

Scientist profile Nataliia Cherniashchuk

e-mail: nchernyashchuk@gmail.com

Biographical information: I was born on February 16, 1985. I have been working at the Lutsk National Technical University since 2007. In 2012, she received the scientific degree of Candidate of Pedagogical Sciences. In 2013, she received the academic title of associate professor of the Department of Computer Technologies of Vocational Education. In 2018, she received the scientific degree of Doctor of Pedagogical Sciences. In 2020, she received the academic title of associate professor of the Department of Computer Sciences. I have two higher educations: a master's degree in computer engineering and a master's degree in cyber security. Now I work as the head of the department of computer engineering and cyber security.

Education: master's degree

Period, Organization, Position		Obtained Qualification, Degree, or Diploma	
2018-	Lutsk National Technical University,	Master of computer engineering	
2019	master's degree		
2021-	1- Western Ukrainian National Master of Cyber Security		
2022	University		
2013	Lutsk National Technical University,	Academic title of associate professor of the Department of	
	associate professor	Computer Technologies of Vocational Training	
2020	Lutsk National Technical University,	Academic title of professor of the Department of Computer	
	professor	Sciences	

Scientific interests: computer engineering, cyber security

Scientific and pedagogical activity:

Period	Organization	Position	Type of work
	Lutsk National Technical University	assistant	Teaching and research work
01.09.2013 – 31.08.2018	Lutsk National Technical University	associate professor	Teaching and research work
	Lutsk National Technical University	professor	Teaching and research work

Educational disciplines: Web programming (Python ma JavaScript), Information security management, Fundamentals of scientific research, IT project management, Social engineering

Professional awards:

1) Certificate of Honor of the Volyn Regional Council - 2015.

2) Acknowledgment of the Ministry of Education and Science of Ukraine – 2022.

SELECTED WORKS:

Monographs:

1. N. L. Chernyashchuk Detection of attacks based on compromise marks: monograph / N. L. Chernyashchuk. – Lutsk: Teren, 2022. – 176 p.

2. N. L. Chernyashchuk Information protection technologies in WI-FI networks: monograph / N. L. Chernyashchuk. - Lutsk: Vezha-Druk, 2017. - 144 p.

3. Chernyashchuk N. L. Information technologies in the educational process: monograph / N. L. Chernyashchuk. – Lutsk: Teren, 2017. – 176 p.

4. Chernyaschuk N.L. Laboratory workshop on operations research and mathematical modeling Petro Antonovych Pekh, Nataliya Leonidivna Chernyashchuk, Mykhailo Volodymyrovych Delyavskyi, Nataliya Volodymyrivna Bagniuk - Lutsk: IVV Lutsk National Technical University, 2020. 100 p.

5. Chernyaschuk N.L. Quality management technology for the training of future engineers-pedagogues in the conditions of the master's degree of the technical university / N.L. Chernyashchuk, Yu.E. Sachuk Monograph. Lutsk: Teren, 2019. 220 p.

6. Sachuk Yu.E., Chernyashchuk N.L. Formation of social and professional mobility of future informatics teachers in the conditions of the master's degree / Yu.E. Sachuk, N.L. Chernyashchuk Monograph. Lutsk: Teren, 2019. 220 p.

Publications included in Scopus, Web of Science databases:

1. Chernyashchuk N. Elaboration of pyramidal methods applyngcomputation technique «rough-fine» image identification The International Society for Optical Engineering Vol. 11176 (1): 11176-201, 11 pag. https://www.spiedigitallibrary.org/conference-proceedings-of-spie/browse/volume-number/11000-NOW/11100-11199. 2019 DOI 10.1117/12.2537179 SCOPUS

2. Chernyashchuk N. Information model for forecasting of violation reparative osteogenesis of long bonds The International Society for Optical Engineering Vol. 11176 (1): 11176-201, 7 pag. https://www.spiedigitallibrary.org/conference-proceedings-of-spie/browse/volume-number/11000-NOW/11100-11199. 2019 DOI 10.1117/12.2536250 SCOPUS

3. Chernyashchuk N. (Panasiuk, N.), Melnyk, V., Bahnyu, N., Melnyk, K., & Zhyharevych, O. (2017). Implementation of the simplified communication mechanism in the cloud of high performance computations. Eastern-European Journal of Enterprise Technologies, 2/2 (86), 24–32.

