOR MEASUREMENT OF RAW COTTON BUNTS.....	577
<i>J. D. Isroilov, S. A. Norkobilov, D. A. Davronbekov, A. S. Shamsiyev</i>	
CHARACTERISTICS OF EFFECTIVE USE OF SCIENTIFIC AND TECHNICAL INNOVATIONS IN THE FIELD OF INFORMATION TECHNOLOGIES	581
<i>Gulnora Ismoilova, Malika Parpieva</i>	
THE TRANSITION ECONOMY OF THE REPUBLIC UZBEKISTAN AND MARKETING MANAGEMENT IN THE CASE OF ICT.....	587
<i>Gulmira Tulenova, Maftuna Qurbanova, Laziz Yunusov</i>	
A MODEL FOR PREVENTING MALICIOUS TRAFFIC IN DNS SERVERS USING MACHINE LEARNING.....	591
<i>Gulomov Sherzod Rajaboevich, Nasrullaev Nurbek Baxtiyorovich, Toshev Sanjar Komilovich</i>	
DEVELOPMENT OF AN ALGORITHM FOR OPTIMIZING ENERGY-SAVING MANAGEMENT PROCESSES IN INTELLIGENT ENERGY SYSTEMS	595
<i>Gayrat Ishankhodjayev, Murodjon Sultanov, Djamshid Sultanov, Dilmutod Mirzaahmedov</i>	
THE ROLE OF PROCESSING INFORMATION IN DIGITAL MARKETING.....	600
<i>Gulnora Ismoilova, Diyora Mirkhadja, Feruza Nabieva</i>	
IMPROVING THE EFFICIENCY OF THE MOTION DETERMINING OF VIDEO OBJECTS USED THE CONTOURS OF THEIR BINARY IMAGES	604
<i>Igor Gavrilov, Diyorabegim Mukhammedova, Anastasia Puziy, Anora Ahmedova</i>	
FIBER OPTIC TEMPERATURE SENSORS IN THE AIRCRAFT FUEL SYSTEM APPLICATION.....	608
<i>Ruslan Zakirov, Oripjon Zaripov, Aziz Umarov</i>	
MODEL AND NUMERICAL ALGORITHM FOR MONITORING AND FORECASTING TRANSFER AND DIFFUSION OF ACTIVE AEROSOL PARTICLES IN THE ATMOSPHERE.....	611
<i>Normakhmad Ravshanov, Nigora Narzullayeva, Farrukh Muradov</i>	

CALCULATION OF SYNAPTIC WEIGHTS IN NEUROEXPERT SYSTEMS.....	615
<i>Sabirov Bahrombek Ilhombekovich, Kuzibaev Khudayshukur Shavkat Ugli, Abdullayev Gulchexra Xakimovna</i>	
ANALYSIS OF DIFFERENT CLINICAL FORMS OF VIRAL HEPATITIS B DISEASE.....	618
<i>Mahruy Saydalieva, Mohiniso Hidirova, Abrorjon Turgunov</i>	
COMPARATIVE ANALYSIS OF THE RESULTS OF ALGORITHMS FOR DILATED CARDIOMYOPATHY AND HYPERTROPHIC CARDIOMYOPATHY USING DEEP LEARNING.....	623
<i>Nigorakhon Nasimova, Bakhodir Muminov, Rashid Nasimov, Kamola Abdurashidova, Munis Abdullaev</i>	
INTERNATIONAL EXPERIENCE IN THE ORGANISATION OF A MULTIMEDIA-BASED DISTANCE LEARNING SYSTEM	628
<i>Mirzakarimova Mukhabbatkhon</i>	
ORGANIZATION OF VIDEO SURVEILLANCE AT RAILWAY CROSSINGS	632
<i>Sattarov Khurshid Abdishukurovich, Yaronova Natalya Valerevna, Ametova Aliye Ayderovna</i>	
COMPARATIVE ANALYSIS OF THE ARCHITECTURE OF DUAL-CORE BLACKFIN DIGITAL SIGNAL PROCESSORS	637
<i>Hakimjon Zaynidinov, Sanjarbek Ibragimov, Gayrat Tojiboyev</i>	
IMPROVEMENT OF THE ALGORITHM FOR NONLINEAR ADAPTIVE IMAGE CONTRAST ENHANCEMENT BASED ON THE THEORY OF FUZZY SETS	641
<i>Sayyora Iskandarova, Ilhom Boynazarov</i>	
A SIMULATION MODEL OF A CLOUD DATA CENTER BASED ON TRADITIONAL NETWORKS AND SOFTWARE-DEFINED NETWORK.....	644
<i>Djuraev R. Kh., Botirov S. R., Juraev F. O.</i>	
GRADIENT DESCENT IN MACHINE LEARNING.....	648
<i>Dilmurod Khasanov, Ma'Ruf Tojiyev, Oybek Primqulov</i>	
NUMERICAL SIMULATION OF FLOW THROUGH AN AXISYMMETRIC TWO-DIMENSIONAL PLANE DIFFUSER BASED ON A NEW TWO-FLUID TURBULENCE MODEL.....	651
