

II SĒJUMS SATURS CONTENTS

Information Technologies

Muhammad Ramzan Ali, Liga Peiseniece, Elina Mikelsons THE MEDIATING ROLE OF GREEN WORK COMMITMENT IN THE RELATIONSHIP BETWEEN GREEN HR PRACTICES, AI ELEMENTS, AND ENVIRONMENTAL SUSTAINABILITY: A QUANTITATIVE ANALYSIS	15
Laylo Bakhronkulova, Muhammad Ramzan Ali, Zulfiya Khabirova, Akimjonov Azimjon, Alimova Zebo, Abdumajidova Muslima ARTIFICIAL INTELLIGENCE IN CYBERSECURITY: THREATS, DEFENSES, AND FUTURE DIRECTIONS	23
Todor Balabanov, Dimitar Dimitrov REVIEW OF THE CYBERSECURITY IMPACT AND LIMITATIONS OF THE USE OF ARTIFICIAL INTELLIGENCE IN TRANSPORT	31
Fayzi Bekkamov, Mumin Babajanov, Mansur Berdimurodov USING BAYESIAN METHODS TO PREDICT USERS' INFORMATION NEEDS IN A DIGITAL LIBRARY	37
Hristina Boycheva DIGITAL TOURISM MARKETING CHANNELS: A POST-COVID COMPARATIVE ANALYSIS OF CONSUMERS' PREFERENCES	43
Sarvinoz Berdibekova, Sherbek Normatov, Dildora Juraeva, Mehriniso Qudratova, Laylo Sayfieva ANALYSIS OF USER SATISFACTION OF ACADEMIC DIGITAL LIBRARIES: A CASE OF UZBEKISTAN	49
Linda Luīze Barbare, Aleksejs Jurenoks, Magone Una Rauba, Zane Viskere METHODOLOGY FOR ANALYSING LMS DATA TO PREDICT STUDENT DROPOUT RISK IN HIGHER EDUCATION	57
Linmu Cui, Aldis Bulis DRIVERS AND BARRIERS TO AI ADOPTION IN RETAIL ENTERPRISES: A SYSTEMATIC LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK	65
Bora Dogan, Yanka Baneva, Yordanka Eneva, Elena Ivanova EVALUATION OF THE DIAGNOSTIC ACCURACY OF TWO AI MODELS FOR ANALYZING MAMMOGRAPHIC IMAGES	77
Bora Dogan, Yordanka Eneva, Yanka Baneva, Elena Ivanova COMPARATIVE ANALYSIS OF THE CAPABILITIES OF TWO ARTIFICIAL INTELLIGENCE MODELS FOR CHEST X-RAY IMAGE INTERPRETATION	83
Dimitar Dimitrov, Todor Balabanov METHODOLOGICAL ASPECTS AND LIMITATIONS FOR ENSURING SAFETY IN TRANSPORT MANAGEMENT USING ARTIFICIAL INTELLIGENCE	93

Dimitar S. Dimitrov, Iliyan Y. Iliev THE RISK OF PERSONAL SMART DEVICES IN THE OPERATIONAL SECURITY FOR MILITARY BASES, PERSONNEL AND MISSIONS	99
Dimitar Dimitrov, Dimitar Nikolov LEVERAGING YARA AND SIGMA RULES TO DETECT CHINESE STATE- SPONSORED HACKING GROUPS OF THE “TYPHOON” TYPE	107
Dimitar Dimitrov, Evgeni Andreev CHINA'S STRATEGIC COMPETITION IN CYBERSPACE. VOLT TYPHOON AND SALT TYPHOON AS A PROJECTION OF POWER, A MORE AGGRESSIVE POSTURE AND A FUTURE BEYOND ESPIONAGE	115
Dimitar Dimitrov, Georgi Penchev, Konstantin Poudin, Georgi Pavlov, Atanas Dimitrov, Vasil Pavlov, Tzvetomira Penkova, Nikola Petrov ILLEGAL TRADE IN TOBACCO PRODUCTS INDICATOR	123
Eugene Eteris, Ingrida Veikša ARTIFICIAL INTELLIGENCE (AI) IN THE LEGAL PROFESSION: EUROPEAN APPROACH	129
Vasyl Frytsiuk, Iurii Kshyvak, Iryna Baranovska, Olena Teplova, Anna Novosadova, Anna Khilya DIGITAL ECOSYSTEMS FOR MUSIC TEACHER TRAINING: ICT, SOCIAL MEDIA, AND ONLINE LEARNING ENVIRONMENTS	137
Peter Grabusts, Jurijs Musatovs, Ērika Teirumnieka MODELING THE DISTRIBUTION OF LAKE REEDS USING GIS	145
Stanka Hadzhikoleva, Todor Rachovski, Emil Hadzhikolev, Ivan Ivanov THE ROLE OF GENERATIVE ARTIFICIAL INTELLIGENCE IN PROGRAMMER TRAINING: OPPORTUNITIES AND CHALLENGES	151
Rosen Iliev, Denislav Ushovski MODELING THE PROCESS OF EXTRACTING SENSOR DATA FROM THE TERRAIN USING GENERALIZED NETS	157
Ivan Ivanov, Kalin Petrov, Todor Rachovski, Desislava Petrova METHODOLOGICAL AND APPLIED ASPECTS OF ARTIFICIAL INTELLIGENCE IN ENERGY CONSUMPTION PREDICTION	165
Refat Ibraimov, Maxbuba Sultonova THE INFLUENCE OF CLIMATE CHANGE ON THE INTEGRAL FUNCTION OF DISTRIBUTION OF HORIZONTAL MINIMUM VISIBILITY DISTANCE	171
Iryna Kyrychenko, Yehor Nesterenko, Anastasiya Chupryna, Loreta Savulioniene, Paulius Sakalys APPLICATION OF CLUSTERING METHODS IN RECOMMENDER SYSTEMS FOR USER BEHAVIOR ANALYSIS	177
Ilmārs Kangro, Harijs Kalis SPECIAL HYPERBOLIC TYPE APPROXIMATION AND FOURIER METHOD FOR SOLVING 3-D STATIONARY DIFFUSION PROBLEM	181

