



Name	Kyryl Korobchynskiy
Position, Department/Faculty	Associate Professor, Mathematical Modelling and Artificial Intelligence department
Academic Degree, Academic Title	Candidate of Technical Sciences (PhD) Associate Professor
Email:	k.korobchinskiy@khai.edu
Scopus Author ID:	57204953347
Web of Science ResearcherID:	D-5251-2017
ORCID iD:	0000-0002-3676-6070
Google Scholar:	https://scholar.google.com/citations?hl=uk&user=UTJgw1oAAAAJ
ResearchGate:	https://www.researchgate.net/profile/Kirill-Korobchinskiy

EDUCATION:

Basic education (university, major, year of graduation):

MSc, Applied Mathematics

National Aerospace University "Kharkiv Aviation Institute", Kharkiv, Ukraine [2004/01 – 2005/06]

BSc, Applied Mathematics

National Aerospace University "Kharkiv Aviation Institute", Kharkiv, Ukraine [2000/09 – 2004/06]

Postgraduate/Doctoral studies:

Associate Professor,

Mathematical Modelling and Artificial Intelligence [2023/11]

PhD, Information Technologies

Simon Kuznets Kharkiv National University of Economics, Kharkiv, Ukraine [2019/11]

Additional training, certification programs:

This certificate is proudly presented to Kyryl Korobchynskiy successfully completed, received a passing grade, and was awarded this Sigma Software University Honor Code Certificate of Completion in SSWU: Teachers' Smart Up: Winter Edition 3.0 2024, 30 hours (1 ECTS), 22-26.01.2024

Assoc. Prof., PhD Kyryl Korobchynskiy has participated in the Wildau-Kharkiv IT Bridge II in the DAAD programme "Digital Ukraine: Ensuring academic success in times of crisis (2023)" in summer semester 2023 Programming and algorithmic languages (C++ language Part II), Bachelor, 4 CP*

For successful completion of the advanced training course at Private higher educational institution "Kharkiv University of Technology "STEP" (order № 001/2302-nK from 07.02.2023) The course was conducted as a part of the project "Prof2IT" of NGO Kharkiv IT Cluster with participation of Grid Dynamics IT company in the field of study:



"INTRODUCTION TO PYTHON PROGRAMMING FOR BIG DATA AND DATA SCIENCE"

Received a passing grade, and was awarded this Sigma Software University Honor Code Certificate of Completion in SSWU TCHR002: TEACHERS' SMARTUP: WINTER PRODUCTIVITY, 30 hours (1 ECTS), 23-27.01.2023

WORK EXPERIENCE:

Professional Career (Workplace, Years, Position):

Associate Professor	2020/12 – now
Mathematical Modelling and Artificial Intelligence Department National Aerospace University "Kharkiv Aviation Institute", Kharkiv, Ukraine	
Deputy Head of the department for research, organizational and methodical work	2024/09 – now
Mathematical Modelling and Artificial Intelligence Department National Aerospace University "Kharkiv Aviation Institute", Kharkiv, Ukraine	
Senior Lecturer	2011/09 – 2020/11
Informatics Department National Aerospace University "Kharkiv Aviation Institute", Kharkiv, Ukraine	
Teaching Assistant	2006/09 – 2011/08
Informatics Department National Aerospace University "Kharkiv Aviation Institute", Kharkiv, Ukraine	
Research and Development Engineer	2002/09 – 2006/08
Informatics Department National Aerospace University "Kharkiv Aviation Institute", Kharkiv, Ukraine	
Development Technician (network administrator)	2003/12 – 2008/02
Aerospace Lyceum on the basis National Aerospace University "Kharkiv Aviation Institute", Kharkiv, Ukraine	

Teaching Experience:

Lecturer , Object-Oriented Programming C#, Bachelor level,	2014 – 2016
National Aerospace University "Kharkiv Aviation Institute", Kharkiv, Ukraine	
Lecturer , Mathematics, High school,	2023 – 2025
National Aerospace University "Kharkiv Aviation Institute", Kharkiv, Ukraine	
Lecturer , Using Git for Software Development; Masters level,	2025 – 2025
National Aerospace University "Kharkiv Aviation Institute", Kharkiv, Ukraine	
Teaching Assistant , Computer Networks, Bachelor level,	2023 – 2024
National Aerospace University "Kharkiv Aviation Institute", Kharkiv, Ukraine	
Lecturer , Non-Relational Databases, Bachelor level,	2024 – 2025
National Aerospace University "Kharkiv Aviation Institute", Kharkiv, Ukraine	
Lecturer , Git for Distributed Software Development, Bachelor level,	2025 – 2025
National Aerospace University "Kharkiv Aviation Institute", Kharkiv, Ukraine	
Teaching Assistant , Numerical Methods, Bachelor level,	2018 – 2019
National Aerospace University "Kharkiv Aviation Institute", Kharkiv, Ukraine	
Lecturer , System Programming, Bachelor level,	2020 – 2025