<i>Zafar Malikov, Akmal Mirzoev, Murodil Madaliev, Doniyor Yakhshibayev, Alisher Usmonov</i>	
METHODS OF RECOGNIZING TEXTS IN DIFFERENT IMAGES	655
<i>Rustam Raximov, Holida Primova, Zulfiya Ruziyeva</i>	
NONLINEAR MATHEMATICAL MODEL OF OSCILLATION PROCESSES OF SPATIALLY LOADED RODS WITH ACCOUNT FOR TEMPERATURE.....	659
<i>Shahzoda Anarova, Shokhimardon Ismoilov, Davron Shokirov</i>	
METHOD AND ALGORITHMS FOR MEASURING THE SIGNS OF BIOMEDICAL INDICATORS OF MEDICAL DIAGNOSTICS	664
<i>Talat Magrupov, Yokubjon Talatov, Malohat Magrupova</i>	
LOAD BALANCING METHOD IN SMART CITY NETWORKS BASED SOFTWARE DEFINED NETWORKING	668
<i>Salimjon Mahmudov, Dilfuza Temirova</i>	
MODELING FLOW OF SMART CITY NETWORK: REVIEW AND ANALYSIS.....	673
<i>Salimjon Mahmudov</i>	

IMPROVING IMAGE CONTRAST: CHALLENGES AND SOLUTIONS.....	679
<i>Shavkat Fazilov, Elmurod Urinov, Shukrullo Kakharov, Ahmad Khashimov</i>	
BUILDING THE PSYCHOLOGICAL FACTORS OF PERSONALITY TOWARDS SOCIAL WORK.....	684
<i>Yakubov Maksadkhon, Dzhangazova Kumriniso, Sherbekova Firuza</i>	
IMPROVEMENT OF GROUNDWATER MONITORING ON THE BASIS OF MODERN INFO-COMMUNICATION AND GIS TECHNOLOGIES.....	688
<i>Djumanov Jamoljon Khudaykulovich, Khabibullayev Ibrokhim Khabibullayevich, Khushvaktov Saydulla Kholbazorovich, Mardiiev Utkir Berdivevich</i>	
INTERCONNECTION OF PERFORMANCE INDICATORS AND RELIABILITY OF DATA TRANSMISSION SYSTEMS.....	694
<i>R. Kh. Djurayev, Sh. Yu. Jabborov, I. I. Omonov</i>	
CREATING AN APPLICATION FOR TRAINING SCIENCE.....	701
<i>Ashirova Anorgul Ismoilovna, Allaberganova Muyassar Rimberganovna, Uktam Madaminov Ataxanovich, Ollaberganova Muyassar</i>	
TRAFFIC AND ROAD SIGN RECOGNITION USING DEEP CONVOLUTIONAL NEURAL NETWORK.....	705
<i>Temurbek Kuchkorov, Jamshid Khamzaev, Zamira Allamuratova, Temur Ochilov</i>	
AGRO-FIELD BOUNDARY DETECTION USING MASK R-CNN FROM SATELLITE AND AERIAL IMAGES	710
<i>Temurbek Kuchkorov, Temur Ochilov, Elyor Gaybulloev, Nazokat Sobitova, Ortik Ruzibaev</i>	
DEVELOPMENT OF A PROTOTYPE OF A SEARCH AND RESCUE ROBOT EQUIPPED WITH MULTIPLE CAMERAS.....	713
<i>Mukhriddin Arabboev, Shohruh Begmatov, Khabibullo Nosirov, Alisher Shakhabiddinov, Jean Chamberlain Chedjou, Kyandoghere Kyamaka</i>	
REMOTE MONITORING SYSTEM ARCHITECTURES IN HEALTHCARE	718
<i>Akhmedov Nurshod, Khalim Khujamatov, Amir Lazarev</i>	
INTELLIGENT IOT SENSORS: TYPES, FUNCTIONS AND CLASSIFICATION.....	723
<i>Khalimjon Khujamatov, Amir Lazarev, Nurshod Akhmedov</i>	
EXTRACTING LINGUISTIC PROPERTIES TO PREDICT CUSTOMER SATISFACTION	729
<i>Herry Irawan, Hardin Zuhdi Santoso, Melati Puspa Anisa, Naomi Bontor Maria Giovanni</i>	
COMPOSITE CASCODE INJECTION-VOLTAIC TRANSISTOR	735
<i>Aripova Ziyoda Khayrullayevna, Aripov Khayrulla Kabilovich, Toshmatov Shunqorjon Toshpulatovich</i>	
COMPLEMENTARY CASCODE CURRENT SOURCE	738
<i>Aripov Khayrulla Kabilovich, Aripova Ziyoda Khayrullayevna, Toshmatov Shunqorjon Toshpulatovich, Khayrullayev Khabibulloh Khozhakbar Ugli</i>	
CASCODE PHOTOCONVERTER WITH AMPLIFIER	741
