International Competition of Student Scientific Works "Black Sea Science 2024"

2nd stage results for the field of "Information Technologies, Automation and Robotics"

Place	Country	Institution	Work Title	Authors	Supervisors	Score		
						Stage 1	Stage 2	Total
I	Ukraine	National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"	The strategy of digital twin implementation at the enterprise during post-war Ukraine reconstruction	Grishyn Kostiantyn	Pankratova Nataliya	92,5	28,3	120,8
I	Ukraine	Oles Honchar Dnipro National University	Automatic solving of physics word problems	Popov Ruslan	Karpenko Nadiia	94,0	26,5	120,5
I	Ukraine	National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"	Automated Detection and Assessment of War-Induced Damage to Agricultural Fields Using Satellite Imagery	Drozd Sofiia	Kussul Nataliia, Yailimova Hanna	91,5	25,0	116,5
I	Ukraine	Odesa National Technological University	Addon for blender3d. Automation of the object texturing process	Liskovetskiy Vladislav	Boltach Svitlana	88,5	28,0	116,5
II	Ukraine	Kharkiv National Air Force University of Ivan Kozhedub	Software and hardware module for automated detection and recognition of interest objects to increase the level of processing efficiency and reliability of aerial reconnaissance data	Havura Ivan, Vasiekin Dmytro	Tupitsya Ivan, Kryvonos Volodymyr	92,0	23,3	115,3
II	Ukraine	National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"	Implementation of innovative Industry 4.0 technologies for the reconstruction of the energy sector of Ukraine	Symonenko Anzhela	Hlushchenko Yaroslava	86,7	28,0	114,7
II	Ukraine	Vinnytsia National Technical University	Development of anthropometric measurement methods using three-dimensional modeling	Zakharchyk Maksym	Romanyuk Oksana	89,5	25,0	114,5

II	Ukraine	State University of Trade and Economics	Development of a web-based system for content exchange	Kushnir Yevhenii	Tomashevska Tetyana	**88,5**	**25,5**	**114,0**
II	Ukraine	Vasyl' Stus Donetsk National University	Classification of rhythmic gymnastics sport elements by video	Neskorodieva Anastasiia	Vietrov Oleh, Shtovba Serhiy	**94,5**	**19,3**	**113,8**
II	Ukraine	National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"	Optimization problem for number of logical elements needed to implement multiple boolean functions using decoder	Skopyk Hlib	Onai Mykola	**84,3**	**28,7**	**113,0**
III	Ukraine	Lutsk National Technical University	A remote control system for a robotic device based on Python programming language using sockets and computer vision	Dovhopoliuk Dmytro	Yashchuk Andrii, Lishchyna Nataliia	**87,0**	**25,7**	**112,7**
III	Ukraine	Odesa National Technological University	Programmatic solutions for businesses that have multiple accounts	Pohorieltsev Pavlo	Boltach Svitlana	**85,5**	**26,7**	**112,2**
III	Ukraine	National Technical University Kharkiv Polytechnic Institute	Research on software for detecting structural errors in business process models based on machine learning	Sapozhnykov Illia	Kopp Andrii	**85,0**	**27,0**	**112,0**
III	Ukraine	Vinnytsia National Technical University	Development of a software application based on machine learning for the generation of 3d models of bionic prostheses of lost limbs	Shyndyruk Viktoriia	Voitko Victoria	**84,8**	**27,0**	**111,8**
III	Ukraine	Khmelnytskyi National University	Neural Network Method for Detection of Fake Document Images for Personality Identification Systems	Zharnovskyi Oleksandr	Sobko Olena, Molchanova Maryna	**86,3**	**25,0**	**111,3**
III	Ukraine	Ivan Kozhedub Kharkiv National Air Force University	Development of a model for determining the priority of air targets based on fuzzy logic	Yaroshchuk Roman	Volkov Andrii	**86,5**	**22,7**	**109,2**
III	Ukraine	Petro Mohyla Black Sea National University	Application for recording sound from the microphone and saving it to a file	Oleksandr Yanovskyi	Kateryna Kirei	**86,3**	**22,0**	**108,3**

