



VI International Scientific and Practical Conference “Business Engineering Complex Systems: Models, Technologies, and Innovations BECS-2021”

Donetsk National Technical University and Ural Federal University named after the First President of Russia B.N. Yeltsin (UrFU) organized the joint VI International Scientific and Practical Conference “Business Engineering of Complex Systems: Models, Technologies, and Innovations BECS-2021” on November 25-26th.



Photo: DonNTU's Site

Key professionals in business system architecture simulation technology development under digital economics and process control methodology, mathematical simulation in the sphere of digital projects took part in the event. The scientific direction was represented by the staff of the department of Economic Cybernetics of DonNTU and the department of Big Data Analytics and TV Image Analysis of the Institute of Radio Electronics and Information Technologies (IRIT) of UrFU.

DonNTU's Rector Prof. A. Anoprienko, Director of the IRIT Dr. I. Obabkov, and DonNTU's Research Board Head Dr. K. Labinski welcomed the participants.

58 presentations most of which had been prepared with Russian colleagues were submitted for participations. All of them were reviewed, listened to at Zoom online sessions and got appreciation from professionals as to their novelty and applied significance for digital economics project methodology development.

Scientists from UrFU Dr. I. Obabkov (“Personnel Resources for IT: Institute Digital Transformation for Student’s Freedom and Motivation”), Prof. D. Berg (“Local Financial Resources Automation Mechanism to Implement Socially Significant Projects”), and Prof. V. Timokhin (“Digitizing Humanitarian Issues”) made their presentations at the plenary meeting. They covered results and solutions related with topical issues of complex system engineering represented by educational institutions and social systems, and the role of the system vital capacity factor under their transformation and reorganization.

Prospects and results of project training in educational programs, issues of actualization of projects to create and develop information application for businesses in the frameworks of interdisciplinary projects and applied aspects of interaction

complex system simulation in business and public administration were discussed in the breakup groups of the conference.

Results of IV International Scientific and Practical Conference “Modern World Economy: Challenges and Reality”

Donetsk National Technical University hosted the IV International Scientific and Practical Conference “Modern World Economy: Challenges and the Reality” on December 7th. Its organizers were the department of International Economics of DonNTU, the Institute of Economic Research, the Institute of Eurasian Economic Union Development Studies, Orenburg State University, and Novgorod State University named after Y. Mudri.



Photo: MOS of the DPR Site

This year’s in-person and online conference gathered 70 participants from the Russian Federation, the Lugansk People’s Republic, and the Donetsk People’s Republic. Students, employees of the Ministry of Economic Development of the DPR, the Ministry of Education and Science of the DPR, and the Institute of Economic Research showed the results of their research.

DonNTU’s Rector Prof. A. Anoprienko, the Minister of Economic Development of the DPR Mr. A. Polovyan, the Director of the Institute of Economic Research Ms N. Shemyakina, Professor of the Financial University under the RF’s Government V. Dementiev, and the Dean of the Engineering Economic Faculty of DonNTU Dr. A. Kravchenko greeted the participants. They emphasized the topicality of this annual conference to specify the DPR’s optimal development model with taking into account the world economy global trends.

The conference covered the issues of country strategic interests, structural developments in the world economy, state economic safety and management characteristics under the geopolitical extremes; social and economic development of countries in the context of global technological trends, problems and prospects of unrecognized states under the modern world economy.

The conference proceedings will be published in the DonNTU’s e-archive and data base of the Russian Science Citation Index. All participants will get their certificates for the submitted papers and also the e-collection.

Thanks to DonNTU from Kemerovo Oblast’s Governor and Kemerovski State University

Donetsk National Technical University and the Dean of its Mining Faculty Dr. A. Korchevski got a thank-you note from the governor of Kemerovo oblast - Kuzbass Mr. S. Tsivilyov and Kemerovski State University for deep confession and empathy of the university staff because of the tragic death of miners and a mine rescue team at “Listvyazhnaya” mine.

Kemerovski State University:

Dear colleagues,

On behalf of citizens of Kuzbass, students and staff of Kemerovski State University we express our gratitude for your support in these difficult times. Our regions know how hard a miner’s fate is and what price is paid for coal mining. On December 3d we again will commemorate the names of those died at “Listvyazhnaya” mine. In loving memory of our countrymen.

