



Name	Andriy Chukhray
Position, Department/Faculty	Professor, Software Engineering Department, National Aerospace University "Kharkiv Aviation Institute"
Academic Degree, Academic Title	Doctor of Technical Sciences, Professor
Email:	achukhray@gmail.com, a.chukhray@khai.edu
Scopus Author ID:	https://www.scopus.com/authid/detail.uri?authorId=57194523801
Web of Science ResearcherID:	https://www.webofscience.com/wos/author/reCORD/ABA-3759-2021
ORCID iD:	https://orcid.org/0000-0002-8075-3664
Google Scholar:	https://scholar.google.com.ua/citations?hl=uk&user=2UjU05UAAAAJ
ResearchGate:	https://www.researchgate.net/profile/Andrey-Chukhray?ev=hdr_xprf

EDUCATION:

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

Specialist Degree in Software Engineering

State Aerospace University "Kharkiv Aviation Institute" [1999]

Master of Science in Software Engineering

State Aerospace University "Kharkiv Aviation Institute" [2000]

Postgraduate/Doctoral studies:

Candidate of Technical Sciences (PhD) in Information Technologies

National Aerospace University "Kharkiv Aviation Institute" [2004]

Doctor of Technical Sciences in Information Technologies

National Aerospace University "Kharkiv Aviation Institute" [2014]

Additional training, certification programs:

Certificate of successful completion of an internship in intelligent computer training programs

Carnegie Mellon University, Pittsburgh, USA

Supervisor: Dr. Bruce M. McLaren

[October – December 2011]

Internship

University of Southampton, Southampton, England

[October 2012]

Certificate of participation and teaching within the DAAD and Wildau University Grant Program

Teaching courses: "Intelligent Tutoring Systems", "Advanced Relational Databases", "Analysis of Systems"

Wildau University, Germany

[2022 – 2024]

Professional certification (Brainbench):

Certified C++ Programmer

Certified Delphi Programmer

Certified RDBMS Concepts

Certified Programming Concepts

Certified Networking Concepts

WORK EXPERIENCE:

Professional Career (Workplace, Years, Position):

Professor, Software Engineering Department

National Aerospace University "Kharkiv Aviation Institute" [2024 – present]

Professor, Department of Mathematical Modelling and Artificial Intelligence

National Aerospace University "Kharkiv Aviation Institute" [2017 – 2024]

Head of the Department of Mathematical Modelling and Artificial Intelligence

National Aerospace University "Kharkiv Aviation Institute" [2017 – 2024]

Head of the Educational and Analytical Department

National Aerospace University "Kharkiv Aviation Institute" [2014 – 2017]

Professor, Department of Aircraft Control Systems

National Aerospace University "Kharkiv Aviation Institute" [2015 – 2019]

Associate Professor, Department of Aircraft Control Systems

National Aerospace University "Kharkiv Aviation Institute" [2004 – 2015]

Assistant, Department of Aircraft Control Systems

National Aerospace University "Kharkiv Aviation Institute" [2003 – 2004]

Postgraduate Student, Department of Aircraft Control Systems

National Aerospace University "Kharkiv Aviation Institute" [2000 – 2003]

Deputy Head of the Department of Aircraft Control Systems for Research Work

National Aerospace University "Kharkiv Aviation Institute" [2004 – 2014]

Deputy Dean of the Faculty of Aircraft Control Systems for Research Work

National Aerospace University "Kharkiv Aviation Institute" [2004 – 2014]

Member of the Specialized Academic Council D64.062.01

National Aerospace University "Kharkiv Aviation Institute" [2015 – present]

Expert

National Agency of Higher Education Quality Assurance [2024]

Teaching Experience:

Professor / Associate Professor
National Aerospace University "Kharkiv Aviation Institute"

Courses taught:

Discrete Mathematics; Algorithms and Data Structures; Object-Oriented Programming;
Computer Networks and Information Coding; Computer System Architecture;
Databases; System Modelling; Decision Theory; Computational Intelligence;
Intelligent Tutoring Systems

Chairman of the Examination Commission for Bachelor's and Master's Thesis Defence:

– Department of Theoretical and Applied Informatics,
Kharkiv National University named after V. N. Karazin
[2017–2018, 2018–2019, 2019–2020]

– Department of Computer Sciences, Sumy State University
[2019–2020, 2020–2021, 2021–2022]

Supervision of postgraduate students:

Prepared 3 Candidates of Technical Sciences (PhD)

Experience in International or National Projects:

Participant and project member in national and international research and educational projects in the field of intelligent tutoring systems, information management systems, and adaptive learning technologies.