<i>Aripov Khayrulla Kabilovich, Aripova Ziyoda Khayrullayevna, Aripova Umida Khayrullayevna, Toshmatov Shunqorjon Toshpulatovich</i>	
INFORMATION AND COMMUNICATIONS TECHNOLOGY INTEGRATION IN LANGUAGE EDUCATION.....	744
<i>Galina Nikolayevna Suleymanova</i>	

OPTIMIZATION OF THE STRUCTURE OF TELECOMMUNICATION NETWORKS BY THE METHOD OF PENALTY FUNCTION.....	749
<i>Saydiahat Parsiev, Inomjon Narzullayev</i>	
MACHINE LEARNING METHODS AS A TOOL FOR DIAGNOSTIC AND PROGNOSTIC RESEARCH IN CARDIOVASCULAR DISEASE.....	752
<i>Charos Khidirova, Shakhnoza Sadikova, Shamil Mukhsinov, Gulrukhsor Nashvandova, Sarvinoz Mirzaeva</i>	
BASIC PRINCIPLES OF WAVELET FILTERING	758
<i>Mirzayev Avaz, Khalilov Sirojiddin</i>	
DEVELOPMENT OF A MODEL FOR THE FUNCTIONING OF NON-RECOVERABLE EQUIPMENT OF TELECOMMUNICATION SYSTEMS.....	761
<i>Sh. Kh. Ismoilov, O. M. Masharipov, V. A. Kuchkarov</i>	
INVESTIGATION OF SPURIOUS ELECTROMAGNETIC RADIATION IN RESIDENTIAL PREMISES.....	764
<i>Vladislav Gubenko, Alisher Shakhobiddinov, Arthur Khatamov, Yelena Borisova</i>	
ANALYSIS OF THE USE OF WAVELETS FOR PROCESSING SIGNALS OF A SEISMOLOGICAL NATURE.....	768
<i>Zaynidinov Hakimjon, Muazzam Artikova</i>	
PARALLEL COMPUTATIONAL ALGORITHMS FOR SOLVING BOUNDARY VALUE PROBLEMS FOR TWO-DIMENSIONAL EQUATIONS OF PARABOLIC TYPE	772
<i>Abdugani Nematov, Turdiev Temur Takhirovich, Ismailov Shikhnazar, Akbar Bakhridinov</i>	
COMPARATIVE ANALYSIS OF METHODS OF ROUTING FLOWS IN TELECOMMUNICATION NETWORKS	776
<i>Amirsaidov U. B.</i>	
STEPS OF ORGANIZING THE METHODOLOGY OF IMPROVEMENT OF METHODS OF DISTANCE LEARNING OF STUDENTS.....	779
<i>Zafar Rakhmonov, Gulmira Pardaeva</i>	
NEURAL NETWORKS FOR MEDICAL IMAGE SEGMENTATION	783
<i>Sobirdjon Radjabov, Akhmad Khashimov, Elmurod Urinov, Shukrullo Kakharov</i>	
DEVELOPMENT AND RESEARCH OF A TRAFFIC MANAGEMENT SYSTEM BASED ON DPI TECHNOLOGY	787
<i>Abdurakhmanov Rustam Pattakhovich, Mirzokulov Xotam Baxtiyor Ogli, Tojieva Feruza Kobiljon Kizi</i>	
MATHEMATICAL MODEL OF INFORMATION PROCESSING IN THE ECOLOGICAL MONITORING INFORMATION SYSTEM.....	791
<i>Anvar Kabulov, Inomjon Yarashov</i>	
PARALLEL IMPLEMENTATION OF REAL-TIME OBJECT DETECTION USING OPENMP	795
<i>Mekhriddin Rakhimov, Jamshid Elov, Utkir Khamdamov, Shavkatjon Aminov, Shakhzod Javliev</i>	
DEVELOPING A MODEL AND ALGORITHM FOR DECISION SUPPORT IN SELF-GOVERNMENT BODIES USING MACHINE LEARNING	799
<i>Rakhimboev Khikmat, Khujaev Otabek, Yusupova Shokhida, Otamuratov Khurmat</i>	

BIG DATA TECHNOLOGIES IN TRANSPORT PLANNING	803
<i>Tashev Komil, Kalauov Saydulla, Akhmedova Nozima</i>	
ON ONE METHOD OF CONSTRUCTING A DECISION RULE IN PATTERN RECOGNITION	806
<i>Shoista Kasimova, Saidaminxon Kasimov</i>	
COMMUNICATION ARCHITECTURE OF SOLAR ENERGY MONITORING SYSTEMS FOR TELECOMMUNICATION OBJECTS.....	811
<i>Ilkhom Siddikov, Doston Khasanov, Halim Khujamatov, Ernazar Reypnazarov</i>	
MODELING THE DECISION-MAKING PROCESS OF LENDERS BASED ON BLOCKCHAIN TECHNOLOGY	816
<i>Juraev Gayrat Umarovich, Rakhimberdiev Kuvonchbek Bakhtiyorovich</i>	