Saranya Kanna Baskar, Velga Vēvere NATIONAL STRATEGIES FOR DIGITIZATION OF HIGHER EDUCATION: A COMPARISON BETWEEN LATVIA AND LITHUANIA	189
Svitlana Kizim, Oksana Voloshyna, Liudmyla Bondarchuk, Mykyta Sapohov, Tetiana Melnychuk INNOVATIVE APPROACHES TO THE ORGANIZATION OF DISTANCE LEARNING WITH THE USE OF DIGITAL TECHNOLOGIES IN DOMESTIC AND INTERNATIONAL EDUCATIONAL PRACTICES	197
Svitlana Kizim, Oksana Voloshyna, Irina Sarancha, Svitlana Nahorniak, Olena Stoliarenko ORGANIZATION OF ADAPTIVE TRAINING USING ARTIFICIAL INTELLIGENCE TECHNOLOGIES IN THE CONTEXT OF WAR	205
Nikolay Komitov, Veselin Mengov, Georgi Komitov, Evelin Shopov JOYSTICK CONTROL OF A 3D PRINTED ROBOTIC MANIPULATOR FOR STUDENT LEARNING	213
Tatyana Krumova PATIENT CLIENT CONSUMER BEHAVIOR IN PHYSICAL AND ONLINE PHARMACIES. A COMPARATIVE ANALYSIS OF PHARMACEUTICAL CARE AND ARTIFICIAL INTELLIGENCE	217
Iryna Kyrychenko, Artem Oliinyk, Kirill Smelyakov, Loreta Savulioniene, Paulius Sakalys COMPARATIVE ANALYSIS OF HEURISTIC ALGORITHMS FOR OPTIMIZING THE DISTRIBUTION OF MEDICAL EQUIPMENT IN A CRISIS	221
Oleg Latyshev, Nikolay Todorov Dolchinkov APPLICATION OF DIGITAL TELECOMMUNICATION ENVIRONMENT TO SOLVE LEGAL ISSUES	225
Georgi Markov, Borislav Nikolov DETECTION AND MITIGATION OF MALICIOUS ACTIVITIES BASED ON DNS QUERY ANALYSIS	231
Stela Mincheva, Veselka Stoyanova RESEARCH ON THE IMPACT OF THE USER EXPERIENCE FOR THE SUCCESS OF A VIRTUAL PRODUCT: BULGARIAN TRAVEL AGENCY WEBSITES	237
Ventsislava Nikolova-Minkova HISTORICAL DEVELOPMENT OF TECHNOLOGIES IN THE FIELD OF ARTIFICIAL INTELLIGENCE	243
Laura Ozoliņa, Arnis Cīrulis, Lauris Taube VEGETATION REALISTIC VISUALIZATION IN VIRTUAL REALITY SCENARIOS	251
Olha Palamarchuk, Iryna Haba, Halyna Shulha, Anna Khilya, Iryna Sarancha NEUROPLASTICITY AND DIGITAL TOOLS IN LIFELONG LEARNING: COGNITIVE CHALLENGES AND OPPORTUNITIES	257

