



Name	Leshchenko Oleksandr
Position, Department/Faculty	Professor, Department of Computer Science and Information Technologies / Faculty of Aircraft Control Systems
Academic Degree, Academic Title	Candidate of Technical Sciences, Associate Professor, Professor of Kharkiv Aviation Institute
Email:	o.leshchenko@khai.edu
Scopus Author ID:	57355823700
Web of Science ResearcherID:	E-1182-2019
ORCID iD:	0000-0001-9405-4904
Google Scholar:	https://scholar.google.ru/citations?hl=ru&pli=1&user=xEkJzcwAAAAJ
ResearchGate:	https://www.researchgate.net/profile/Oleksandr-Leshchenko

EDUCATION:

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

Kharkiv Aviation Institute, Automated Control Systems, 1984.

Postgraduate/Doctoral studies:

1. Candidate of Technical Sciences, National Aerospace University "Kharkiv Aviation Institute", 1993.
2. Senior Researcher, Automation of Technological Processes and Production, National Aerospace University "Kharkiv Aviation Institute", 1996.
3. Associate Professor, Department of Information Systems, National Aerospace University "Kharkiv Aviation Institute", 1999.
4. Professor of Kharkiv Aviation Institute, National Aerospace University "Kharkiv Aviation Institute", 2021.

Additional training, certification programs:

1. "Teachers` Smartup" course by Sigma Software University. Certificate № 10157. Partner of the course — IT Ukraine Association, 1 EST. 24 - 28.01.2022
2. Advanced training at the National Aerospace University "Kharkiv Aviation Institute" Certificate of advanced training Series PC № 02066769/000824-22, order № 231 7.12.2022.
3. International Scientific and Technical Seminar "Critical Computer Technologies and Systems (CriCTechS)", 2 hours, December 22, 2022
4. International Scientific and Technical Seminar "CriCTechS", 1 hour, December 31, 2022
5. SSWU TCHR002: Teachers` Smartup: Winter Productivity", 30 hours (1 EST). 01/23-27/2023.
6. Clarivate "Institution Profile in the Web of Science: Creation, Adjustment, Functions, Opportunities", 1 hour, January 12, 2023
7. Clarivate "On Financing Scientific Research", 1 hour, January 26, 2023
8. Roundtable "Digital Transformation of Scientific Activities in Higher Education Institutions in the Conditions of European Integration", 3 hours. January 31, 2023. Certificate 20230131/495.
9. Clarivate "Open Access in Ukraine and the World", opportunities, 1 hour, February 9, 2023

- 10.SSWU: Teachers` Startup: Summer Edition", 30 hours (1 EST). 17-21.07.2023.
- 11.GlobalLogic Education. IT Tools for Teachers, 18 hours, July 2023.
- 12.SSWU TCHR001: Teachers` Startup: Summer Edition", 30 hours (1 EST). 1-5.08.2023.
- 13.SSWU: Teachers` Startup: Winter Edition 3.0 2024", 30 hours (1 EST). 22-26.01.2024.
- 14.Sigma Software University: Teachers` Startup: Summer Edition 2024", 30 hours, (1 EST), 22-26.07.2024.
- 15.Advanced training at the National Aerospace University "Kharkiv Aviation Institute", discipline "Culture of Ukrainian Speech" (module 3), 30 hours, (1 EST) Khai Order No. 227 dated 31.05.2024.
- 16.International Scientific and Technical Seminar "Critical Computer Technologies and Systems (CriKTechS)", 2 hours, October 31, 2024.

WORK EXPERIENCE:

Professional Career (Workplace, Years, Position):

Dec 1989 – Dec 1992	Graduate Student, Department of Information Control Systems, National Aerospace University "Kharkiv Aviation Institute", Kharkiv, Ukraine
Jan 1993 – Aug 1993	Researcher, National Aerospace University "Kharkiv Aviation Institute", Kharkiv, Ukraine
Sep 1993 – Aug 1995	Senior Researcher, National Aerospace University "Kharkiv Aviation Institute", Kharkiv, Ukraine
Sep 1995 – May 1997	Assistant, Department of Information Control Systems, National Aerospace University "Kharkiv Aviation Institute", Kharkiv, Ukraine
Jun 1997 – Aug 2022	Associate Professor, Department of Information Control Systems, National Aerospace University "Kharkiv Aviation Institute", Kharkiv, Ukraine
Sep 2023 – Current	Professor, Department of Computer Science and Information Technologies (the department was renamed in 2019), National Aerospace University "Kharkiv Aviation Institute", Kharkiv, Ukraine