III	Oman	University of Technlogy and Applied Sciences	Securing Organizations and Employees: AI-Powered Cyber Security System for Malware Defense System	Fatima Naif Al Aamri, Malak Sami Hadid Al Aamri	Mr. Rogelio Gutierrez	86,3	22,0	108,3
III	Ukraine	Mykolaiv National Agrarian University	Development of voice assistant based on neural systems	Zakharchenko Yevhen, Balyuk Yan	Tyshchenko Svitlana, Zhebko Oleksandr	85,3	22,7	108,0
III	Kazakhstan	Turan University	Development of a computer-based educational program on the subject "fundamentals of computer modeling"	Alimbekova Ayaulym, Gavrilova Anastassiya, Kan Alexandr	Kim Yekaterina	84,0	24,0	108,0
III	Ukraine	Ukrainian Academy of Printing	Designing the automated complex for segregated waste gathering of operational printing	Storozhuk Dmytro	Neroda Tetyana	88,5	16,7	105,2
	Ukraine	Petro Mohyla Black Sea National University	Expanding NASA functionality using its API and improving interest among people in space exploration	Yaroslav Popov	Kateryna Kirei	83,0		
	Ukraine	Donbas State Engineering Academy	Application for preliminary diagnosis of dyslexia in children	Hryshchuk Danyil	Melnykov Oleksandr	83,0		
	Ukraine	Mykolaiv National Agrarian University	Distributed data analysis as a key tool for processing and analyzing large amounts of information	Yereshchenko Oleksandr, Bugayov Danilo	Tyshchenko Svitlana	83,0		
	Ukraine	Donbas State Engineering Academy	Decision support system for detection color determination anomaly	Vladislav Kanishev	Oleksandr Melnykov	83,0		
	Ukraine	Kremenchuk Mykhailo Ostrohradskyi National University	Information and analytical system for collecting, processing and analyzing data on air pollution	Zavalieiev Arsentiy, Vadurin Kyrylo	Perekrest Andrii, Bakharev Volodymyr	83,0		

	Ukraine	Odesa National University of Technology	Effective automatic control of the energy-saving process of cooking and smoking sausage in the chamber with thermoelectric heat pump	Petrenko Dmytro, Pashkov Serhii	Kovalchuk Dmytro	**83,0**		
	Ukraine	Separated Structural Subdivision «Odesa Technical Professional College of Odesa National University of Technology»	Research of the influence of modern trends in UI/ UX design of mobile applications on user's mood	Sichkar Oleksandr, Pyshkin Danylo	Zhadan Artur	**82,7**		
	Ukraine	Lutsk National Technical University	Transliteration Program "CotoGwa"	Lohatskyi Vladyslav, Savluk Maksym, Ryzhok Solomiia	Surynovych Olena, Lishchyna Natalia	**82,5**		
	Ukraine	Uzhhorod National University	The design of the pipelined RISC-V processor with the hardware coprocessor of digital signal processing	Makhrov Valentyn	Hedeon Hanna	**82,5**		
	Ukraine	Donbas State Engineering Academy	Study of the influence of factors on the incidence and performance of forecasting the change percentage of infected and those carrying the disease of covid-19 in a severe form in the world	Dmitry Kozub	Oleksandr Melnykov	**82,5**		
	Ukraine	Ivan Kozhedub National Air Force University	Improving the efficiency of covering wireless sensor networks based on UAV`s.	Riabkov Vladyslav, Shapovalova Tetiana	Mykhalevskiy Dmytro	**82,0**		
	Ukraine	Sumy State University	Information and software of virtual reality training application "Natural gas dryer plant"	Kuzmuk Danyla	Shovkoplias Oksana, Kuzikov Borys	**81,7**		
	Ukraine	Vinnytsia Mykhailo Kotsiubynskyi State Pedagogical University	Application of the python programming language and arduino robotics kits in the process of training future teachers of computer science	Kyslitsyn Vitalii	Umanetz Volodymyr	**80,7**		

	Ukraine	Kharkiv National Air Force University	Development of mathematical motion model of anti-aircraft shell for self-propelled anti-aircraft gun «gepard»	Danylo Starcev	Stanislav Piskunov	**80,5**		
	Ukraine	Cherkasy State Technological University	A new way of increase the efficiency of the rear wing of a car and new designs for its implementation	Kravchenko Oleksandr	Batrachenko Olexandr	**80,5**		
	Ukraine	Khmelnytskyi National University	Method for Intelligent Analysis of Text Messages Credibility Based on the Ensemble Approach	Shevchuk Pavlo	Molchanova Maryna, Mazurets Oleksandr	**80,3**		
	Ukraine	State Biotechnological University	Results of experimental study of the process of automated measurement of physiological parameters of biological objects	Sukhin Vitaly, Komarychev Oleksiy, Kantemir Veronika	Kosulina Natalia, Shigimaga Victor	**79,7**		
	Ukraine	MykolaivNationalAgrarianUniversity	Photovoltaic helio installation with automatic sun tracking system	Holubiev Volodymyr, Abdullaeva Adzhirie	Koshkin Dmytro, Tyshchenko Svitlana	**79,5**		
	Ukraine	Odesa National University of Technology	Simulation modeling of an asynchronous electric drive of a feed pump with vector control in Matlab-simulink package	Andreshkov Artem	Babich Vladyslav	**79,5**		
	Ukraine	Private Higher Education Establishment "Academician Stepan Demianchuk International University of Economics and Humanities"	Adaptive computer vision	Vodyanitski Valentin	Yuskovych-Zhukovska Valentyna	**79,5**		
	Bulgaria	SWU"Neofit Rilski"-Blagoevgrad	Cyber security when exchanging biometric and biomedical data	Hristov Hristo	Batalov Filip	**78,7**		
	Ukraine	National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"	Increase of the efficiency of implementation of multiple operations in the redundant numerical system on FPGA in on-line mode	Verbovskyi Illia	Zhabin Valerii	**78,5**		