Faithfully,

Veronika Dzvoni

The Head of the Press Office of KemSU



Photo: DonNTU’s Site

DonNTU’s Scientists are Winners of X International Contest “Zolotoy Korifey”

According to the results of the X International Contest of Educational, Methodological, and Scientific Literature published in 2020/2021 “Zolotoy Korifey” which took place from June23 till November 23 the collective monograph “Economics at Post-Soviet Territory under New Pathologic Challenges and Digitizing Processes” ranked second in the nomination “Economic Science” in the direction of “Scientific Literature”. It had been edited by Professor, the Honored Science Worker of Udmurtia K. Pavlov (Izhevsk, “Shelest” Publishing House, 1921).



Photo: DonNTU’s Site

Such academics of the Engineering and Economic Faculty of DonNTU as Dr. I Kondaurova (Chapter 22: Human Capital: Methods, Models, and Evaluation Approaches), Dr. Zhilchenkova, and senior lecturer O. Shtager (Chapter 24: Company’s Personnel Quality Management) are the monograph author group members. High appreciation of the authors proves the Faculty’s academics professional level.

Practice of Participation of Department of Programmed Engineering of DonNTU in International Conferences on Neuroinformatics

Neural networks have become the main tool to develop not only computer vision systems but also different applied systems of diagnostics, control and forecast quite recently. The department of Programmed Engineering named after L. Feldman has been researching and developing synthetic neuron networks new architectures, their training methods, neuron networks programmed emulators for given object computer recognition and making decisions based on data intellectual analysis since 1997.

The department took part in three international scientific conferences in the RF during the current year. The I National Congress on cognitive research, artificial intelligence and neuroinformatics took place at the Russian Academy of Science (RAS) in October 2020. It was the first time when four corresponding Russian associations have gathered at one place. It was the on-line Congress because of the pandemic. 20 countries such as the USA, Great Britain, Germany, France, Spain, Canada, China, India and others took part in the Congress. The International Programming Committee had reviewed and selected the presentations. The President of the RAS academician A. Sergeev opened the Congress and greeted the participants. He emphasized the significance of artificial intelligence and neurosciences in economic development. Academicians K. Anokhin, V. Ostrovski, D. Ushakov, and P. Balaban also made their presentations at the plenary meeting. Prof. O. Fedyaev and his master student N. Tkachov took part in the conference



Administrative building of the RAS where the Congress took place
Photo: O. Fedyaev

“Neuroinformatics -2020” held in the frameworks of the Congress. Their presentation “On-line Control of Students’ Presence at Classes” covered the solving of the task of computer face recognition in the real time based on in-depth training neuron network. The presentation was published in the collection of the Springer publishing house indexed in the SCOPUS. There was a feedback- the proposal to public this topic results in such international journals as ACIS and Quest Journals Inc.

The National Research Nuclear University (Moscow) held the XXIII International Conference “Neuroinformatics -2021” on October 18-22nd 2021. It covered the issues of the theory and applications of synthetic neuron networks, neurobiology problems, adaptive behavior and cognitive research. The Conference was in the mixed format. There were a lot of organizations interested in participation in the event: 16 research institutes, 25 Russian universities, 8 companies, 28 foreign insti-

tutions (Germany, the USA, Poland, Korea, Japan, Mexico, Great Britain, and Ukraine represented by DonNTU). 76 presentations were made within the five days. Prof. O. Fedyaev and the student Y. Reshetnyak represented Donetsk and



made their on-line presentation “Neural Network Detection of the Given Type Objects on the Car Path” in which they described the solution of the scientific and practical task to search and classify the given objects on the video image with the application of computer vision modern algorithms. The developed software in the combination with the necessary hardware can be applied to observe traffic conditions on the car path in the real timescale. The paper has been published in the collection of the Springer publishing house indexed in the SCOPUS.