Teaching Experience:

Sep 1995 – May 1997	Assistant, Department of Information Control Systems, National Aerospace University "Kharkiv Aviation Institute", Kharkiv, Ukraine
Jun 1997 – Aug 2022	Associate Professor, Department of Information Control Systems, National Aerospace University "Kharkiv Aviation Institute", Kharkiv, Ukraine
Sep 2023 – Current	Professor, Department of Computer Science and Information Technologies (the department was renamed in 2019), National Aerospace University "Kharkiv Aviation Institute", Kharkiv, Ukraine

Experience in International or National Projects:

2003 - 2005	Executor	State budget project "Development of methodological principles, methods and mathematical models of logistics analysis and management of complex technological complexes", National Aerospace University "Kharkiv Aviation Institute" (No 0103U004080, MES of Ukraine)
2004 - 2005	Executor	State budget project "System methodology and information technologies for quality management of projects for the creation of high-tech samples of new technology ", National Aerospace University "Kharkiv Aviation Institute" (No 0104U000835, MES of Ukraine)
2006-2008	Executor	State budget project "Development of methodological foundations, system models and intelligent information technologies for logistics management

		of distributed production and projects for their creation”, National Aerospace University “Kharkiv Aviation Institute” (No 0106U001035, MES of Ukraine)
2009 – 2011	Executor	State budget project “Development of methodological foundations, system models and intelligent information technologies for logistics management of distributed production and projects for their creation”, National Aerospace University “Kharkiv Aviation Institute” (No 0103U004080, MES of Ukraine)
2012 – 2014	Executor	State budget project “Development of the theoretical foundations of logistics management of the design, production, operation and disposal of aviation equipment”, National Aerospace University “Kharkiv Aviation Institute” (No 0112U000104, MES of Ukraine)
2015 – 2017	Executor	State budget project “Development of theoretical bases by investment projects and programs of reformation and development of machine-building complex of Ukraine”, National Aerospace University “Kharkiv Aviation Institute”, (No 0115U003328, MES of Ukraine)
2018 – 2020	Executor	State project “Information technologies in the management of the development of organizational and technical systems”, National Aerospace University “Kharkiv Aviation Institute” (No 0118U003824, MES of Ukraine)
2021 – 2023	Executor	State project “Information technologies in management of logistics and distributed systems”, National Aerospace University “Kharkiv Aviation Institute” (No 0121U111437, MES of Ukraine)
2024 – 2026	Executor	State project “Models and intelligent technologies for logistics management of high-tech products in the context of digital transformation of industry”, National Aerospace University “Kharkiv Aviation Institute” (No 0124U002045, MES of Ukraine)

RESEARCH ACTIVITIES:

Main Research Areas:

Information Modeling in Application Development; Using Artificial Intelligence to Create Intelligent Systems; Development of Databases and Information Warehouses.

Number of Publications (Scopus, WoS, others):

Over 150 scientific publications, including indexed articles in Scopus database, patents; multiple conference proceedings and applied research outputs.

Monographs, Textbooks:

Co-author of 4 textbooks in the field of information technology, building multidimensional databases and information warehouses.

Participation in Scientific Conferences:

Participation in international scientific conferences during 2020-2025:

1. X International Scientific and Technical Conference “Modern Directions of Development of Information and Communication Technologies and Control Tools”, April 9-10, 2020, Ukraine.
2. XXX International Conference “New Technologies in Mechanical Engineering”, September 3-8, 2020, Koblevo – Kharkiv, Ukraine.

