CONTENTS

INFORMATICS, COMPUTER ENGINEERING AND AUTOMATION	
Belei O.I., Shtaier L.O., Filyuk A., Kravets O.Ya.	
DEVELOPMENT OF THE INFORMATION AND REFERENCE SYSTEM "FLOODS"	1
Bugaieva L.M., Abramova A.O.	
DEVELOPMENT OF AN INTELLIGENT SYSTEM USING A BAYESIAN NETWORK	
FOR EVALUATING AIR FILTRATION EFFICIENCY	8
Veresh V.V., Guranich P.P., Susla A.I., Trush R.V., Philip M.O.	
AUTOMATED QUALITY CONTROL SYSTEMS BASED ON COMPUTER VISION	17
Vernik M.O., Oleshchenko L.M.	
ANALYSIS OF QUANTUM AND CLASSICAL NEURAL NETWORK APPROACHES	
FOR DETECTING FLOW STATE FROM WEARABLE EEG DATA.	22
Veselovska H.V., Plakhotniuk M.F.	
THE IMPROVEMENT IN APPROACHES TO THE USE FOR SYSTEMS OF THE ARTIFICIAL	
INTELLIGENCE AND NETWORK INFORMATION TECHNOLOGIES IN COMPLEX SYSTEMS	
OF COMPUTER-ORIENTED TRAINING AND METHODS FOR CONTROL OF THESE SYSTEMS	30
Vinnychenko V.V.	
FAST UNCERTAINTY ESTIMATION METHODS FOR EDGE COMPUTING	
IN COMPUTER VISION SYSTEMS.	38
Volk M.O., Tverdokhlib D.B., Semytotskyi D.O., Trotsenko D.Yu., Hrynchak I.D., Koroshenko O.A.	
ADAPTIVE METHODS FOR MANAGING DISTRIBUTED COMPUTATIONS WITH EMBEDDED	
SELF-RECOVERY MECHANISMS IN HETEROGENEOUS CLOUD ENVIRONMENTS	46
Hordieiev M.H., Tryshyn V.V.	
METHODS OF USING ELECTRONIC NAVIGATION EQUIPMENT FOR SOLVING	5.4
THE FUNDAMENTAL NAVIGATION PROBLEM	34
Hurzhiy S.V. PROSPECTS FOR SWARM ROBOTICS	60
Dychko A.O., Salyuk A.I., Minaieva Yu.Yu.	00
INTELLECTUALIZATION OF MONITORING THE FUNCTIONING OF BIOCHEMICAL	
WASTEWATER TREATMENT PLANTS	67
Drevych L.O.	07
COMPARATIVE ANALYSIS OF ROAD LANE SEGMENTATION METHODS	
ON IMAGES	73
Zinovatna S.L., Oshovskyi V.R., Onishchenko T.V.	,
INFORMATION SYSTEM FOR ACCOUNTING FOR COMBINED TRANSPORTATION	. 81
Zlotenko B.M., Statsenko D.V., Melnyk H.V., Kalashnik V.Yu., Goldberg M.I.	
EDUCATIONAL IT PROJECT OF CREATING A LABORATORY STAND	
FOR MATHEMATICAL MODELING AND EXPERIMENTAL RESEARCH	
OF A COMPUTER SYSTEM FOR CONTROLLING ROOM AIR TEMPERATURE	87
Ivanyshyn V.V., Moshensky A.O.	
HARDWARE OF THE BIO-TECHNICAL SYSTEM FOR BEEHIVE MONITORING	
AND CONTROL. SENSOR DEVICES	93
Kandel K.V.	
USE OF VIRTUAL ASSISTANTS IN MEDICINE	100
Karpenko R.V.	
PREDICTION OF THE INTENSITY OF DEPOSIT FORMATION ON THE HEATING SURFACES	
OF A SOLID FUEL POWER BOILER USING A NEURAL NETWORK MODEL	108
Kozak L.M., Romanyuk O.O., Kovalenko O.S., Surovtsev I.V., Pezentsali G.O.	
DIGITAL MEDICAL IMAGE STORAGE MODEL TO ENSURING QUALITY ANALYSIS	
OF MEDICAL DATA	118