ANALYSIS PASSWORD-BASED AUTHENTICATION SYSTEMS WITH PASSWORD POLICY	821
<i>Aybek Imamaliyev, Zarif Khudoykulov</i>	
MATHEMATICAL MODELING OF MAGNETOELASTIC VIBRATIONS OF CURRENT CONDUCTIVE SHELLS IN THE NON STATIONARY MAGNETIC FIELD	824
<i>Ravshan Indiaminov, Nuriddin Yusupov</i>	
SYNTHESIS OF A TEST SIGNAL FROM THE ENERGY SPECTRUM OF A REAL DIGITAL SIGNAL	828
<i>Komil Rakhmatov, Amritdin Salakhitdinov, Khotam Mirzokulov</i>	
IMPROVING DATA HIDING METHODS IN NETWORK STEGANOGRAPHY BASED ON PACKET HEADER MANIPULATION.....	831
<i>Abduhalil Ganivev, Obid Maylonov, Baxtiyor Turdibekov, Ma'Mura Uzoqova</i>	
CRN AND 5G BASED IOT: APPLICATIONS, CHALLENGES AND OPPORTUNITIES	836
<i>Ilkhom Siddikov, Khalim Khujamatov, Ernazar Reypnazarov, Doston Khasanov</i>	
THE INTERNET IN THE TERRITORY OF LITERATURE: ANALYSIS OF BLOCKS DEDICATED TO THE POETRY OF I. YUSUPOV.....	841
<i>Zamira Ayimbetova</i>	
APPLICATION OF TRANSFORMER MODEL ARCHITECTURE IN THE NEW DRUGS DESIGN	846
<i>Davronov Rifqat Rahimovich, Abdumalikov Shoxrux Qaxramon O'G'Li, Safarov Ro'Zmat Abdiqayum O'G'Li</i>	
PREDICTING THE ACTIVITY AND PROPERTIES OF CHEMICALS BASED ON ROBERTA.....	849
<i>Davronov Rifqat Rahimovich, Safarov Ro'Zmat Abdiqayum O'G'Li, Abdumalikov Shoxrux Qaxramon O'G'Li</i>	
NUMERICAL ALGORITHM FOR CALCULATION THE DENSITY OF HARMFUL SUBSTANCES IN THE ATMOSPHERE	853
<i>Farrukh Muradov, Nadira Tashtemirova</i>	
MATHEMATICAL MODEL AND COMPUTATIONAL ALGORITHM OF VIBRATION PROCESSES OF THIN MAGNETOELASTIC PLATES WITH COMPLEX FORM	856
<i>Nuraliev Fakhreddin Murodillayevich, Aytmuratov Bakbergen Sharibayevich, Artikbayev Mahkam Artikbayevich</i>	

ONLINE REGISTRATION AND MONITORING SYSTEM OF PATIENTS WITH DIABETES IN CLINICS	861
<i>Manzura Khashimkhodjaeva, Muazzam Artikova</i>	
APPLICATION OF TELECOMMUNICATION AND GEOINFORMATION SUPPORT OF GROUNDWATER MONITORING IN IRRIGATED AGRICULTURES ZONES.....	864
<i>Yusupov Rustam Abdumurodovich, Murodullaev Baxtiyor Tolqin O'G'Li, Xaitov Nasim To'Lqin O'G'Li, Anorboev Erkin Alisher Ugli, Abduvaitov Akmal Abdimuminovich</i>	
ANALYSIS OF EXISTING SMART CROSSROADS AND A NEW APPROACH OF SMART CROSSROAD	869
<i>Anvar Shuxratbekovich Abdullayev, Oybek Turabayevich Allamov, Oybek Azamatovich Rustamov, Ruslan Jumaboyevich Urinov, Yakubova Ugiljan Kadamovna</i>	
RAILWAY MONITORING SYSTEM SIMULATION ON THE SENSORS STREAM DATA	874
<i>Rakhimov Mukhammad Abdu Kayumbek, Jeong Won Kang, Ryumduck Oh</i>	
ADVANTAGES USING OF THE CONTOUR ANALYSIS METHOD FOR DETECTING FIRE FROM VIDEO IMAGES	878
<i>Rustam Khamdamov, Khoshim Rakhmanov, Ergash Saliev, Zaynidin Karshiyev</i>	
THE ROLE OF TEXT PRAGMATICS IN THE STUDY OF COMPUTER LINGUISTICS.....	882
<i>Kurbanova Mukhabbat Matyakubovna, Qobilova Nargiza Eshimovna</i>	
ANALYSIS OF INFORMATION SECURITY PROBLEMS IN ELECTRONIC MANAGEMENT WITH POSSIBLE SOLUTIONS	885
<i>Irgasheva Durdonga Yakubdjanovna, Xolimtayeva Iqbol Ubaydullayevna</i>	
CYBERSECURITY AND INFORMATION WAR.....	890
<i>Boboyorov Bobomurod Normatovich, Shoxiaxon Bobomurod Og'Li Boboyorov</i>	