3. VIII International Scientific and Technical Conference "Problems of Informatization", November 26-27, Cherkasy – Baku – Bielsko-Biala – Kharkiv, 2020, Ukraine.
4. XI International Scientific and Technical Conference "Modern Directions of Development of Information and Communication Technologies and Control Tools", April 8-9, 2021, Ukraine.
5. XXXI International Conference "New Technologies in Mechanical Engineering", p. Iron Port, September 3-6, 2021, Kharkiv, Ukraine.
6. XII International Scientific and Technical Conference "Modern Directions of Development of Information and Communication Technologies and Control Tools", April 27-28, 2022 – Baku – Kharkiv – Zhilina, Ukraine.
7. XXXII All-Ukrainian Conference "New Technologies in Mechanical Engineering", Kharkiv, Ukraine, September 3-6, 2022, Ukraine.
8. X International Scientific and Technical Conference "Problems of Informatization", November 24-25, 2022 Cherkasy – Baku – Bielsko-Biala – Kharkiv, Ukraine.
9. XII International Scientific and Technical Conference "Modern Directions of Development of Information and Communication Technologies and Control Tools", April 26-27, 2023 – Baku – Kharkiv – Zhilina, Ukraine.
10. XXXIII All-Ukrainian Conference "New Technologies in Mechanical Engineering", September 4 – 7, 2023 – Kharkiv, Ukraine.
11. VIII International Scientific and Technical Conference "Computer Modeling and Optimization of Complex Systems KMOSS-2023", November 1 – 3, 2023. – Dnipro, Ukraine.
12. XI International Scientific and Technical Conference "Problems of Informatization", November 16-17, 2023, Baku – Kharkiv – Bielsko-Biala, Ukraine.
13. XIV International Scientific and Technical Conference "Modern Directions of Development of Information and Communication Technologies and Control Tools", April 25 – 26, 2024, – Baku – Kharkiv – Zhilina, Ukraine.
14. XXXIV All-Ukrainian International Scientific and Technical Conference "New Technologies in Mechanical Engineering", September 4 – 7 2024 - Kharkiv, Ukraine.
15. XII International Scientific and Technical Conference "Problems of Informatization", November 21-22, 2024 Baku - Kharkiv - Bielsko-Biala, Ukraine.
16. XV International Scientific and Technical Conference "Modern Directions of Development of Information and Communication Technologies and Management Tools", April 24-25, 2025 Baku - Kharkiv - Zhilina, Ukraine.

TEACHING ACTIVITIES:

Courses Taught:

1. Fundamentals of Artificial Intelligence (Bachelor's degree), National Aerospace University "Kharkiv Aviation Institute".
2. Databases and Knowledge Bases in Information Systems (Bachelor's degree), National Aerospace University "Kharkiv Aviation Institute".
3. Development of Databases and Knowledge Bases (Bachelor's degree), National Aerospace University "Kharkiv Aviation Institute".
4. Multidimensional Databases and Information Warehouses (Master's degree), National Aerospace University "Kharkiv Aviation Institute".

Author Courses, Academic Programs:

1. Fundamentals of Artificial Intelligence (Bachelor's degree), National Aerospace University "Kharkiv Aviation Institute".
2. Databases and Knowledge Bases in Information Systems (Bachelor's degree), National Aerospace University "Kharkiv Aviation Institute".
3. Development of Databases and Knowledge Bases (Bachelor's degree), National Aerospace University "Kharkiv Aviation Institute".
4. Multidimensional Databases and Information Warehouses (Master's degree), National Aerospace University "Kharkiv Aviation Institute".

Methodological Materials, Textbooks:

1. Leshchenko, O. B. Development of object-relational databases and knowledge based on InterSystems Caché technology [Text] / O. B. Leshchenko, Yu.O. Leshchenko, T. M. Solyanyk. – Kharkiv : National Aerospace University "Kharkiv Aviation Institute", 2017. – 96 p. (In Ukrainian).
2. Leshchenko, O. B. Ensuring integrity and reliability in post-launch databases of information control systems [Text] / O. B. Leshchenko, Yu. O. Leshchenko, A. N. Anikin. – Kharkiv : FLP "Lysenko I. B.", 2018. – 64 p. (In Ukrainian).
3. Leshchenko, O. B. Application of DeepSee InterSystems technology for building multidimensional databases and information warehouses [Text] / O. B. Leshchenko, Yu. O. Leshchenko. – Kharkiv : National Aerospace University "Kharkiv Aviation Institute", 2021. – 66 p. (In Ukrainian).
4. Leshchenko, O. B. Administration of post-relational databases of information management systems [Text] / O. B. Leshchenko, Yu. O. Leshchenko. – Kharkiv : National Aerospace University "Kharkiv Aviation Institute", 2023. - 60 p. (In Ukrainian).

GRANTS AND PROJECTS:

Participation in International and National Projects:

Agreement between InterSystems Corporation and National Aerospace University "Kharkiv Aviation Institute" for the use of InterSystems Caché software licenses for ACADEMIC USE (Enterprise - Concurrent Users:64, Multi-Server, Platform Independent, DeepSee Model, iKnow, DeepSee Visual Reporti). (010101-F-17.3.5 Academic License Order Form & Agreement v1.0).

