



Name	Yuliia Leshchenko
Position, Department/Faculty	Associate Professor, Department of Computer Science and Information Technologies / Faculty of Aircraft Control Systems
Academic Degree, Academic Title	Candidate of Technical Sciences
Email:	j.leshchenko@khai.edu
Scopus Author ID:	57208906381
Web of Science ResearcherID:	E-1325-2019
ORCID iD:	0000-0001-9232-697X
Google Scholar:	https://scholar.google.com.ua/citations?user=6v4LimkAAAAJ
ResearchGate:	https://www.researchgate.net/profile/Yuliia-Leshchenko-3

EDUCATION:

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

National Aerospace University "Kharkiv Aviation Institute", 8.080401 "Information management systems and technologies", 2006.

Postgraduate/Doctoral studies:

Candidate of Technical Sciences, National Aerospace University "Kharkiv Aviation Institute", 2016.

Additional training, certification programs:

1. Advanced training at the National Aerospace University "Kharkiv Aviation Institute" Certificate of advanced training Series PC № 02066769/000587-19, order № 1457 6.06.2019.
2. Internship at the University Prof. Dr Asen Zlatarov, 90 hours, Burgas, Bulgaria, 26.10.- 9.11.2020.
3. Teachers Startup course by Sigma Software University. Certificate № 10197. Partner of the course – IT Ukraine Association, 1 EST. 24.01. - 28.01.2022.
4. SSWU TCHR001: Teachers Startup: Summer edition course by Sigma Software University. Certificate № 039c8bd23b734ac68eabd1ae311ad0d7. Partner of the course — IT Ukraine Association, 30 hours (1 ESTS), 01.08. - 05.08.2022.
5. SSWU TCHR002: Teachers Startup: Winter Productivity, Certificate № 1cacb689edbd4fcbb12d2a267c39f316, 30 hours (1 ESTS). 23.01.-27.01.2023.
6. SSWU: Teachers Startup: Summer Edition, Certificate № 0dfa58fca3d24a6492a7277f20d8a78c, 30 hours (1 ESTS). 17.07.-21.07.2023.
7. GlobalLogic Education. IT Tools for Teachers, 18 hours, July 2023.
8. International Scientific and Technical Seminar "Critical Computer Technologies and Systems (CriKTechS)", 4 hours, October 27, 2023.
9. SSWU: Teachers` Startup: Winter Edition 3.0 2024", Certificate № a549980a50da4b0188eae46939ddece, 30 hours (1 ESTS). 22.01.-26.01.2024.
10. Advanced training at the National Aerospace University "Kharkiv Aviation Institute" Certificate of advanced training Series PC № 02066769/01028-24, order № 268 24.06.2024.

11. Sigma Software University: Teachers Startup: Summer Edition 2024", Certificate № f54872bb4b0f4218900af01b71d8b151, 30 hours, (1 ESTS), 22.07.-26.07.2024.
12. Sigma Software University: Teachers Smart Up: Winter Edition 2025, Certificate № 7946016b68214c3aade82a0f94b72b0e, 30 hours (1 ECTS), 27.01.-31.01.2025.
13. Sigma Software University: Teachers Smart Up: Summer Edition 2025, Certificate № 25f f056641224b8abbd3bb61049f23b7, 30 hours (1 ECTS), 21.07.-25.07.2025.

WORK EXPERIENCE:

Professional Career (Workplace, Years, Position):

May 2006 – Apr 2009	Postgraduate student, Department of Information Control Systems, National Aerospace University "Kharkiv Aviation Institute", Kharkiv, Ukraine
Jun 2009 – Aug 2013	Engineer, Department of Information Control Systems, National Aerospace University "Kharkiv Aviation Institute", Kharkiv, Ukraine
Sep 2013 – Feb 2015	Engineer (2-nd category), Department of Information Control Systems, National Aerospace University "Kharkiv Aviation Institute", Kharkiv, Ukraine
Mar 2015 – Feb 2017	Junior researcher, Department of Information Control Systems, National Aerospace University "Kharkiv Aviation Institute", Kharkiv, Ukraine
Mar 2017 – Aug 2017	Researcher, Department of Information Control Systems, National Aerospace University "Kharkiv Aviation Institute", Kharkiv, Ukraine
Sep 2017 – Aug 2018	Assistant, Department of Information Control Systems, National Aerospace University "Kharkiv Aviation Institute", Kharkiv, Ukraine
Sep 2018 – present	Associate 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 2017 – Aug 2018	Assistant, Department of Information Control Systems, National Aerospace University "Kharkiv Aviation Institute", Kharkiv, Ukraine
Sep 2018 – present	Associate 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:

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)
2025 – 2027	Executor	State budget project, closed topic (No 0125U001562, MES of Ukraine)

RESEARCH ACTIVITIES:

Main Research Areas:

Artificial intelligence; Databases and Data Warehouses; Information Technologies. Big-Data Processing and Analysis Technologies.