National Aerospace University "Kharkiv Aviation Institute", Kharkiv, Ukraine
Lecturer, Databases and Information Systems, Bachelor level, 2005 – 2025
National Aerospace University "Kharkiv Aviation Institute", Kharkiv, Ukraine
Lecturer, Programming Fundamentals (C++), Bachelor level, 2005 – 2025
National Aerospace University "Kharkiv Aviation Institute", Kharkiv, Ukraine

RESEARCH ACTIVITIES:

Main Research Areas:

Artificial Intelligence and Educational Technologies: intelligent learning support systems, database organization with AI, online courses, learning process automation, algorithmic languages and programming.

Mathematical Modeling and Numerical Methods: modeling of kinetic processes in electrochemical systems, simulation of explosion processes and toxic emissions, assessment of terrain relief and wind speed influence on accident consequences, numerical optimization methods and decision-making visualization.

Technogenic Safety and Ecology: modeling of emissions and explosions in open atmosphere, assessment of accident consequences for humans, reliability of pipeline systems functioning, analysis of harmful substances dispersion in the environment.

Optimization and Spatial Configurations: synthesis of optimal spatial structures, object packing algorithms, genetic algorithms, visualization of decision-making processes, information technologies for configuration problems.

Number of Publications (Scopus, WoS, others):

As of May 2025: author of 78 publication, 14 of which indexed in Scopus database. Hirsch index – 5 (Scopus).

Key Articles (Scopus, WoS, others):

Yakovlev S., Kartashov O., Korobchynskiy K.

AUTHOR FULL NAMES: Yakovlev, Sergiy (7006718461); Kartashov, Oleksii (57204835505); Korobchynskiy, Kyryl (57204953347) 7006718461; 57204835505; 57204953347 The Informational Analytical Technologies of Synthesis of Optimal Spatial Configuration (2018) International Scientific and Technical Conference on Computer Sciences and Information Technologies, 2, art. no. 8526704, pp. 140 - 143, Cited 8 times.

DOI: 10.1109/STC-CSIT.2018.8526704

Yakovlev S., Kartashov O., Korobchynskiy K.

AUTHOR FULL NAMES: Yakovlev, Sergiy (7006718461); Kartashov, Oleksii (57204835505); Korobchynskiy, Kyryl (57204953347) Models and methods of information technologies of spatial configurations synthesis (2019) CEUR Workshop Proceedings, 2353, pp. 292 - 302,

Korobchynskiy K., Berestenko A.

AUTHOR FULL NAMES: Korobchynskiy, Kyryl (57204953347); Berestenko, Anastasiia (58904516000) Involvement of information technologies for the startup online course for learning the English language (2023) CEUR Workshop Proceedings, 3641, pp. 194 - 203,

Yakovlev S., Kartashov O., Korobchynskiy K., Yakovleva I., Yarovaya O. AUTHOR FULL NAMES: Yakovlev, Sergiy (7006718461); Kartashov, Oleksii (57204835505); Korobchynskiy, Kyryl (57204953347); Yakovleva, Iryna (57210412302); Yarovaya, Olga (57204828724) Optimal spatial configurations synthesis using visualization of



the decision-making process (2021) CEUR Workshop Proceedings, 3003, pp. 114 - 122,

Skob Y., Yakovlev S., Pichugina O., Kalinichenko M., Korobchynskiy K., Hulianytskyi A. AUTHOR FULL NAMES: Skob, Yurii (57203641210); Yakovlev, Sergiy (7006718461); Pichugina, Oksana (57163964800); Kalinichenko, Mykola (58115852600); Korobchynskiy, Kyryl (57204953347); Hulianytskyi, Andrii (56103536600) Numerical Evaluation of Wind Speed Influence on Accident Toxic Spill Consequences Scales (2023) Environmental and Climate Technologies, 27 (1), pp. 450 - 463, DOI: 10.2478/rtuct-2023-0033

Krivtsov S., Menailov I., Korobchynskiy K. AUTHOR FULL NAMES: Krivtsov, Serhii (57214220648); Menailov, Ievgen (57202229519); Korobchynskiy, Kyryl (57204953347) 57214220648; 57202229519; 57204953347 Detection of Patients with Diabetes Mellitus using Density-Based Spatial Clustering of Applications with Noise (2022) CEUR Workshop Proceedings, 3348, pp. 97 - 103,

Yakovlev S., Kartashov O., Korobchynskiy K., Skripka B. AUTHOR FULL NAMES: Yakovlev, Sergiy (7006718461); Kartashov, Oleksii (57204835505); Korobchynskiy, Kyryl (57204953347); Skripka, Bohdan (57210417448) 7006718461; 57204835505; 57204953347; 57210417448 Numerical results of variable radii method in the unequal circles packing problem (2019) Experience of Designing and Application of CAD Systems in Microelectronics, art. no. 8779288, DOI: 10.1109/CADSM.2019.8779288