Grants, Scholarships, Academic Mobility Programs:

None

PROFESSIONAL ACHIEVEMENTS AND AWARDS:

Honorary Titles:

Professor of Kharkiv Aviation Institute, National Aerospace University "Kharkiv Aviation Institute", 2021.

Distinctions, Awards, Prizes:

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|------|--|
| 2013 | 2st place in the "Ikari-KHAI" competition of professional skills, nomination Fundamental Disciplines Teacher |
| 2024 | Awarded the "For Merit" badge |



Membership in Professional Associations:

Member of the professional association of the Public Organization "Ukrainian Scientific and Educational IT Society". Certificate No. 21-00097 FS dated 2.12.2021.

INTERNATIONAL ACTIVITIES:

Internships:

None

Cooperation with Foreign Universities:

None

Teaching/Lecturing Abroad:

None

SELECTED PUBLICATIONS:

Key Articles (Scopus, WoS, others):

1. Leshchenko, O. B. Development of a website for providing copywriting services [Text] / O. B. Leshchenko, S. G. Igunov, Yu. O. Leshchenko // Radioelectronic and computer systems. – 2018. – No. 2(86). – P. 52-66. DOI: <https://doi.org/10.32620/reks.2018.2.06>. (In Ukrainian).
2. Leshchenko, A. B. Web application for keeping a nutrition and training diary: requirements, development and implementation [Text] / O. B. Leshchenko, A. S. Khlyupina, D. O. Bohdan // Radioelectronic and computer systems. – 2018. – No. 3(87). – P. 49-62. DOI: <https://doi.org/10.32620/reks.2018.3.06>. (In Ukrainian).
3. Chukhray, A. Formalization of tasks generation for complex of interactive web-tests on math [Text] / A. Chukhray, E. Yashina, O. Leshchenko // Radioelectronic and computer systems. – 2021. – № 3(99). – P. 140-148. DOI: <https://doi.org/10.32620/reks.2021.3.11>.
4. Diagnostic support of an intelligent tutor system for teaching skills to solve algebraic equations [Text] / A. Kulik, A. Chukhray, M. Chernenko, O. Leshchenko // Radioelectronic and computer systems. – 2021. – № 3(99). – P. 160-168. DOI: <https://doi.org/10.32620/reks.2021.3.13>.
5. Diagnostic support of intelligent tutor system for teaching skills to construct control object frequency characteristics [Text] / A. Chukhray, M. Chernenko, T. Stoliarenko, O. Leshchenko // Radioelectronic and computer systems. – 2022. – No. 3. – P. 190-199. DOI: <https://doi.org/10.32620/reks.2022.3.14>.
6. Modeling of logistics of war reserve stockpiling for successful combat operations [Text] / O. Fedorovich, M. Lukhanin, O. Prokhorov, Yu. Pronchakov, O. Leshchenko, V. Fedorovich // Radioelectronic and computer systems. – 2023. – No. 1. – P. 183-196. DOI: <https://doi.org/10.32620/reks.2023.1.15>.
7. Modeling waves of a strike drones swarm for a massive attack on enemy targets [Text] / O. Fedorovich, D. Krytskyi, O. Leshchenko, O. Yashina, Yu. Malieieva // Radioelectronic and Computer Systems. – 2024. – № 2 (110). – P. 209 – 220. DOI: <https://doi.org/10.32620/reks.2024.2.16>.
8. Experimental evaluation of the efficiency of containerization technology in the onboard software of a nanosatellite CubeSat [Text] / O. V. Lyubimov, I. B. Turkin, O. B. Leshchenko, V. S. Valkovyi // Aerospace technic and technology. – 2024. – No. 4 (196). – P. 87-103. DOI: <https://doi.org/10.32620/aktt.2024.4.10>. (In Ukrainian).



Books, Chapters in Collective Monographs:

1. Leshchenko, O. B. Development of object-relational databases and knowledge based on InterSystems Caché technology [Text] / O. B. Leshchenko, Yu.O. Leshchenko, T. M. Solyanyk. – Kharkiv : National Aerospace University "Kharkiv Aviation Institute", 2017. – 96 p. (In Ukrainian).
2. Leshchenko, O. B. Ensuring integrity and reliability in post-launch databases of information control systems [Text] / O. B. Leshchenko, Yu. O. Leshchenko, A. N. Anikin. – Kharkiv : FLP "Lysenko I. B.", 2018. – 64 p. (In Ukrainian).
3. Leshchenko, O. B. Application of DeepSee InterSystems technology for building multidimensional databases and information repositories [Text] / O. B. Leshchenko, Yu. O. Leshchenko. – Kharkiv : National Aerospace University "Kharkiv Aviation Institute", 2021. – 66 p. (In Ukrainian).
4. Leshchenko, O. B. Administration of post-relational databases of information management systems: tutorial [Text] / O. B. Leshchenko, Yu. O. Leshchenko. – Kharkiv, National Aerospace University "Kharkiv Aviation Institute", 2023. - 60 p. (In Ukrainian).