Kozelskyi O.V., Savenko B.O.
EXTERNAL ADAPTIVE CLUSTERING SYSTEM TO INCREASE THE FLEXIBILITY OF REAL-TIME OPERATING SYSTEMS BASED ON DYNAMIC TASKS PLANNING
Kornuta V.A., Merenko B.I. A COMPREHENSIVE APPROACH TO MODELING AND PLANNING OF INTELLIGENT
AUTOMATED SYSTEMS BASED ON SAT-PLANNING
Lavrik V.V., Novak D.S., Dromenko V.B., Guida O.H., Uchen O.V. SCRUM AS A TOOL FOR TRANSFORMATION OF TEAM INTERACTION
IN SOFTWARE DEVELOPMENT
Leheza A.V., Povkhan I.F., Saroz V.Ya., Yakovlev V.O. GENERAL SCHEME FOR CONSTRUCTING A SET OF BASIC DIDACTIC INDICATORS
IN THE MODEL OF EFFECTIVENESS OF THE ELECTRONIC LEARNING PROCESS
Madinov M.L., Ihnatenko P.A., Halahan N.V.
OVERVIEW OF CURRENT STANDARDS AND TRENDS IN LOCAL AREA NETWORKS:
ACHIEVEMENTS BY 2025
Manko D.V., Myronova N.O., Shaptala S.V., Kulyaba-Kharytonova T.I.
SYNCHRONISATION SYSTEM FOR A THREE-DIMENSIONAL MODEL OF A DIGITAL TWIN
OF A ROBOTIC DEVICE WITH STREAMING IOT DATA
Mashkovskyi R.A., Malyi O.Yu.
OVERVIEW OF TECHNICAL SOLUTIONS AND COMPONENTS FOR THE IMPLEMENTATION
OF ELECTRONIC SPEED CONTROLLERS (ESC) FOR BRUSHLESS DC MOTORS (BLDC)173
Mirkevych O.M.
DEVELOPMENT OF A MODEL FOR PREDICTING BEET PULP MOISTURE
IN THE DRYING COMPLEX OF SUGAR PRODUCTION
Nevliudov I.Sh., Yevsieiev V.V., Jabrayilzade E.A.
NUMERICAL SIMULATION OF DC MOTORS ROTATION SPEED IN COLLABORATIVE ROBOTS
USING ADAPTIVE NEURAL PID CONTROLLER
Novak D.S., Moshenskyi A.O., Sukalo M.L., Pylypenko V.I., Lisovets S.M.
MODELS AND METHODS FOR POLYMER COMPOSITE MATERIALS MICROSCOPY
PROCESSING USING MODERN MACHINE LEARNING TECHNOLOGIES
Oleshchenko L.M.
PROSPECTS FOR INTEGRATING LI-FI TECHNOLOGY INTO HETEROGENEOUS
WIRELESS NETWORKS
Pashkovskyi B.V.
AUTOMATED PROCESS OF DETERMINING AREAS AND PLACES
OF CONCENTRATION OF ROAD AND TRANSPORT ACCIDENTS
IN THE URBAN TERRITORIAL COMMUNITY OF IVANO-FRANKIVSK222
Redko D.I., Redko I.V.
PRIMITIVE PROGRAMMING ALGEBRAS OF COMPUTABLE FUNCTIONS
OVER MULTIDOMAIN TUPLES AND RELATIONS
Romanyshyn Yu.M., Yelmanov S.O., Durkot M.Yu., Teglivets O.V., Melnyk V.R., Yurenia A.V.
IMAGE QUALITY ENHANCEMENT USING NEURAL NETWORK MIRNET MODIFICATIONS237
Ruvinska V.M., Maksimychev A.M.
COLLABORATIVE CONTENT FILTERING FOR RECOMMENDER SYSTEMS
FOR CONTEXT MODELING BASED ON DEEP LEARNING
Savytskyi O.I., Moiseichenko V.V.
MODERN APPROACHES TO AUTOMATION OF IRON ORE PULP CLASSIFICATION PROCESSES
BY FINE SCREENING METHOD. 253
Sapozhnyk D.O.
METHODS AND AREAS OF APPLICATION OF QUANTUM COMPUTERS
IN CRYPTOGRAPHY AND LOGISTICS
Sgadov S.O.
EMOTION SIMULATION USING MARKOV CHAINS FOR ARM MICROPROCESSORS266
LING TION SHIP DATION USING PARKOY CHAINS FOR ARM PHEROI RUCESSURS

Semankiv M.V.
IMPROVING THE EFFICIENCY OF ALGORITHMS FOR THE TRAVELING SALESMAN PROBLEM 272
Sikora O.V., Kobylnyk T.I.
PROGRAMMING AS A TOOL FOR DEVELOPING DIGITAL LITERACY IN EDUCATION278
Statyvka Yu.I., Nedashkivskiy O.L., Mingjun Z.
EVALUATING THE LEVEL OF INTERNATIONALIZATION
OF SCIENTIFIC INSTITUTIONS IN THE PRESENCE OF MISSING DATA
Florov S.V., Cherkaskyi O.V., Cherkaskyi D.O., Zubchenko N.S., Peremetchyk D.O.
COMPARATIVE CHARACTERISTICS OF THE MODULAR EXPONENTIAL GROUP AND
THE ELLIPTIC CURVE OVER A PRIME FIELD IN ELECTRONIC COMMUNICATION SYSTEMS290
Ciapa S.M.
SOME ASPECTS OF ARCHITECTURAL INTEGRATION OF AUTONOMOUS SYSTEMS301
Shilinh A.Yu., Savchenkova Yu.Ye.
SYSTEM ANALYSIS OF FACTORS INFLUENCING
THE EFFECTIVE PROMOTION OF AN INFORMATION PRODUCT IN THE MARKET
OF INFORMATION PRODUCTS AND SERVICES
Shutenko V.M.
ANALYSIS OF THE EFFICIENCY OF MULTI-LEVEL CACHING
IN DISTRIBUTED INFORMATION SYSTEMS. 317
Yavorskyi O.V., Tarakhtii O.S.
IMPACT OF PRIMARY AND SECONDARY REGULATION STRATEGIES ON THE FREQUENCY
STABILITY OF A HYBRID POWER SYSTEM
INFORMATION ABOUT AUTHORS