



Name	Oleksandr Liubimov
Position,	Assistant-lecturer, Software Engineering
Department/Faculty	Department
Academic Degree,	M.Cs.
Academic Title	
Email:	o.liubimov@khai.edu
Scopus Author ID:	58099287400
Web of Science	KDO-3124-2024
ResearcherID:	
ORCID iD:	ORCID: 0000-0003-3636-6939
Google Scholar:	https://scholar.google.com/citations?user=TAv
	BjR4AAAJ&hl=uk
ResearchGate:	https://www.researchgate.net/profile/Oleksand
	<u>r-Liubimov?ev=hdr_xprf</u>

EDUCATION:

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

National Aerospace University "KhAI", master's in computer science, "Specialized computer systems", 2003

Postgraduate/Doctoral studies:

In the process

Additional training, certification programs:

Internal QMS ISO9001 Auditor (Bureau Veritas), 2009 PMI's Project Management Professional (PMP), 2011 PMI's Program Management Professional (PgMP), 2015 PMI's Portfolio Management Professional (PfMP), 2019 Certified Business Administrator (MBA), 2012

WORK EXPERIENCE:

Professional Career (Workplace, Years, Position):

PJSC "Kharton-Incor", 2003-2005, Embedded Systems Engineer (embedded SW and HW)

LLC "Westron", 2005-2008, Lead Embedded Software Engineer

LLC "EKTOS-UKRAINE", 2009-2017, CEO LLC "EKTOS-UKRAINE", 2017-now, Business Director

LLC "TECHTO-IF", 2022-2024, Technology Advisor

LLC "ABCS", 2023-now, CTO

National Aerospace University "KhAI", Software Engineering Department, 2023-now, assistant lecturer

Teaching Experience:







National Aerospace University "KhAI", Software Engineering Department, 2023-now

Experience in International or National Projects:

EUDP (Europe Horizon), 2010-2012, Fuel-cell systems for emergency electrification, Denmark, Canada, Ukraine. Position: System Architect/Project Manager

RESEARCH ACTIVITIES:

Main Research Areas:

Software for mission critical applications, System Designs, Model-based software engineering, Real-time software applications, Green Software, Energy Efficient Computations.

Number of Publications (Scopus, WoS, others):

More than 30 publications, including SLRs in nanosatellites and UAVs software and system design.

Monographs, Textbooks:

2 collective monographs.

Participation in Scientific Conferences:

Took an active part in more than 10 major scientific conferences.

TEACHING ACTIVITIES:

Courses Taught:

Research and development for Masters, Avionics software for nanosatellites and UAVs, PC's architecture, Assembler Programming, Software Quality Control

Author Courses, Academic Programs:

Avionics software for nanosatellites and UAVs

Methodological Materials, Textbooks:

Avionics software for nanosatellites and UAVs

GRANTS AND PROJECTS:

Participation in International and National Projects:

NRFU 0143/24 "Experimental Validation of the Dual-Purpose UAV On-board Controller", 2024-2025, Position: Researcher

Grants, Scholarships, Academic Mobility Programs:

NRFU 0143/24 "Experimental Validation of the Dual-Purpose UAV On-board Controller", 2024-2025, Position: Researcher

PROFESSIONAL ACHIEVEMENTS AND AWARDS:

Honorary Titles: None







Distinctions, Awards, Prizes: None **Membership in Professional Associations:**

Project Management Institute (PMI), since 2011 IEEE (Ukraine Section), since 2022 GoIT, since 2024 Ukrainian Startup Fund (USF), Since 2023 Brave1, Since 2023

INTERNATIONAL ACTIVITIES:

None

SELECTED PUBLICATIONS:

Key Articles (Scopus, WoS, others):

- Liubimov, O., Turkin, I., Pavlikov, V., & Volobuyeva, L. (2023). Agile Software Development Lifecycle and Containerization Technology for CubeSat Command and Data Handling Module Implementation. Computation, 11(9), 182. https://doi.org/10.3390/computation11090182
- Liubimov, O., Turkin, I., Cheranovskiy, V., & Volobuieva, L. (2024). UAV Mission Computer Operation Mode Optimization Focusing on Computational Energy Efficiency and System Responsiveness. Computation, 12(12), 235. https://doi.org/10.3390/computation12120235
- Liubimov, O., & Turkin, I. (2024). Experimental study of FreeRTOS operating system reactivity in power saving modes of the onboard computer microcontroller. Aerospace Technic and Technology, 0(4), 71-86. doi:https://doi.org/10.32620/aktt.2024.4.09
- Liubimov, O., & Turkin, I. (2024). Multicriteria evaluation of industry-known interfaces of onboard network of CubeSat nanosatellites. Aerospace Technic and Technology, 0(3), 138-153. doi:https://doi.org/10.32620/aktt.2024.3.12
- Liubimov, O., & Liubimov, M. (2023). USE OF OPEN-SOURCE COTS/MOTS HARDWARE AND SOFTWARE PLATFORMS FOR THE BUILD UP OF THE CUBESAT NANOSATELLITES. Journal of Rocket-Space Technology, 31(4), 138-147. https://doi.org/10.15421/452318
- Liubimov, O., Turkin, I. (2024). Optimizing the CubeSat On-Board Computer Power Consumption Under Hard Real-Time Constraints. In: Nechyporuk, M., Pavlikov, V., Krytskyi, D. (eds) Integrated Computer Technologies in Mechanical Engineering - 2023. ICTM 2023. Lecture Notes in Networks and Systems, vol 996. Springer, Cham. https://doi.org/10.1007/978-3-031-60549-9 30

Books, Chapters in Collective Monographs:

Liubimov, O., Turkin, I. (2024). Optimizing the CubeSat On-Board Computer Power
Consumption Under Hard Real-Time Constraints. In: Nechyporuk, M., Pavlikov, V., Krytskyi, D.
(eds) Integrated Computer Technologies in Mechanical Engineering - 2023. ICTM 2023.
Lecture Notes in Networks and Systems, vol 996. Springer, Cham.
https://doi.org/10.1007/978-3-031-60549-9_30





ADDITIONAL INFORMATION:

Language Proficiency:

Ukrainian – Native, English – B2 (CEFR), German – A2 (CEFR).

IT Skills:

Embedded software design and programming (assembler, C, C++, Rust) Embedded systems design and architecting (Matlab/Simulink) Software compliance (CRA/Cyber Security, Functional Safety) SysML/UML SDLC

Social and Community Activities:

Project/Program/Portfolio management

Active member of several startup funds as expert, military and defense clusters technical member and advisor, military volunteer

