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PROFESSIONAL AND ACADEMIC POSITIONS:

- 2020 to current Assoc. Prof. of the Department of Software Engineering and Management Intelligent Technologies (before 2022 – Department of Software Engineering and Management Information Technologies), Educational and Scientific Institute of Computer Science and Information Technologies (before 2022 – Faculty of Computer Science and Software Engineering), National Technical University "Kharkiv Polytechnic Institute";
- 2009 – 2020 Assoc. Prof. of the Department of Cybernetics of Kharkiv Petro Vasylenko National Technical University of Agriculture;
- 2008 – 2009 Senior Lecturer of the Department of Cybernetics of Kharkiv Petro Vasylenko National Technical University of Agriculture;
- 2001 – 2008 Assistant of the Department of Cybernetics of Kharkiv Petro Vasylenko National Technical University of Agriculture.

EDUCATION:

Ph.D. (Technical sciences) (April, 2009) Kharkiv National University of Radio Electronics, Kharkiv, Ukraine.

Specialization: mathematical modeling and computational methods

Specialist Degree (Applied Mathematics, 5.5 years, Honors Diploma) (January, 1996) Kharkiv State Polytechnic University, Kharkiv, Ukraine

Concentrations: Applied Mathematics

COURSES TAUGHT

- Python Frameworks (lectures and lab classes in English and Ukrainian at Bachelor level),
- Fundamentals of Python Programming (lectures in English and Ukrainian at Bachelor level),
- Advanced Python Programming Course (lectures in English and Ukrainian at Bachelor level)

FIELDS OF RESEARCH INTEREST:

- Data Mining,
- Machine Learning,
- Computer Vision,
- Mathematical Modeling,
- Operations Research,
- Optimization Methods.

SUMMARY OF CAREER ACHIEVEMENTS

- Prepared and published more than 67 publications, 4 collective monographs, 3 textbooks, 8 articles in publications indexed in Scopus and Web of Science.
(Google Scholar - <https://scholar.google.com/citations?user=jeD1w74AAAAJ&hl;>
ORCID ID is 0000-0001-6770-6778,
Scopus Author ID <https://www.scopus.com/authid/detail.uri?authorId=57212035934>)

RELATED PUBLICATIONS

Books:

- Kutsenko, A., Kovalenko, S., Tovazhnyanskyy, V., Kovalenko, S. System Approach to Control-Oriented Mathematical Modeling of Thermal Processes of Buildings. In: Zgurovsky, M., Pankratova, N. (eds) System Analysis & Intelligent Computing. SAIC 2020. Studies in Computational Intelligence, vol 1022. Springer, Cham.: pp 37–52.
- https://link.springer.com/chapter/10.1007/978-3-030-94910-5_3

Papers

- Kutsenko A., Kovalenko Sv., Kovalenko Ser. Development and Generalization of the Main Provisions of Equilibrium Thermodynamics Applied to General Quasi-Static Systems, 2022 IEEE 3rd International Conference on System Analysis & Intelligent Computing, , pp. 177-182 <https://ieeexplore.ieee.org/document/9922990>
- .Megel Y., Kutsenko A., Blagov I., Kovalenko Sv., Kovalenko Ser., Malko M., Rybalka A. Information System for Automating Processes of Biological Objects Detection, Recognition, and Measurement, 2021 XXXI International Scientific Symposium Metrology and Metrology Assurance (MMA), 2021, Sozopol, Bulgaria, 2021, pp. 1-6, <https://ieeexplore.ieee.org/document/9610832>
- Kovalenko S.M. Forecasting the production of agricultural products by machine learning methods / S.M. Kovalenko, S.V. Kovalenko // Visnyk of Kharkiv. nat. tech. un-tu villages. household in them. P. Vasilenko. - Kharkiv, 2020. - Issue. 210: Econ. science. - P. 56-68. https://www.researchgate.net/publication/354270222_PROGNOZUVANNA_VIROBNICTVA_SILSKOGOSPODARSKOI_PRODUKЦИИ_METODAMI_MASINNOGO_NAVCANNA
- Megel Y.Ye. Approach to quantitative assessment of the impact of inbound tourism on the country's economy / Yu.Ye. Megel, S.M. Kovalenko, S.V. Kovalenko, O.D. Mikhnova // Information processing systems. - 2019. - № 3(158). – C. 65–72. <http://www.hups.mil.gov.ua/periodic-app/article/19500>
- Megel Y. E. Prediction techniques and economic breeding index for analyzing multidimensional feature vectors / Y. E. Megel, O. D. Mikhnova, S. M. Kovalenko // Visnyk KhNTUSG. Technical sciences. Issue 203 "Problems of energy supply and energy saving in the agro-industrial complex of Ukraine". - Kharkiv: KhNTUSG, 2019 - P. 145–148. http://repository.kpi.kharkov.ua/bitstream/KhPI-Press/51598/1/visnyk_KhNTUSH_2019_203_Megel_Prediction.pdf
- Kashcheev L.B. An approach to assessing the quality of food packaging, based on fuzzy inference / L.B. Kashcheev, S.V. Kovalenko, S.M. Kovalenko, Y.E. Megel, V.P. Putyatin, I.V. Chaly // Bulletin of the Kharkiv National University. tech. un-tu villages. household in them. P. Vasilenko. - Kharkiv: KhNTUSG, 2019. - Issue. 207. - P. 35–41. <http://dspace.khntusg.com.ua/bitstream/123456789/10508/1/13.pdf>
- Alexander Kutsenko, Svitlana Kovalenko, Sergii Kovalenko, Leonid Kashcheiev, Olena Mikhnova, Igor Chaly. A Fuzzy Logic Based Approach to E-tourist Attractiveness Assessment // Proceedings of IEEE International Conference on System Analysis & Intelligent Computing <https://ieeexplore.ieee.org/document/9239184>

- Yury Megel, Olena Mikhnova, Svitlana Kovalenko, Sergey Kovalenko, Antonina Rybalka, Igor Chalyi and Ivaylo Blagov. Measuring multimedia content proximity via artificial intelligence methods // Proceedings of 30th IEEE International Scientific Symposium September 7 -11, 2020, Sozopol, Bulgaria “Metrology and Metrology Assurance 2020”
<https://ieeexplore.ieee.org/abstract/document/9254237>
- An approach to quality evaluation of embryos based on their geometrical parameters / Alexander Kutsenko, Yuriy Megel, Sergii Kovalenko, Svitlana Kovalenko, Omiotek Zbigniew, U. Zhunisova // Photonics Applications in Astronomy, Communications, Industry, and High-Energy Physics Experiments 2019 : Proceedings of SPIE - The International Society for Optical Engineering, Wilga, Poland, 26 May - 2 June 2019. - 2019. - Vol. 11176, № 111762G.
<https://www.spiedigitallibrary.org/conference-proceedings-of-spie/11176/2536420/An-approach-to-quality-evaluation-of-embryos-based-on-their/10.1117/12.2536420.full?SSO=1>