Simeonka Petrova	265
ANALYZING E-COMMERCE OF SMALL AND MEDIUM-SIZED ENTERPRISES IN THE EUROPEAN UNION: DEPENDENCIES AND TRENDS IN THE CONTEXT OF DIGITALIZATION	
Mekhriniso Quدراتova, Marat Rakhmatullayev, Sherbek Normatov, Laylo Sayfieva, Sarvinoz Berdibekova	271
EXPANDED SELECTING CRITERIA OF RESEARCH DATABASES FOR UNIVERSITY LIBRARIES	
Agnese Reine	277
THE INTERSECTION OF ARTIFICIAL INTELLIGENCE AND EMPLOYMENT LEGAL RELATIONS: BALACING EMPLOYER INTERESTS WITH FUNDAMENTAL RIGHTS IN AI-DRIVEN EMPLOYMENT PRACTICES	
Stefko Burdzhiev, Maria-Magdalena Burdzhieva	285
NUCLEAR WEAPONS - CONSEQUENCES FOR THE BIOSPHERE IN CASE OF THEIR POTENTIAL USE	
Bohdan Rozputnia, Liudmyla Shevchenko, Volodymyr Umanets, Serhii Yashchuk, Yuliia Sabadosh	293
METHODOLOGICAL APPROACHES TO USING ARTIFICIAL INTELLIGENCE TO DEVELOP CREATIVE SKILLS IN FUTURE DESIGNERS	
Zhaneta Savova, Antoniya Tasheva, Rosen Bogdanov	299
ON THE SYSTEMATIC ENCODING OF P-ARY REED-SOLOMON CODES WITH AN ARBITRARY PRIME P	
Laylo Sayfieva, Sherbek Normatov, Mekhriniso Quدراتova, Sarvinoz Berdibekova, Temur Khudayberganov	307
ASSESSING THE NEED AND POSSIBILITY OF USING RECOMMENDER SYSTEMS IN UNIVERSITY LIBRARIES	
Igor Schukin, Raisa Smirnova	313
THE METHOD OF COMPLETE BIFURCATION ANALYSIS FOR PREDICTING THE BEHAVIOR OF COMPLEX SYSTEMS	
Mariya Shirokopetleva, Olena Shevchenko, Daria Pervieieva, Loreta Savulioniene, Paulius Sakalys	321
A COMPARATIVE ANALYSIS OF NATIVE IOS FRAMEWORKS FOR DEVELOPING GRAPHICS SCENES IN AUGMENTED REALITY APPLICATIONS	
Georgi Stanchev, Vanya Katsarska	329
APPLICATION OF TURBO CODES IN UNMANNED AERIAL SYSTEMS	
Dilyana Stoicheva	337
IMAGE RECOGNITION IN THE TRAFFIC SIGN SYSTEM - SEMIOTIC AND LINGUISTIC ASPECTS	
Svetlomir Stankov, Desislava Velinova	345
APPLICATION OF A LARGE LANGUAGE MODEL FOR AIR POLLUTION ANALYSIS BY USING A RAG SYSTEM	
Diyora Talipova	353

MATHEMATICAL METHODS FOR EVALUATION OF WEBOMETRIC INDICATORS
OF INFORMATION LIBRARY CENTERS

Oļegs Uzhga-Rebrov DECISION MAKING DECISION MAKING BASED ON FUZZY PREFERENCE RELATIONS	359
Velga Vevere, Inga Shina, Malalgodapitiya Gamage Darika Nirujani Nanayakkara, Iveta Linina, Rosita zvirgzdina INTEGRATING DIGITAL TECHNOLOGIES TO ENHANCE CSR STRATEGIES FOR RETAIL COMPANIES IN LATVIA	367
Roberts Volkovičs DATA CENTRE MONITORING MODEL UTILIZING ARTIFICIAL INTELLIGENCE, MACHINE LEARNING AND ANOMALY DETECTION ALGORITHMS	375
Roberts Volkovičs POLLUTION DETECTION MODEL UTILIZING ANOMALY DETECTION TECHNIQUES PERFORMING ANALYSIS OF SATELLITE DATA	383
Roberts Volkovičs MODEL FOR PROCESSING HISTORICAL TIMESERIES AND ESTABLISHING RULESET FOR ANOMALY DETECTION IN CURRENT SENSOR DATA AND GENERAL-PURPOSE FORECASTING FOR SMART FARMING IN LATVIA	389
Ibrohim Yuldoshev, Dilmurod Tuhtanazarov, Turdali Jumayev, Anvarjon Mahkamov MODELING AND NUMERICAL SOLUTION OF LIQUID FILTRATION PROCESSES IN MULTILAYER OIL FIELDS	395