IMAGE FEATURES SELECTION BASED ON COMPUTER VISION TECHNIQUES TO DETECT POTHOLE FOR INTELLIGENT TRANSPORT SYSTEM	895
<i>Mohd Omar, Pradeep Kumar</i>	
APPLICATION GEOFORTRANATIONAL TECHNOLOGIES IN HYDROGEOLOGICAL RESEARCH	901
<i>Djumanov Jamoljon Khudaykulovich, Khushvaktov Saydulla Kholbazorovich, Mirsoatov Alisher Mirtursunovich, Anorboev Erkin Alisher Ugli, Ma'Mirov Farrukh Azamatovich</i>	
THE ROLE OF ADAPTIVE FILTERS IN THE RECOGNITION OF SPEECH COMMANDS	906
<i>Kamoliddin Shukurov, Ulugbek Berdanov, Umidjon Khasanov, Shokhrukhmirzo Kholdorov, Boburkhon Turaev</i>	
BUILDING AN INFORMATION MODEL OF THE MAIN INDUSTRIES OF THE OIL EXTRACTION ENTERPRISE.....	910
<i>Yusufbekov Nodirbek Rustambekovich, Yusupov Firnafas, Abdullayeva Gulchekhra Khakimovna, Aliyev Oybek Azadovich, Eaambcrganova Fazilat Shukhratovna</i>	
OPTIMIZATION THE INDICATORS OF QUALITY OF SERVICE	914
<i>Zakirov Vakhid Maripovich</i>	
USING OF A PORTABLE URINE ANALYZER FOR REMOTE HEALTH ASSESSMENT.....	917
<i>Inna P. Korneeva, Kristina A. Kramar, Talat M. Magrupov, Evgeniia A. Semenova</i>	

IMITATION MODELS OF THE RAILWAY ORGANIZATION FOR RAILWAY TRANSPORT FLOWS	921
<i>Jonibek Usmonov Turdiqulovich, Tulkindjon Djuraev Boysoatovich, Ziyoda Pusatova Maxmudjonovna</i>	
DEVELOPMENT OF CURRENT CONVERTERS IN THE POWER SUPPLY CONTROL AND MANAGEMENT SYSTEM USING RENEWABLE ENERGY SOURCES THROUGH ARTIFICIAL INTELLIGENCE IN THE SPHERE OF TELECOMMUNICATIONS	925
<i>Natalya Amurova, Surayyo Abdullaeva, Yelena Borisova, Inomjon Narzullayev, Ilxom Siddikov</i>	
AN APPROACH TO FINDING THE MOST OPTIMAL ROUTE IN A DYNAMIC GRAPH	930
<i>Akhram Khasanovich Nishanov, Oybek Turabaevich Allamov, Ortig Bakhtiyorovich Ruzibaev, Anvar Shukhratbekovich Abdullaev, Shahlo Turabaevna Allamova</i>	
INCREASING THE EFFECTIVENESS OF TEACHING THE THEORY OF PROBABILITY AND MATHEMATICAL STATISTICS ON THE BASIS OF CONTEXT EDUCATION.....	935
<i>Abdugani Mamatov, Odila Islomova, Inomjon Narzullayev</i>	
APPROACHES TO FORMALIZING THE ACCESS CONTROL SYSTEM	940
<i>Durdona Irgasheva, Dilmurod Khurramov, Sanobar Rustamova</i>	
AN IN-DEPTH ANALYSIS OF AUTOMATIC SPEECH RECOGNITION SYSTEM	944
<i>Oybek Djuraev, Utkir Khamdamov, Sabrina Muminkhodjaeva, Ulugbek Abdullaev, Khusniya Akhmedova</i>	
TRAFFIC SIGN RECOGNITION METHOD BASED ON SIMPLIFIED GABOR WAVELETS AND CNNS.....	949
<i>Mukhriddin Umarov, Farrukh Muradov, Temur Azamov</i>	
HUMAN BODY WIRELESS TEMPERATURE SENSOR WITH DATA COLLECTION ABILITY	954
<i>Ruslan Zakirov, Dilbara Yodgorova, Alim Khakimov, Oybek Abdulkhaev, Shukurullo Kuliev</i>	
STRUCTURAL CHARACTERISTICS OF A CAVERA AT A SMALL BUBBLE STAGE OF CAVITATION	957
<i>Begimov Uktam Ibrogimovich, Khudaykulov Svet Ishankulovich</i>	
INDICATORS OF EFFICIENCY OF SYNTHESIS OF ACCESS CONTROL SYSTEMS.....	961
<i>Durdona Irgasheva</i>	
ANALYSIS OF ALGORITHMS FOR ELECTRONIC DIGITAL SIGNATURE WITH INCREASED SECURITY	965
<i>Oydin Akhmedova, Khusniya Akhmedova</i>	
RESEARCH OF PROBABILITY-TIME CHARACTERISTICS OF THE WIRELESS SENSOR NETWORKS FOR REMOTE MONITORING SYSTEMS	969