Links to Citation Database Profiles:

<https://www.scopus.com/authid/detail.uri?authorId=57355823700>
<https://www.webofscience.com/wos/author/record/E-1182-2019>
<https://scholar.google.ru/citations?hl=ru&pli=1&user=xEkJzcwAAAAJ>

ADDITIONAL INFORMATION:

Language Proficiency:

Ukrainian – Native
 English – with a dictionary

IT Skills:

Category	Skills / Tools	Level / Experience	Notes / Context
Programming	JavaScript, Cache Object Script, Cache Server Page, InterSystems ZEN, InterSystems DeepSee	Advanced	Courses, research and applied projects
Databases	MSM, MS SQL, MySQL, Microsoft Access, InterSystems Cache, InterSystems IRIS	Advanced	Courses, research and applied projects
Managing Scientific Content	Open Journal Systems	Advanced	research and applied projects

Social and Community Activities:

1. Member of the editorial board of the journal "Aviation and Space Engineering and Technology" (Category "B", Order of the Ministry of Education and Science of Ukraine No. 975 dated 11.07.2019), National Aerospace University "Kharkiv Aviation Institute", Ukraine (ISSN: 1727-7337 (Print), 2663-2217 (Online)). <http://nti.khai.edu/ojs/index.php/aktt>.
2. Member of the editorial board of the journal "Radioelectronic and Computer Systems" (Quartiles Q2, Category "A", Order of the Ministry of Education and Science of Ukraine No. 1017 dated 27.09.2021), National Aerospace University "Kharkiv Aviation Institute", Ukraine (ISSN 1814-4225 (Print), 2663-2012 (Online)). <http://nti.khai.edu/ojs/index.php/reks>.

3. Responsible for the administration of the Scientific Editions of National Aerospace University "Kharkiv Aviation Institute" website.
4. Responsible for the administration of the website of the scientific and technical journal "Radioelectronic and Computer Systems" (Category "A").
5. Responsible for uploading metadata of the scientific and technical journal "Radioelectronic and Computer Systems" on the website of the DOAJ library (Directory of Open Access Journals).
6. Responsible for uploading metadata of the scientific and technical journal "Radioelectronic and Computer Systems" on the website of the scientometric database Index Copernicus.
7. Responsible for uploading metadata of the scientific and technical journal "Radioelectronic and Computer Systems" on the website of the V. I. Vernadsky National Library of Ukraine.
8. Responsible for uploading metadata of the scientific and technical journal "Radioelectronic and Computer Systems" on the website of the Google Academy.
9. Responsible for the registration of scientific publications on the Crossref website (DOI (Digital Object Identifier) registration).
10. Responsible for the administration of the website of the scientific and technical journal "Aerospace Technic and Technology" (Category "B").
11. Responsible for uploading metadata of the scientific and technical journal "Aerospace Technic and Technology" on the website of the DOAJ library (Directory of Open Access Journals).
12. Responsible for uploading metadata of the scientific and technical journal "Aerospace Technic and Technology" on the website of the scientometric database Index Copernicus.
13. Responsible for uploading metadata of the scientific and technical journal "Aerospace Technology and Technology" on the website of the V. I. Vernadsky National Library of Ukraine.
14. Responsible for uploading metadata of the scientific and technical journal "Aerospace Technology and Technology" on the website Google Academy.
15. Responsible for registering the scientific and technical journal "Aerospace Technic and Technology" on the website Crossref (DOI (Digital Object Identifier) registration).
16. Responsible for the administration of the website of the scientific journal "Propileia of Law and Security".
17. Responsible for the registration of the scientific journal "Propileia of Law and Security" on the Crossref website (DOI (Digital Object Identifier) registration).
18. Responsible for the administration of the website of the permanent specialized academic councils of National Aerospace University "Kharkiv Aviation Institute".
19. Responsible for the plagiarism check on the iThenticate Scopus website.