Scientist profile

e-mail: *k.bortnyk@lntu.edu.ua*
Name: *Kateryna Bortnyk*

Position: *Associate Professor, Department of Computer Engineering and Security*

Biographical information: *Graduated from Lviv Polytechnic National University. Employed at Lutsk National Technical University since 1987. Earned a Ph.D. in 2013. Currently holds the position of Associate Professor in the Department of Computer Engineering and Security.*

Education:

Organization	Obtained Qualification, Degree, or Diploma
National University «Lviv Polytechnic »	*Specialist's degree in «Electronic computing machines»*
Lutsk National Technical University	*Scientific degree and PhD in «Mechanics of deformable solids» (01.02.04)*

Scientific interests: *Logic circuit synthesis and analysis, digital information processing device design, advanced information protection technologies, and the integration of socio-humanitarian competencies into engineering education.*

Scientific and pedagogical activity:

Period	Organization	Position	Type of work
16.03.1999 – 31.10.2014	*Lutsk National Technical University*	*assistant*	*Teaching and research work*
01.11.2014– until today	*Lutsk National Technical University*	*associate professor*	*Teaching and research work*

Educational disciplines: *Computer logic, cybersecurity essentials*

Knowledge of languages: *Ukrainian, English, German*

SELECTED WORKS:

Monographs:
1. Computer Electronics: A Study Guide for Undergraduate Students in Computer Engineering. Kaganyuk O., Polishchuk M., Zdolbitska N., Bortnyk K. Computer Electronics Textbook. – Lutsk: Lutsk National Technical University, 2020. – 224 p.

Publications included in Scopus, Web of Science databases:

1. Artem Konotopchyk, Kateryna Melnyk, Svitlana Lavrenchuk, Nataliia Khrystynets, Pavlo Melnyk, Kateryna Bortnyk. System of dynamic optimization pricing by machine learning / The 14th IEEE International Conference on Dependable Systems, Services and Technologies (DESSERT'2024). Greece, Athens, 11-13 October, 2024. (Scopus)

2. N. Bahniuk, O. Linchuk., K. Bortnyk, I. Kondius, K. Melnyk and K. Kondius, "Threats Detection and Analysis Based on SYSMON Tool," 2023 13th International Conference on Dependable Systems, Services and Technologies (DESSERT), Athens, Greece, 2023, pp. 1-7. (Scopus)
doi: 10.1109/DESSERT61349.2023.10416443

3. Kardashuk V., Bortnyk K., Bahnyuk N. (2023). Problems of information protection in virtual private networks and protection against attacks on Web applications. COMPUTER-INTEGRATED TECHNOLOGIES: EDUCATION, SCIENCE, PRODUCTION , (53), 117-124. https://doi.org/10.36910/6775-2524-0560-2023-53-18

4. Kardashuk V., Bortnyk K., Bahnyuk N. (2023) Methods for improving testing of digital systems // Scientific journal "Computer-integrated technologies: education, science, production" - Lutsk: Publishing house of LNTU. - Issue 51 - pp. 43-51. https://doi.org/10.36910/6775-2524-0560-2023-51-06

5. Baranchuk S., Bortnyk K. (2024) System for monitoring power outages based on the Arduino platform and

the React Native framework// Scientific journal "Computer-integrated technologies: education, science, production" Lutsk: Publishing house of LNTU. Issue 56 p. 93-98.
https://doi.org/10.36910/6775-2524-0560-2024-56-11

LINK PROFILE:

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SCOPUS: *https://www.scopus.com/authid/detail.uri?authorId=57208403801*
WEB OF SCIENCE Researcher ID: https://www.webofscience.com/wos/author/record/G-7967-2018
GOOGLE SCHOLAR: *https://scholar.google.com/citations?user=XBmv_aUAAAAJ&hl=uk*