Key projects and funding organizations:

- National Aerospace University "Kharkiv Aviation Institute" [2004 – present]
- Carnegie Mellon University, Pittsburgh, USA [2011]
- University of Applied Sciences of Upper Austria, Wels [2006 – 2009]
- Training Program Development Center, Beijing, China [2019]
- Center for Innovation in Mathematics Education, Plymouth, England [2009 – 2010]
- Kharkiv Regional Center for Evaluation of the Quality of Education [2007 – 2008]
- European Union, TEMPUS Grant [2011 – 2014]

Project roles: Programmer, Mathematician, Analyst, Project Manager

RESEARCH ACTIVITIES:

Main Research Areas:

Information management systems; data quality in databases; intelligent tutoring systems; adaptive learning systems; computational intelligence; modelling of training processes; intelligent computer-based learning systems.

Number of Publications (Scopus, WoS, others):

29 publications indexed in Scopus; h-index = 6.

Additional publications in international conference proceedings and national scientific journals.

Participation in Scientific Conferences:

Regular participation in international and national scientific conferences in the fields of information technologies, artificial intelligence, intelligent tutoring systems, and computer science, including conferences indexed in Scopus and CEUR Workshop Proceedings.

TEACHING ACTIVITIES:

Courses Taught:

Discrete Mathematics; Algorithms and Data Structures;
Object-Oriented Programming; Computer Networks and Information Coding;
Computer System Architecture; Databases; System Modelling;
Decision Theory; Computational Intelligence; Intelligent Tutoring Systems.

GRANTS AND PROJECTS:

Participation in International and National Projects:

Projects on development and implementation of intelligent tutoring systems in the following domains: system modelling; theory of automatic control; databases; mathematics; electronics; fault-tolerant control; algorithms and data structures.

Project roles: Programmer, Mathematician, Analyst, Project Manager.

Funding organizations and partners:

- National Aerospace University "Kharkiv Aviation Institute" [2004 – present]
- Training Program Development Center, Beijing, China [2019]
- Carnegie Mellon University, Pittsburgh, USA [2011]
- University of Applied Sciences of Upper Austria, Wels [2006 – 2009]
- Center for Innovation in Mathematics Education, Plymouth, England [2009 – 2010]
- Kharkiv Regional Center for Evaluation of the Quality of Education [2007 – 2008]
- European Union, TEMPUS Grant [2011 – 2014]

Additional applied projects:

- Automation of document flow for finished products sales
NVP "Hartron-Plant", Kharkiv [2006 – 2007]
- Fuzzy search system for persons suspected of terrorism and financial fraud
CS, Kharkiv [2004]
- Information system for managing administrative and financial activities of the university National Aerospace University "Kharkiv Aviation Institute" [1998 – 2005]
- Enterprise management information system LLC "UkrLend" [1997 – 1998]

Grants, Scholarships, Academic Mobility Programs:

Grants of the President of Ukraine for Young Scientists [2006]

Scholarship of the Cabinet of Ministers of Ukraine [2006 – 2008]

Grants of the University of Applied Sciences Zittau/Görlitz (Germany)
for participation in the Zittau Fuzzy Colloquium international conference



[2005, 2006, 2008, 2010, 2011, 2013]

Grant of the Ministry of Education and Science of Ukraine
for internships in leading foreign universities [2011]

DAAD and Wildau University Grant (Germany)
for teaching courses "Intelligent Tutoring Systems", "Advanced Relational Databases",
"Analysis of Systems" [2022 – 2024]

PROFESSIONAL ACHIEVEMENTS AND AWARDS:

Distinctions, Awards, Prizes:

Winner of the "Grants of the President of Ukraine for Young Scientists" competition
[2006]

Scholar of the Cabinet of Ministers of Ukraine
[2006 – 2008]

Awarded the Diploma of the Presidium of the National Academy of Sciences of Ukraine
[2004]

Scholar of the Kharkiv Regional State Administration named after G.F. Proskura
[2010 – 2011]

Winner (1st place) of the annual competition "The Best by Profession" (IKARI KHAI):
– Nomination "Young Scientist" [2006]
– Nomination "Scientist" [2013]
– Nomination "Scientist" [2014]