Number of Publications (Scopus, WoS, others):

Over 180 scientific publications, including indexed articles in Scopus and WoS database, patents; multiple conference proceedings and applied research outputs.

Monographs, Textbooks:

Co-author of 6 textbooks, 2 monographs and 1 monograph chapter in the field of information technology, building multidimensional databases and information warehouses.

Participation in Scientific Conferences:

Regular participant (more 100) and speaker at international and national scientific conferences (Ukraine, Poland, Latvia, Germany and others).

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. Computer Technologies for Processing and Analyzing Big-data (Bachelor's degree), National Aerospace University "Kharkiv Aviation Institute".
5. 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. Computer Technologies for Processing and Analyzing Big-data (Bachelor's degree), National Aerospace University "Kharkiv Aviation Institute".
5. 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:

none

Grants, Scholarships, Academic Mobility Programs:

none

PROFESSIONAL ACHIEVEMENTS AND AWARDS:

Honorary Titles:

none

Distinctions, Awards, Prizes:

2018	Certificate of the Faculty of Aircraft Control Systems with entry on the board of honor
2024	Certificate of Appreciation from the Kharkiv Mayor



2025	Honorary Certificate of the National Aerospace University "KHAU"
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Membership in Professional Associations:

2021 – present	Member of the professional association of the Public Organization "Ukrainian Scientific and Educational IT Society". Certificate No. 21-00106 FS, 2.12.2021.
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INTERNATIONAL ACTIVITIES:**Internships:**

Internship at the University Prof. Dr Asen Zlatarov, 90 hours, Burgas, Bulgaria, 26.10.- 9.11.2020.

Cooperation with Foreign Universities:

none

Teaching/Lecturing Abroad:

none

SELECTED PUBLICATIONS:**Key Articles (Scopus, WoS, others):**

1. Fedorovych, O. Dual education as a bridge between theoretical and practical knowledge [Text] / O. Fedorovych, N. Kunanets, Yu. Leshchenko, N. Veretennikova // The 1-st International Workshop IT Project Management (ITPM 2020), CEUR Workshop Proceedings, Volume 2565, Slavsko, Lviv region, Ukraine, 18 – 20 February 2020. – P. 295 – 306.
2. Milanov, M. Development of the application of information support of medical diagnostic and treatment centers [Text] / M. Milanov, Yu. Leshchenko, A. Yelizieva, R. Artiukh // Advanced Information Systems. – 2020. – № 1. – Vol. 4. – P. 77 – 84.
3. Fedorovych, O. Dual Education as a Progressive Form of Qualitative Training of Expert for Innovative Aerospace Technical Production [Text] / O. Ye. Fedorovych, Yu. O. Leshchenko, K. O. Zapadnia // Aerospace Technic and Technology.– 2020. – № 1 (161). – P. 42 – 49. (In Ukrainian).
4. Simulation of the business processes of the developing enterprise to create complex products with multi-level component architecture [Text] / O. Fedorovich, Yu. Pronchakov, A. Yelizieva, Yu. Leshchenko // Aerospace Technic and Technology. – 2021. – No 4 (172). – P. 79 – 86.
5. Using of the component method in logistics of supplies of high-tech production components [Text] / O. Fedorovich, Yu. Pronchakov, Yu. Leshchenko, A. Yelizieva // Advanced Information Systems. – 2021. – № 5 (3). – P. 40 – 45. (In Ukrainian).
6. Modeling the impact of threats and vulnerabilities in transport logistics of a developing enterprise [Text] / O. Fedorovich, Yu. Pronchakov, Yu. Leshchenko, A. Yelizieva // Radioelectronic and Computer Systems. – 2021. – № 3 (99). – P. 29 – 36.
7. Selection of Suppliers For the Manufacture of High-Technological Products Considering Long Logistic Cargo Delivery Chains Selecting Suppliers [Text] / Fedorovich, Yu. Pronchakov, K. Rybka, Yu. Leshchenko // Aerospace Technic and Technology. – 2021. – № 5 (175). – P. 75 – 81. (In Ukrainian).
8. Simulation of Transport Logistics of Military Cargo Considering the Losses Occurring in the War Zone Due to Delays in Delivery [Text] / O. Fedorovich, O. Uruskiy, I. Chepkov, M. Lukhanin, Yu. Pronchakov, K. Rybka, Yu. Leshchenko // Radioelectronic and Computer Systems. – 2022. –

№ 2 (102). – P. 63 – 74. (In Ukrainian).