4. Nataliia Chernyaschuk Oleksandr Bezkrevnyi, Leonid Kupershtein.The analysis handwarefor recording image and video and processing on fpga. The International Society for Optical Engineering Vol. 11176 (1): 11176-201, 11 pag. The International Society for Optical Engineering Vol. 11176 (1): 11176-201, 5 pag. https://www.spiedigitallibrary.org/conference-proceedings-of-spie/browse/volume-number/11000-NOW/11100-11199.2019 DOI 10.1117/12.2536310 SCOPUS

5. Vasyl Melnyk, Olena Kuzmych, Nataliia Bahniuk, Nataliia Cherniashchuk, Liudmyla Hlynchuk, Oksana Mekush. Effective Big Data Analysis Based on Sockets Application to Biomedical Data Processing - Conference Proceedings, 2021 11th International Conference on Advanced Computer Information Technologies, 15-17 September 2021, page 19

6. <u>Kuzmych, O., Cherniashchuk, N., Lishchyna, N., Mekush, O., Gumenyuk, P. Mobile Robot Motion</u> <u>Stability and Optimal Chassi Construction</u> 2021 11th International Conference on Advanced Computer Information Technologies, ACIT 2021 - Proceedingsc. 141-146

7. Melnyk, V., Kaganyuk O., Kozlenko, M., Chernyaschuk, N., & Shcherbluk, A. (2020). Dependence of the intensity of data processing in the cluster on the performance of sockets without taking into account heterogeneity. COMPUTER-INTEGRATED TECHNOLOGIES: EDUCATION, SCIENCE, PRODUCTION, (40), 128-139. https://doi.org/10.36910/6775-2524-0560-2020-40-20

8. Kostyuchko S., Chernyashchuk N., Polishchuk M., Kyrylyuk L., Sakhniuk A. Application of intrusion detection systems. Technical news. 1(51), 2 (52). Lviv, - 2020. P. 81-82.

9. Kostyuchko S., Kyrylyuk L., Chernyashchuk N., Bortnyk K., Hrynyuk S.. Wireless access point with a multi-level data protection algorithm (in English). COMPUTER-INTEGRATED TECHNOLOGIES: EDUCATION, SCIENCE, PRODUCTION, (42), Lutsk, - 2021. P. 128-139. https://doi.org/10.36910/6775-2524-0560-2021-42.

10. Bortnyk K.Ya., Delyavskyi M.V., Kuzmych O.I., Bagniuk N.V., Chernyaschuk N.L. The main threats to the security of information systems. // Scientific journal "Computer-integrated technologies: education, science, production" - Lutsk: LNTU Publishing House. - Issue 40. - 2020. - pp. 137-142 (0.75 dr. sheet).

11. Hlynchuk L.Ya., Yatsyuk S.M., Kuzmych O.I., Bagnyuk N.V., Chernyashchuk N.L. Analysis of requirements and methodology for selecting topics for studying the basics of cryptographic information protection. // Scientific journal "Computer-integrated technologies: education, science, production" - Lutsk: LNTU Publishing House. - Issue 40. – 2020. – pp. 16-22 (0.875 dr. sheet)

12. Chernyaschuk N.L., Bortnyk K.Ya., Plevako N.V. Analysis of the study of the functioning of the electronic document circulation information system. // Scientific journal "Computer-integrated technologies: education, science, production" - Lutsk: LNTU Publishing House. - Issue 40. – 2020. – pp. 143-148 (0.75 dr. sheet)

13. Kaganyuk O.K., Chernyashchuk N.L., Podolyak V.M., Bagniuk N.V., Svyridyuk K.A. Study of static characteristics in the development of a mobile application // Scientific journal "Computer-integrated technologies: education, science, production" - Lutsk: LNTU Publishing House. - Issue 45. – 2021. – pp. 10-23 (1,625 dr. sheets)

14. Chernyashchuk N.L., Boyko M.V., Chikirda M.V., Savonyuk N.S., Bagnyuk N.V. Optimization of the cluster application deployment process in the Kubernetes system // Scientific journal "Computer-integrated technologies: education, science, production" - Lutsk: LNTU Publishing House. - Issue 45. – 2021. – pp. 43-50 (1 dr. sheet)

15. Khrystinets, N., Chernyashchuk, N., Miskevich, O., Dovhonyuk, M. (2020). Technologies of hardware virtualization of Intel microprocessors. COMPUTER-INTEGRATED TECHNOLOGIES: EDUCATION, SCIENCE, PRODUCTION, (40), 158-163. https://doi.org/10.36910/6775-2524-0560-2020-40-24

Membership in scientific societies:

- 1) 020 Cisco instructor on the CyberOps course
- 2) 2021 Cisco instructor for the CCNA Security course

LINK PROFILE:

Google Scholar: https://scholar.google.com.ua/citations?user=8VWOdz8AAAAJ&hl=uk

Academia.edu: https://independent.academia.edu/NataliiaCherniashchuk/Analytics/activity/overview

NBUV portal: ID: 1465261 http://irbis-nbuv.gov.ua/ASUA/1465261

ORCID: <u>https://orcid.org/0000-0002-3178-8377</u>