Name	Andrii Karpenko
Position, Department/Faculty	Senior Lectures at Department of Computer systems, network and cybersecurity
Academic Degree, Academic Title	Ph.D. in cybersecurity and information protection
Email:	a.karpenko@csn.khai.edu
Scopus Author ID:	57218095560
Web of Science ResearcherID:	LJK-8519-2024
ORCID iD:	0000-0003-2789-1168
Google Scholar:	https://scholar.google.com/citations?user=A6_aMXIAAAAJ&hl=uk
ResearchGate:	https://www.researchgate.net/profile/Andrii-Karpenko-2?ev=hdr_xprf

EDUCATION:

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

National Aerospace University – Kharkiv Aviation Institute
Bachelor of Science, Computer and Information Systems Security / Information Protection
2013 – 2017
Specialization: Information security in communication systems

National Aerospace University – Kharkiv Aviation Institute
Master's Degree, Cybersecurity
2017 – 2018

Postgraduate/Doctoral studies:
National Aerospace University – Kharkiv Aviation Institute
Doctor of Philosophy (Ph.D.), Cybersecurity and information protection
2019 – 2023

Additional training, certification programs:

Cisco – IT Essentials (Issued May 2016)

AWS Certified Solutions Architect – Associate (Issued May 2022)

AWS Certified Solutions Architect – Professional (Issued Jul 2022)

WORK EXPERIENCE:

Professional Career (Workplace, Years, Position):

NATIONAL AEROSPACE UNIVERSITY «KHARKIV AVIATION INSTITUTE»

- **SoftServe**

  - Senior AWS DevOps Engineer (Jan 2023 – Present)
  - DevOps Engineer (Oct 2021 – Jan 2023)

- **GlobalLogic**

  - Senior System (DevOps) Engineer (Feb 2021 – Oct 2021)
  - System Engineer (DevOps) (Jul 2019 – Feb 2021)
  - Associate System Engineer (DevOps) (Oct 2018 – Jul 2019)
  - Trainee System Engineer (DevOps) (Jul 2018 – Oct 2018)

- **AT IIT**

  - C/C++ Developer (Oct 2016 – Jul 2018 · 1 yr 10 mos)
  - Design Engineer (Oct 2016 – Feb 2017 · 5 mos)

Teaching Experience:
National Aerospace University – "Kharkiv Aviation Institute"
Senior Lecturer (Sep 2024 – Present, full-time, Kharkiv, Ukraine)

RESEARCH ACTIVITIES:

Main Research Areas:
Cybersecurity, Information security, DevOps, SRE, Cloud Engineering, Distributed Systems

Number of Publications (Scopus, WoS, others):
6

Monographs, Textbooks:
Karpenko A.S. Methods and Tools for Ensuring Cybersecurity of Globally Distributed Replicated Data Storage Systems with Controlled Consistency: Monograph / edited by A.V. Gorbenko. Kharkiv: FOP Brovin O.V., 2025 – 156 p.
Participation in Scientific Conferences:
DESSERT 2020, Crictecs, DESSERT 2024,

TEACHING ACTIVITIES:

Courses Taught:
Theory and Technologies of Secure Distributed Systems Development, Information Security in Computer Systems, Information Security in Information and Communication Systems, Theoretical Foundations of Cryptology, Information Security Management.

Author Courses, Academic Programs:

Theory and Technologies of Secure Distributed Systems Development, Information Security in Computer Systems, Information Security in Information and Communication Systems, Theoretical Foundations of Cryptology, Information Security Management.

SELECTED PUBLICATIONS:

Key Articles (Scopus, WoS, others):
A. Gorbenko, O. Tarasyuk, and A. Karpenko, «Analysis of Trade-offs in Fault-Tolerant Distributed Computing and Replicated Databases», in Proceedings of 11th International Conference on Dependable Systems, Services and Technologies, DESSERT, Kyiv, 2020, pp. 1-6. DOI: 10.1109/DESSERT50317.2020.9125078

A. Gorbenko, A. Karpenko, and O. Tarasyuk, «Performance evaluation of various deployment scenarios of the 3-replicated Cassandra NoSQL cluster on AWS», Radioelectronic and computer systems, no. 4 (100), pp. 157-165, 2021. DOI: 10.32620/reks.2021.4.13

A. Karpenko, O. Tarasyuk, and A. Gorbenko, "Research of Consistency and Performance in Non-relational Replicated Databases," Modern Information Systems, vol. 5, no. 3, pp. 66–75, 2021. DOI: 10.20998/2522-9052.2021.3.09

O. Tarasyuk, A. Gorbenko, and A. Karpenko, "Development of Architectures, Theorems, and Models of Properties of Distributed Data Storage Systems," Measuring and Computing Equipment in Technological Processes, no. 2, pp. 5–13, 2022. DOI: 10.31891/2219-9365-2022-70-2-1

J. Ahmed, A. Karpenko, O. Tarasyuk, A. Gorbenko, and A. Sheikh-Akbari «Consistency issue and related trade-offs in distributed replicated systems and databases: a review», Radioelectronic and computer systems, no. 2 (106), pp. 171-179, 2023. DOI: 10.32620/reks.2023.2.14

Karpenko, A. , Gorbenko, A., Akulynichev, A., Tarasyuk, O. Using Redundant Reads for Improving Performance and Availability of Distributed Replicated Systems with Relaxed Consistency // Proc. 2020 IEEE 11th Int. Conf. on Dependable Systems, Services and Technologies (DESSERT'2024). – Greece, Athens, 2024. – P. 1-6.

Books, Chapters in Collective Monographs:
Karpenko A.S. Methods and Tools for Ensuring Cybersecurity of Globally Distributed Replicated Data Storage Systems with Controlled Consistency: Monograph / edited by A.V. Gorbenko. Kharkiv: FOP Brovin O.V., 2025 – 156 p.

Links to Citation Database Profiles:
1. https://www.scopus.com/authid/detail.uri?authorId=57218095560
2. https://scholar.google.com/citations?user=A6_aMXIAAAAJ&hl=uk&authuser=1
3. https://www.webofscience.com/wos/author/record/LJK-8519-2024
4. https://orcid.org/my-orcid?orcid=0000-0003-2789-1168

ADDITIONAL INFORMATION:

Language Proficiency:
Ukrainian – Native
English - Professional working proficiency

IT Skills:
SRE, DevOps, Cloud Engineering

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