Russian Economic University named after G. Plekhanov (Moscow) (REU) held the XXIV International Scientific Conference “Company’s Engineering and Knowledge Control on December 2-3d. Its aim was to analyze development of promising approaches, methods and means to raise efficiency of company’s digital transformation efficiency based on modern intellectual technologies. The conference has been organized and held by the department of Applied Informatics and Information Security of REU during all these years. The department of Programmed Engineering of DonNTU has close scientific and pedagogic links with it. This fact gave rise for Prof. O. Fedyaev’s being a member of the Conference programming committee. He made his on-line presentation “On-line Control of Students at Classes with the Help of Neural Network Face Recognition” at the breakup group “Cognitive and Intellectual Technologies to Support Decision Making”. The Conference presentations will be published in the proceedings eLIBRARY.ru and some of them made in English in the collection of CEUR Workshop Proceedings indexed in the SCOPUS. Prof. O. Fedyaev, who is a member of Russian Association of Artificial Intelligence, exchanged information with his colleagues during the Conference in which such famous professionals in the field of artificial intelligence as Prof. B. Kobrinski, Prof. A. Averkin, Prof. T. Gavrilova, Prof. G. Rybina, and Prof. Y. Telnov took part.

Development of Cooperation with LPR

The Head of the department “Business and Personnel Management” of DonNTU Dr. I. Kondaurova has come back from her business trip to Lugansk State University named after Dal where she took part in the meeting of the Dissertation Board and was the official opponent and reviewer of the dissertation of N. Bryukhina



“Evaluation of Efficiency of Usage of Human Capital in the Region”.

International Scientific and Practical Conference “Economics and Marketing in XXI Century: Problems, Practice, and Prospects”

The department of “Economics and Marketing” of DonNTU held the XVII International Scientific and Practical Conference “Economics and Marketing in the XXI Century: Problems, Practice, and Prospects” online. Its organizers were DonNTU, the Ministry of Coal and Power of the DPR, the Institute of Economic Research, Donetsk National University, Donetsk Academy of Management and Public Administration under the Head of the DPR, Donbass State Technical University (the LPR, Alchevsk), Kemerovski State University, and other institutions.



Photo: Site of the MES of the DPR

There were 178 participants who represented 23 institutions of the DPR, the LPR, the RF, Belarus, and Bulgaria and had submitted 105 papers at the Conference.

There were such breakup groups as “Topical Issues and Prospects of Industrial Development of the Donetsk Region”, “Marketing Modern Concepts and Technologies”, and “Social and Economic System Sustainability” at the Conference.

Recommendations on the prospects of industrial development, industrial company competitiveness raise, and social and economic system sustainability provision summed up the event. They will be included into the Conference proceedings placed in the RSCI base.

DonNTU’s Student is among Winners of All-Russian Artistic Gymnastics Competition

The city of Astrakhan hosted the All-Russian Artistic Gymnastics Competition “Kaspiyskie Zori” on December 5-7th. More than 500 athletes took part in it.

The second year student of the Faculty of Intellectual Systems and Programming of DonNTU Irina Abakumova ranked second in the Masters of Sports program.



Photo: Site of the MES of the DPR

DonNTU's Student Ranks First at Moscow Artistic Gymnastics Tournament "Zimnie Zvyozdi"

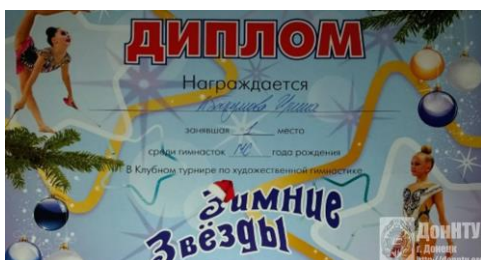


Photo: DonNTU's Site

Moscow held the Artistic Gymnastics Tournament "Zimnie Zvyozdi" on December 11-12th. There were athletes from different Russian regions among the participants. The second year student of the Faculty of Intellectual Systems and Programming of DonNTU Irina Abakumova ranked first in the Masters of Sports program.

The newsletter is prepared by the International Office of DonNTU and can include information published in the newspaper "Donetsk Polytechnic". Should you have any questions and offers as to the published material, please address us at: 1st Building of Donetsk National Technical University, room 220; tel.: 08 – 25; URL: : <http://donntu.org/international-cooperation/otdely-instituta-mezhdunorodnogo-sotrudnichestva> E-mail: ovs@donntu.org