<i>Halim Khujamatov, Ilhom Siddikov, Ernazar Reypnazarov, Doston Khasanov</i>	
ANALYSIS OF METHODS AND ALGORITHMS FOR FEATURE EXTRACTION OF BIOSIGNALS OF MUSCLE ACTIVITY	975
<i>A'Lokhon Qakhkharov, Shokhrukhmirzo Kholdorov, Nozima Atadjanova, Sayyora Davletova, Nasim Khayitov</i>	
APPLICATION OF LPWAN TECHNOLOGIES FOR THE IMPLEMENTATION OF IOT PROJECTS IN THE REPUBLIC OF UZBEKISTAN.....	980
<i>Nurshod Akhmedov, Halim Khujamatov, Amir Lazarev, Madiyar Seidullayev</i>	

MODELS OF INTEGRATION OF HIGHER EDUCATION MANAGEMENT INFORMATION SYSTEMS.....	984
<i>Utkir Khamdamov, Alisher Abdullaev, Khurshid Sultanov, Jamshid Elov</i>	
IMPROVING AND EVALUATING METHODS NETWORK ATTACK ANOMALY DETECTION.....	988
<i>Doniyor Usmanbayev</i>	
DEVELOPING A DATABASE OF UZBEK LANGUAGE CONCATENATIVE SPEECH SYNTHESIZER	993
<i>Bakhtiyor Akmuradov, Utkir Khamdamov, Oybek Djuraev, Aziz Mukhamedaminov</i>	
APPLICATION OF THE ALGEBRAIC CRYPTANALYSIS METHOD TO THE KUZNYECHIK ENCRYPTION ALGORITHM.....	998
<i>Bakhtiyor Abdurakhimov, Ilkhom Boykuziev, Zarif Khudoykulov, Orif Allanov</i>	
SOLVING THE PROBLEM OF GEOMETRICAL NONLINEAR DEFORMATION OF ELECTRO-MAGNETIC THIN PLATE WITH COMPLEX CONFIGURATION AND ANALYSIS OF RESULTS	1004
<i>Fakhreddin Nuraliev, Shohruh Safarov, Mahkam Artikbayev</i>	
DIFFERENTIAL CHARACTERISTICS OF REFLECTIONS OF KUZNYECHIK ENCRYPTION ALGORITHM	1009
<i>Bakhtiyor Abdurakhimov, Ilkhom Boykuziev, Orif Allanov, Bekzod Xidirov</i>	
EXCHANGE OF MESSAGES IN THE TELECOMMUNICATION NETWORK WITH DIFFERENT TYPES OF COMMUNICATION CHANNELS	1013
<i>Umarov Ulugbek Agzamovich, Nigmatov Hikmatulla</i>	
PARALLEL PROCESSING OF SIGNALS IN LOCAL SPLINE METHODS	1017
<i>Hakimjon Zaynidinov, Bakhromov Sayfiddin, Azimov Bunyod, Jurayev Umidjon</i>	
IDENTIFICATION MODULE OF THE ALGORITHMS FOR CALCULATING ESTIMATES.....	1020
<i>Mirzaakbar Hudayberdiev, Alisher Khamroev, Sherzod Yuldashev</i>	
PECULIARITIES OF FACE DETECTION AND RECOGNITION.....	1023
<i>Mamatov Narzillo, Abdukadirov Bakhtiyor, Kakharov Shukrullo, Oriffonov Bakhodirjon, Abdukadirova Gulbahor</i>	
TRANSPARENT RELATIVISTIC QUANTUM NETWORKS	1028
<i>Sabirov Karimjon Kabildjanovich, Asadov Quvonchbek Urinovich</i>	
ALGORITHMS TO SYNTHESIS FOR ADAPTIVE SUB-OPTIMAL CONTROL OF DYNAMIC OBJECTS BASED ON REGULAR METHODS	1031
<i>Yulduz Muhtarkhodjaeva Abdurakhmanova, Jasur Usmonovich Sevinov</i>	
FILTERING ALGORITHMS FOR SPEECH SIGNALS IN MAXK TLAB	1034
<i>Fakhreddin Abdirazakov, Sukhrob Atoev, Baydullaev Ruslan</i>	
HYDROGEOLOGICAL-MATHEMATICAL MODEL OF FORMATION AND MANAGEMENT OF RESOURCES AND QUALITY OF FRESH UNDERGROUND WATER OF THE KARAKALPAK ARTESIAN BASIN	1038
<i>Kuanish Seitnazarov, Anvar Aytanov, Ermuhammed Kojametov, Nurbek Asenbaev</i>	
MATHEMATICAL MODELS FOR CALCULATION OF LIMITS IN WATER RESOURCES MANAGEMENT IN IRRIGATION SYSTEMS	1043
<i>Aybek Seytov, Rasul Turayev, Daniyar Jumamuratov, Adilbay Kudaybergenov</i>	

IMPLEMENTATION OF THE R-FUNCTION FOR VIRTUAL ENVIRONMENT OBJECTS OF THE SIMPLE SHAPES	1047
<i>Nuraliev Fakhreddin, Giyosov Ulugbek, Usmonov Akbarjon, Aliyev Azizbek</i>	