	Ukraine	Donbas State Engineering Academy	Study of change of forest coverage within Spivakivka village with the help of own development application and Global Forest Watch web application	Denisenko Victoria	Melnykov Oleksandr	**77,5**		
	Ukraine	Petro Mohyla Black Sea National University	Streaming microscopic image data to the cloud storage for detection of acute lymphoblastic leukemia using CNN	Kravchenko Polina	Burlachenko Ivan	**77,0**		
	Ukraine	National Academy of National Guard of Ukraine	Development of the candidates selecting method for education in the master's studies of a military higher educational institution_	Kuzhelovych Mykyta	Novykova Olena	**77,0**		
	Ukraine	National University "Yuriy Kondratyuk Poltava Polytechnic"	Creation of a web application for investment project risk management based on fuzzy neural networks	Ostrianyn Vadym	Skakalina Olena	**76,8**		
	Ukraine	National University "Yuriy Kondratyuk Poltava Polytechnic"	Creation and research of forecasting models of the spread and consequences of covid-19	Kornienko Denys	Skakalina Olena	**76,5**		
	Ukraine	Ivan Kozhedub Kharkiv National Air Force University	Development of a mobile application for troubleshooting on-board command ultra-shortwave radios	Kurman Oleksandra	Krasnorutskyi Andrii	**76,0**		
	Ukraine	State University of Trade and Economics	Model of ChatGPT usage to create a chatbot	Buynoza Olena	Ivanova Olena	**75,5**		
	Ukraine	State university of Trade and Economics	Implementation of artificial intelligence for the restaurant business	Oleshko Sofia	Bovsh Liudmyla	**75,0**		
	Ukraine	National Technical University «Kharkiv Polytechnic Institute»	Advancing synthetic data generation: a flexible pipeline for complex human image scenarios	Romanovych Ihor	Bilova Mariia	**74,7**		
	Ukraine	Odesa National University of Technology	Automation of the bread baking process in a tunnel oven	Aristov Maksym	Zhygailo Oleksii	**74,5**		

	Ukraine	Donbas State Engineering Academy	Forecasting the duration of repair works during water pipe damage in a small city	Zakabula Oleksii	Melnykov Oleksandr	**74,5**		
	Ukraine	Ukrainian State University of Science and Technologies	Automation of environmental risk monitoring and assessment	Zelenko Daria	Horbova Olexandra, Zelenko Yuliia	**74,5**		
	Ukraine	NTUU "Ihor Sikorskyi Kyiv Polytechnic Institute"	Features of siem solutions implementation in state authorities	Iryna Svieshnikova, Volodymyr Mishchenko	Oleksiy Khakhlyuk	**74,5**		
	Ukraine	Vinnytsia Mykhailo Kotsiubynskyi State Pedagogical University	Methodology for training future computer science teachers to teach robotics in vocational education institutions	Rozputnia Bohdan		**73,5**		
	Ukraine	National University "Odesa Polytechnic"	Web application for control training and nutrition automatization	Pryvalov Andrii	Mykola Rudnichenko	**73,5**		
	Ukraine	O.M.Beketov National University of Urban Economy in Kharkiv	Development of an intelligent information image recognition subsystem	Steshenko Vladlen	Novozhilova Marina	**73,3**		
	Ukraine	National university of food technologies	Creation and research of a mechatronic module for determining the material of plastic bottles in recycling lines	Yakymchuk Yurii, Skopets Vladyslav	Iakymchuk Mykola	**73,0**		
	Ukraine	National Technical University «Kharkiv Polytechnic Institute»	Conscious Consumption: Information System For Efficient Food Storage Controls	Bondarenko Danylo	Liutenko Iryna	**73,0**		
	Ukraine	National University of Water and Environmental Engineering	Practical application of anomalies detection algorithms in the water reservoir monitoring system	Demchuk Iurii	Zhukovska Nataliia, Zhukovskyy Viktor	**72,0**		
	Ukraine	State Biotechnological University	Analysis of emotions in the text	Kolokolnikov Viktor	Chub Iryna, Demchenko Kateryna	**71,7**		