Laureate (2nd place) of the annual competition "The Best by Profession" (IKARI KHAI),
Nomination "Young Scientist" [2004]

Certificate of successful completion of an internship at Carnegie Mellon University, USA
[2011]

Awarded the statuette "Star" of the first annual competition
"Alley of Stars of the Faculty of Aircraft Control Systems"
[2014]

Awarded the Honorary Badge "For Merit" before KHAI University
[2015]

Gratitude of the Kharkiv Regional Council
[2018]

Certificate of Honor of the Kharkiv City Council



A blue geometric shape, resembling a stylized wing or a series of overlapping triangles, is located in the top left corner.

[2019]

Gratitude of the Ministry of Education and Science of Ukraine
[2021]

Gratitude of the Kharkiv Regional Military Administration
[2023]

Membership in Professional Associations:

Expert of the National Agency of Higher Education Quality Assurance [2024]

Member of the Specialized Academic Council D64.062.01
National Aerospace University "Kharkiv Aviation Institute" [2015 – present]

INTERNATIONAL ACTIVITIES:

Internships:

Internship in intelligent computer training programs
Carnegie Mellon University, Pittsburgh, USA
[October – December 2011]

Internship
University of Southampton, Southampton, England
[October 2012]

Cooperation with Foreign Universities:

Carnegie Mellon University, Pittsburgh, USA
University of Applied Sciences of Upper Austria, Wels, Austria
University of Applied Sciences Zittau/Görlitz, Germany
Wildau University, Germany
Center for Innovation in Mathematics Education, Plymouth, England

Teaching/Lecturing Abroad:

Teaching courses "Intelligent Tutoring Systems", "Advanced Relational Databases",
"Analysis of Systems" within the DAAD and Wildau University Grant Program,
Wildau University, Germany
[2022 – 2024]

SELECTED PUBLICATIONS:

Key Articles (Scopus, WoS, others):

Chukhray, A.; Dvinskykh, D.; Narozhnyy, V.; Stoliarenko, T. (2023).
Using an expression tree for adaptive learning.
Proceedings of the 13th International Conference on Dependable Systems, Services and
Technologies (DESSERT 2023).

Chukhray, A.; Dvinskykh, D.; Narozhnyy, V.; Trofymova, I.; Stoliarenko, T. (2023).



Using binominal theorem for expression tree comparing in Intelligent Tutoring Systems.
CEUR Workshop Proceedings.

Havrylenko, O.; Kulik, A.; Chukhray, A. (2022).
The choice of the operability restore tools of rational control objects.
CEUR Workshop Proceedings.

Chukhray, A.; Yashina, E. (2021).
Models and software for intelligent web-based testing systems in mathematics.
CEUR Workshop Proceedings, 3003, 1–10.

Kulik, A.; Chukhray, A.; Chernenko, M.; Leshchenko, O. (2021).
Diagnostic support of an intelligent tutor system for teaching skills to solve algebraic equations.
Radioelectronic and Computer Systems, (3), 160–168.

Chukhray, A.; Havrylenko, O. (2021).
The engineering skills training process modeling using dynamic Bayesian nets.
Radioelectronic and Computer Systems, (2), 87–96.

Chukhray, A.; Havrylenko, O. (2020).
Index-requisite data diagnostics in information management systems.
CEUR Workshop Proceedings, 2740, 75–86.

Markovych, S.; Chukhray, A.; Lukashov, V.; Havrylenko, O.; Novytska, O. (2021).
A graphical environment for algorithms training.
Lecture Notes in Networks and Systems, 188, 186–205.

ADDITIONAL INFORMATION:

Language Proficiency:

Ukrainian, English

IT Skills:

Programming languages and technologies: Delphi, C#, Java, PHP, Python, ActionScript

Databases: Oracle, MySQL, Microsoft SQL Server

Areas of application: information management systems, intelligent tutoring systems, database systems, adaptive learning systems.

Social and Community Activities:

Expert of the National Agency of Higher Education Quality Assurance [2024]

Member of specialized academic council for the defense of doctoral and candidate theses
National Aerospace University "Kharkiv Aviation Institute" [2015 – present]

Chairman of Examination Commissions for Bachelor's and Master's thesis defense
Kharkiv National University named after V. N. Karazin; Sumy State University
[2017 – 2022]