OBJECT TRACKING METHOD BASED ON KALMAN FILTER AND CAMSHIFT ALGORITHM FOR UAV APPLICATIONS	1052
<i>Sukhrob Atoev, Akhram Nishanov, Fakhreddin Abdirazakov</i>	
VISUALIZATION OF THE RESULTS OF COMPUTING EXPERIMENTS FOR MONITORING AND ANALYSIS OF FILTRATION PROCESSES IN A NON-GENERAL LAYER OF OIL FIELDS	1056
<i>Nazirova Elmira Shodmonovna, Sadikov Rustam Toxirovich, Ne'Matov Asliddin Rabbimqulovich, Ismailov Shikhnazар Rashid O'G'Li</i>	
PROGRAM FOR CALCULATION OF THE OPTIMAL DISTRIBUTION OF THE PLANNED AMOUNT OF GAS ON THE GAS SUPPLY NETWORK	1060
<i>Khodzhaev Shukhrat Tolibovich, Yuldashev Aziz Khujamurodovich, Khodzhaev Tolib Tohirovich</i>	
DESIGNING AN INTERFACE FOR THE EXCHANGE OF INFORMATION AND ENERGY RESOURCES BETWEEN MOBILE DEVICES VIA TYPE-C	1064
<i>K. T. Rakhimjanov, N. R. Saburova</i>	
BASIC CONCEPTS AND STAGES OF RESEARCH DEVELOPMENT ON ARTIFICIAL INTELLIGENCE	1068
<i>Nodir Raximov, Oybek Primqulov, Barno Daminova</i>	
QCA BASED CONTENT ADDRESSABLE MEMORY DESIGN	1072
<i>Karimov Madjid Malikovich, Komil Tashev, Nuriddin Safoev</i>	
DEVELOPMENT OF A LINEAR RISK MODEL BASED ON BIPOLAR FUZZY SETS IN POORLY-FORMED PROCESSES	1077
<i>Baro Solieva, Mirzaakbar Xuday Berdiev, Aziza Mirzarakmedova, Zuxriddinxuja Abdurazzoqxujjaev</i>	
IMPROVEMENT OF THE CALCULATION PROCEDURE OF TAX BURDEN WITH DIGITAL TECHNOLOGIES.....	1081
<i>Shavkat Turaev</i>	
STUDY OF NATIONAL HERITAGE SITES ON THE BASIS OF GAMIFICATION TECHNOLOGY	1085
<i>Nuraliev Fakhreddin Murodillaevich, Ibodullayev Sardor Nasriddin O'G'Li, Narzulloyev Oybek Mirzayevich, Omonov Shahzod Shavkat O'G'Li</i>	
2D PENTAGONAL VON NEUMANN CELLULAR AUTOMATA WITH PERIODIC BOUNDARY	1089
<i>Doston Jumaniyozov, Shovkat Redjepov</i>	
NON-RESTORING QCA ARRAY DIVIDER USING CIXOR FUNCTIONAL GATE.....	1093
<i>Nuriddin Safoev, Xusnutdin Samarov</i>	
RESEARCH OF THE ELEMENTARY SECTION OF A GAS PIPELINE UNDER GAS OUTFLOW FROM ITS END TO THE ENVIRONMENT	1096
<i>Ismatilla Khujaev, Khusniddin Mamadaliev, Xayotjon Aminov</i>	
NEW APPROACH TO DEVELOPING EFFICIENT NIDPS	1100
<i>Komil Tashev, Madjid Karimov</i>	

SPEAKER SEPARATION: USE NEURAL NETWORKS.....	1105
<i>Mekhriddin Rakhimov, Turaev Boburkhon, Turaev Khurshid</i>	
FINDING OPTIMAL ARCHITECTURE OF NEURAL NETWORKS FOR PREDICTING REFERRALS ON THE VIRTUAL MUSEUMS WEBSITE.....	1108
<i>Otabek Khujaev, Omonboy Khalmuradov, Ortiq Ruzibayev, Shukurulloh Ismoilov, Khudayshukur Kuzibaev</i>	
DEVELOPMENT OF INFORMATION DATABASE FOR PROVIDING DATA CONNECTION IN WORK WITH THE MOODLE CLOUD SYSTEM FOR THE CREDIT TRAINING SYSTEM.....	1112
<i>Akmal Aliqulov, Tulkun Yadgarov, Ozoda Abduganiyeva</i>	
NACL CONCENTRATION AND WATER TEMPERATURE INFLUENCE ON THE RAYLEIGH WING BY FOUR PHOTON POLARIZED SPECTROSCOPY	1116
<i>Khakberdi Jumanov, Khotam Mirzokulov, Abduvali Khidirov</i>	
AS A MECHANISM THAT ACHIEVES THE GOAL OF DECISION MANAGEMENT	1119
<i>Nodir Raximov, Jurabek Quvondikov, Xurshid Dusanov, Barno Daminova</i>	
APPLICATION OF DISTANCE LEARNING IN PROFESSIONAL DEVELOPMENT	1123