9. Simulation of the Logistic Process of the Industrial Enterprise Evacuation in Wartime [Text] / O. Fedorovich, Yu. Pronchakov, K. Rybka, Yu. Leshchenko // Aerospace Technic and Technology. 2022. – № 3 (179). – P. 84 – 93. (In Ukrainian).

10. Simulation of the Logistics to Establish Parity of Military Forces in a War Zone [Text] / O. Fedorovich, O. Uruskiy, Yu. Pronchakov, A. Rybka, Yu. Leshchenko// Aerospace Technic and Technology. – 2022. – № 4 (180). – P. 57 – 67. (In Ukrainian).

11. Modeling of supply logistics and training of military personnel for the successful use of weapons in a combat area [Text] / O. Fedorovich, I. Chepkov, M. Lukhanin, Yu. Pronchakov, K. Rybka, Yu. Leshchenko // Radioelectronic and Computer Systems. – 2022. – № 3 (103). – P. 33 – 46.

12. Simulation of arms distribution strategies by combat zones to create military parity of forces [Text] / O. Fedorovich, M. Lukhanin, O. Prokhorov, O. Slomchynskiy, O. Hubka, Yu. Leshchenko // Radioelectronic and Computer Systems. – 2023. – № 4 (108). – P. 209 – 220.

13. Models and information technology of aging management of man-made systems in the conditions of modern risks [Text] / O. Fedorovich, L. Lutai, O. Uruskiy, S. Gubka, Yu. Leshchenko // Radioelectronic and Computer Systems. – 2024. – № 3 (111). – P. 175-189.

14. Modeling of strike drone missions for conducting wave attacks in conditions of enemy anti-drone actions [Text] / O. Fedorovich, D. Krytskyi, M. Lukhanin, O. Prokhorov, Yu. Leshchenko // Radioelectronic and Computer Systems. – 2025. – № 1 (113). – P. 29-43.

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. Solanyk. – Kharkiv: National Aerospace University "Kharkiv Aviation Institute", 2017. – 96 p. (In Ukrainian).

2. Fedorovich, O. Models and Methods of Quality Assurance in the Life Cycle and Logistics of High-technology Production of Developing Enterprises: monograph. / O. Fedorovich, Yu. Pronchakov, Yu. Leshchenko. – Kharkiv : FLP "Lysenko I. B.", 2017. – 255 p. (In Ukrainian).

3. Leshchenko, Y. System Model for Decision Making Support in Logistics and Quality Management Business Processes of Manufacture Enterprise. [Text] / Y. Leshchenko, A. Yelzieva. In: Ageyev D., Radivilova T., Kryvinska N. (eds) Data-Centric Business and Applications. Lecture Notes on Data Engineering and Communications Technologies. – Berlin: Springer, 2020. – Vol. 42. – P. 93–113.

4. 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).

5. Fedorovich, O. Studying the quality of logistics in the life cycle of innovative technology creation: monograph. / O. Fedorovich, V. Kosenko, Yu. Leshchenko, Yu. Pronchakov. – Riga: ISMA, 2020. – 177 p.

6. 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).

7. 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).

Links to Citation Database Profiles:

<https://www.scopus.com/authid/detail.uri?authorId=57208906381>,

<https://www.webofscience.com/wos/author/record/E-1325-2019>,

<https://scholar.google.com.ua/citations?user=6v4LimkAAAAJ>.

ADDITIONAL INFORMATION:

Language Proficiency:

Ukrainian	Native
English	B2, First Certificate in English, certificate № 98B293T415DQ93 https://langskill.co.uk/wp-content/qr-verification/98B293T415DQ93.jpg

IT Skills:

JS, MS SQL, MySQL, Microsoft Access, InterSystems Cache (Cache·Object Script, Cache Server Page, InterSystems ZEN, InterSystems DeepSee), InterSystems Ensemble, InterSystems IRIS, MATLAB Simulink, Visual Prolog, Python, Google Colaboratory (Jupyter Notebook).

Social and Community Activities:

1. Preparation for publication and layout of the journal "Aviation and Space Engineering and Technologies" (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 (Printed edition), 2663-2217 (Online)). <http://nti.khai.edu/ojs/index.php/aktt>.
2. Preparation for publication and layout of the journal "Radioelectronic and Computer Systems" (Quartiles Q2, Category "A", Order of the Ministry of Education and Science of Ukraine No. 1017 dated 09/27/2021), National Aerospace University "Kharkiv Aviation Institute", Ukraine (ISSN 1814-4225 (Printed edition), 2663-2012 (Online)). <http://nti.khai.edu/ojs/index.php/reks>.
3. Secretary of the examination commission for the defense of bachelor's and master's degree theses at the Department of Computer Science and Information Technologies.
4. Participation in faculty and university career guidance activities, including offsite events, interactive exhibitions, and open days.