Korobchynskiy K., Shapovalov M., Seredenko V. AUTHOR FULL NAMES: Korobchynskiy, Kyryl (57204953347); Shapovalov, Maksym (59423227400); Seredenko, Viktoriia (59423329800) 57204953347; 59423227400; 59423329800 Development and analysis of the training course "Organization of databases" with AI (2024) CEUR Workshop Proceedings, 3777, pp. 300 - 314

Yakovlev S., Kartashov O., Pichugina O., Korobchynskiy K. AUTHOR FULL NAMES: Yakovlev, Sergiy (7006718461); Kartashov, Oleksii (57204835505); Pichugina, Oksana (57163964800); Korobchynskiy, Kyryl (57204953347) Genetic algorithms for solving combinatorial mass balancing problem (2019) 2019 IEEE 2nd Ukraine Conference on Electrical and Computer Engineering, UKRCON 2019 - Proceedings, art. no. 8879938, pp. 1061 - 1064, Cited 6 times. DOI: 10.1109/UKRCON.2019.8879938

Martynov D., Zholudov Y., Slipchenko M., Slipchenko O., Korobchynskiy K. AUTHOR FULL NAMES: Martynov, Danylo (57221536040); Zholudov, Yuriy (24759544600); Slipchenko, Mykola (24315146500); Slipchenko, Olena (57204838800); Korobchynskiy, Kyryl (57204953347) Numerical Simulation of Kinetic Processes in Thin-layer Electrochemiluminescent Light Emitting Cells (2024) CEUR Workshop Proceedings, 3777, pp. 338 - 347, . <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85210103915&partnerID=40&md5=6f26a0d52bbc634c8c9935a1dfdd7f3d>

TEACHING ACTIVITIES:

Courses Taught:

Programming Fundamentals (C++); Programming and Algorithmic Languages; Databases and Information Systems; System Programming; Database Organization; Web Programming; Git for Distributed Software Development; Non-Relational Databases; Computer Networks; Using Git for Software Development; Mathematics; Object-Oriented Programming C#; Theory of Algorithms; Numerical Methods; Programming; Discrete Mathematics; Mathematical Logic

Author Courses, Academic Programs:

Programming Fundamentals (C++); Programming and Algorithmic Languages; Databases and Information Systems; System Programming; Database Organization; Web Programming; Git for Distributed Software Development; Non-Relational Databases; Computer Networks; Using Git for



Software Development; Mathematics; Object-Oriented Programming C#; Theory of Algorithms; Numerical Methods; Programming;

Methodological Materials, Textbooks:

Co-author of 5 methodological manuals.

ADDITIONAL INFORMATION:

Language Proficiency:

English, Ukrainian – Native, Russian – Second Native

IT Skills:

Modelling, .NET C#, Databases, Python, MathCad, MatLab, C++, Microsoft Office, Zoom, ...

Social and Community Activities:

Charity during the full-scale invasion of Russia.

As part of the Foundation's program aimed at supporting family forms of upbringing in the Kharkiv region, "Strengthening alternative care in support of the Better Care reform in Kharkivska oblast", a mathematics tutor

Reviewer,

This is to certify that Kyryl Korobchynskyi has participated as Technical Program Committee Member and Reviewer in the 5th World Conference on Artificial Intelligence: Advances and Applications (WCAIAA 2024) held at Sir Padampat Singhania University, Udaipur, India during February 22-23, 2024.

We appreciate the support and cooperation of Kyryl Korobchynskyi as member Technical Program Committee and Reviewer during 5th Congress on Intelligent Systems (CIS 2024) organized by the Department of Computer Science and Engineering, CHRIST (Deemed to be University), Kengeri Campus, Bangalore, and Liverpool Hope University, U.K. CIS 2024 is sponsored by Science and Engineering Research Board, Department of Science and Technology, Government of India (ANRF) and Soft Computing Research Society (SCRS), New Delhi.

Program Committee Member and Reviewer in the 5th International Conference on Sustainable and Innovative Solutions for Current Challenges in Engineering & Technology (ICSISCET 2023) held during October 21-22, 2023.

We appreciate the support and cooperation of Kyryl Korobchynskyi as a Program Committee Member and Reviewer in the 2nd International Conference on Advances in Data-driven Computing and Intelligent Systems (ADCIS 2023) held during September 21-23, 2023.

Program Committee Member and Reviewer the 2023 IEEE World Conference on Applied Intelligence and Computing (AIC 2023) held during July 29-30, 2023 in India.

Program Committee Member and Reviewer in the International Conference on Computer Vision and Robotics (CVR 2023) held during February 24-25, 2023 in India.