	Country	University	Project	Authors	Supervisors	Score		
	Poland	Poznan University of Technology	An Artificial Intelligence-Based Similarity Framework for Comprehensive Habitability Index Calculation of Exoplanets	Ibrahimli Natig		**71,7**		
	Ukraine	Vasyl' Stus Donetsk National University	Development of an application for generating melodies based on the circle of fifths system	Fedorenko Yevhenii	Sichko Tetiana	**71,5**		
	Ukraine	National University "Yuri Kondratyuk Poltava Polytechnic"	Development of a robotic complex for reconnaissance	Bilokin Oleksandr, Sabelnikov Lavr, Dendeberya Serhiy	Laktionov Oleksandr, Pedchenko Nazar	**70,5**		
	Ukraine	National University «Yuriy Kondratyuk Poltava Polytechnic»	Intelligent control system of greenhouse microclimate parameters	Fenko Denys	Kyslytsia Svitlana	**70,3**		
	Ukraine	Lutsk National Technical University	Information system for forecasting the order of raw materials	Ostapchuk Oleksandr	Zdolbitska Nina	**70,3**		
	Ukraine	Vasyl' Stus Donetsk National University	Application for encoding and decoding text messages	Ovramets Illia, Afanasieva Daria	Zelinska Oksana	**70,0**		
	Ukraine	National university of food technologies	Variational synthesis of a dosing robot manipulator based on augmented reality technology – AR	Yasychev Vladyslav, Yemelianov Dmytro	Krivoplyas-Volodsna Liudmyla	**70,0**		
	Ukraine	Khmelnitsky National University	Information system for the selection of sports based on the analysis of human morphofunctional indicators	Shvaiko Valeriia, Yevdokymova Mariia	Pavlova Olga, Soltyk Oleksandr	**69,7**		
	Ukraine	Kharkiv National Automobile and Highway University	Simulation of the digital system for adjusting the angular position of the manipulator	Stypanovych Mykola, Kuzmynykh Vasyl	Binkovska Anzhela, Ponikarovska Svitlana	**69,3**		
	Ukraine	Industrial professional college of Kryvyi Rih National University	Development of a microprocessor-based system for controlling the led ticker displays on Arduino	Nikitin Roman	Nikitina Hanna	**68,0**		

	Country	University	Project	Participant	Supervisor	Score		
	Ukraine	Lviv Polytechnic National Univers	Methods for increasing and assessing the efficiency of voltage converters for mobile electronics	Bratiuk Pavlo	Ozirkovskyi Leonid	**67,5**		
	Ukraine	State Higher Education Institution «Pryazovskyi State Technical University»	A system for measuring applied force and spatial orientation of an oar with Bluetooth communication	Parakhin Ruslan	Levytska Tatiana, Piatykop Olena	**67,5**		
	Ukraine	National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"	Model of a cyber defence system for critical information infrastructure facilities	Horyn oleg	Storchak Anton	**67,5**		
	Ukraine	National Technical University «Kharkiv Polytechnic Institute»	Systematization and organisation of information in everyday life and professional spheres using the method of decision-making based on fuzzy inference	Nilova Yelizaveta	Kozulia Mariia	**66,0**		
	Ukraine	Private Higher Education Establishment "Academician Stepan Demianchuk International University of Economics and Humanities"	Voice assistant for a smart home	Orlovskyi Danylo	Yuskovych-Zhukovska Valentyna	**65,7**		
	Ukraine	Professional College of Industrial Automation and Information Technology of Odesa National Technology University	Sustainable and Green IT Practices	Avramenko Oleksandr	Havryliuk Yuliia	**65,0**		
	Ukraine	Vinnytsia Trade and Economic Institute of the State Trade and Economic University	Design of an internet system for ordering and delivery of pizza	Bondarenko Viktoriia	Romanuke Vadim	**64,0**		
	Ukraine	Lutsk National Technical University	Digital rebuild invest	Beraya Dmytro, Zimych Alina	Lukianchuk Iurii, Bagniuk Natalia	**63,7**		
	Ukraine	Sumy National Agrarian University	Migration Of The University Educational Platform To The Cloud Management System	Kovalov Roman	Viunenko Oleksandr	**61,5**		

	Ukraine	Separated structural subdivision "Odesa Technical Professional College of Odesa National University of Technology"	Development of a computer game in the vertical scroll shooter genre and development of criteria for evaluating game projects of this type	Ryaboshapka Darya	Kryvchenko Anastasiia, Dzhabrailov Dmytro	**60,0**		
	Ukraine	State Biotechnological University	Theoretical study of the process of automated measurement of physiological parameters of biological objects	Korshunov Kostiantyn, Maltsev Kiril, Yurkovets Roman	Kosulina Natalia. Chorna Mariya	**59,0**		