<i>Sarvar Makhmudjanov, Akmal Aliqulov, Sirojiddin Atabaev</i>	
AN APPLICATION OF GAUSS NEUTROSOPHIC NUMBERS IN MEDICAL DIAGNOSIS	1128
<i>Dilnoz Muhamediyeva, Nodir Egamberdiyev</i>	
RESEARCHING OF THE DEGRADATION PROCESS OF LASER DIODES USED IN OPTICAL TRANSPORT NETWORKS	1132
<i>Bekzod Turgunov, Nurmakhmad Juraev, Sherali Toshpulatov, Komilov Abdullaev, Usmonali Iskandarov</i>	
MATHEMATICAL MODEL OF INFORMATION EXCHANGE THROUGH THE EDUCATIONAL PLATFORMS	1136
<i>Khurshid Sultanov, Utkir Khamdamov, Djamshid Sultanov, Munis Abdullaev</i>	
IMPLEMENTATION OF SPEECH PROCESSING ALGORITHMS BASED ON SINGULAR VALUE DECOMPOSITION AND HIDDEN MARKOV MODEL	1140
<i>Kamoliddin Shukurov, Turaev Boburkhon, Umidjon Khasanov</i>	
EXACT SOLUTION OF A DOUBLE NONLINEAR PROBLEM OF BIOLOGICAL POPULATION WITH ABSORPTION AND WITH MIGRATION	1143
<i>Mersaid Aripov, Maftuha Sayfullayeva, Firuza Kabiljanova</i>	
MATHEMATICAL MODEL OF THE SYSTEM FOR STUDENT PROGRESS TRACKING.....	1147
<i>Kunduz Medetova, Larisa Marisheva</i>	
CLOUD COMPUTING SECURITY CHALLENGES AND SOLUTIONS.....	1151
<i>Abdukodir Karimov, Iskandar Olimov, Khusniddin Berdiyev, Umida Tojiakbarova, Otabek Tursunov</i>	
SIMULATION MODELING FOR OPTIMIZING THE CROPS STRUCTURE IN THE CONDITIONS OF THE JIZZAKH REGION.....	1157
<i>Akmal Akhatov, Bobir Saidaliyev, Jurabek Quvondikov</i>	
LOW AREA QCA DEMULTIPLEXER DESIGN	1161
<i>Nuriddin Safoev, Nurbek Nasrullaev</i>	

ALGORITHMIC FORMALIZATION OF USER ACCESS TO THE ECOLOGICAL MONITORING INFORMATION SYSTEM.....	1166
<i>Inomjon Yarashov</i>	
DEVELOPMENT OF A LOGO-PERIODIC ANTENNA IN THE VERY HIGH FREQUENCY BAND AND MEASUREMENT OF ITS BASIC PARAMETERS	1169
<i>Akhmad Olmasov, Amritdin Salakhiddinov, Khotam Mirzokulov</i>	
MODELING THE GILBERT MODEL FOR COMMUNICATION CHANNELS BASED ON ARTIFICIAL INTELLIGENCE	1172
<i>A. A. Qodirov</i>	
DEVELOPMENT OF A MATHEMATICAL MODEL FOR BALANCING THE LEVEL AND DEVICE FOR REMOTE MONITORING OF GROUNDWATER PARAMETERS	1175
<i>Rustam Yakhshibaev, Boburkhon Turaev, Khudoyorkhon Jamolov, Nozima Atadjanova, Elena Kim, Nargiza Sayfullaeva</i>	
EQUIPMENT AND SOFTWARE FOR ENERGY SUPPLY MONITORING AND CONTROL PROCESS.....	1179
<i>Ilkhomjon Siddikov, Muzaffar Sobiroy, Akmaljon Abdumalikov, Khurshid Sattarov</i>	
PERFORMANCE CHARACTERISTICS OF FIBER OPTICAL LINES AND DIAGNOSTIC TECHNIQUES FOR OPTICAL FIBER CABLE	1185
<i>Abdulaziz Nazarov, Bobir Ochilov, Mirkomil Khasanov</i>	
MODELING AGREEMENT OF RESOURCES IN A DISTRIBUTED INFORMATION ENVIRONMENT.....	1190
<i>Nadirbek Yusupbekov, Nargiza Usmanova, Farkhod Ergashev, Dilshod Mirzayev</i>	
PARAMETRIC ALGORITHM FOR SEARCHING THE MINIMUM LOWER UNITY OF MONOTONE BOOLEAN FUNCTIONS IN THE PROCESS SYNTHESIS OF CONTROL AUTOMATES	1196
<i>Anvar Kabulov, Mansur Berdimurodov</i>	
APPLICATION OF IOT TECHNOLOGY IN ECOLOGY (ON THE EXAMPLE OF THE ARAL SEA REGION).....	1200
<i>Anvar Kabulov, Islambek Saymanov</i>	
A SMART TRAFFIC CONTROLLING SYSTEM USING AUXILIARY SENSORS WITH DEEP LEARNING AND ITS SIMULATION	1205
<i>Qingyang Zeng</i>	

Author Index