

## Scientist profile Serhii Hryniuk

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**Biographical information:** I was born on June 14, 1987 in the village of Zhuravychi, Kivertsi district, Volyn region. I am married, have 2 children. I have been working at Lutsk National Technical University since 2011. In 2021, I received the degree of Candidate of Technical Sciences. In 2023, I received the academic title of Associate Professor. Currently, I work as an Associate Professor at the Department of Computer Engineering and Security.



### Education: master's degree

Period, Organization, Position		Obtained Qualification, Degree, or Diploma
2004-2008	National Pedagogical University named after M.P. Drahomanova, bachelor's degree	Bachelor of Mathematics
2008-2009	National Pedagogical University named after M.P. Drahomanova, specialist degree	Qualifications of a teacher of mathematics and computer science, administrator of educational computer systems
2012-2014	Lutsk National Technical University, specialist degree	The qualification of an engineer in the automated management of technological processes.
2012-2016	Lutsk National Technical University, postgraduate student	Scientific degree and diploma of candidate of technical sciences in the specialty 05.02.08 "Mechanical engineering technology"
2022-2023	Lutsk National Technical University, master's degree	Master of Science in Computer Engineering

**Scientific interests:** research and development of systems for monitoring and controlling IoT devices, development and research of optimization algorithms for ensuring efficient energy use in IoT devices, development of software for information systems

### Scientific and pedagogical activity:

Period	Organization	Position	Type of work
01.09.2009 – 31.08.2011	Lutsk Pedagogical College	teacher	Teaching work
01.09.2011 – 31.01.2021	Lutsk National Technical University	assistant	Teaching and research work
01.02.2021 – 31.08.2024	Lutsk National Technical University	senior lecturer	Teaching and research work
01.09.2024 – until today	Lutsk National Technical University	associate professor	Teaching and research work

**Educational disciplines:** system programming, theory of information and coding, information protection algorithms and system programming, information systems audit

**Knowledge of languages:** Ukrainian

### **Professional awards:**

- 1) *Diploma of the Lutsk National Technical University on the occasion of Science Day – 2021.*

### **SELECTED WORKS:**

1. Polishchuk, M., Grinyuk, S., Kostyuchko, S., Tkachuk, A., & Savaryn, P. (2023). TESLA SWITCH OF 4 BATTERIES BASED ON THE ARDUINO UNO BOARD. *Informatyka, Automatyka, Pomiary W Gospodarce I Ochronie Środowiska*, 13(3), 111-116. URL: <https://doi.org/10.35784/iapgos.4051>.
2. Kostyuchko Serhii, Kuzmych Olena, Aitouche Abdel, Sergiy Grinyuk, Mekush Oksana. Application of Parametric Sensitivity Method to Analysis of Automatic Mooring Winch with Electric Drive System // *IEEE Explore Digital Library*, Published in: 2019 4th Conference on Control and Fault Tolerant Systems (SysTol), DOI: 10.1109/SYSTOL.2019.8864751, ISSN: 2162-1209
3. Polishchuk M., Hrynyuk S. Use of information encryption technology for secure transmission in the network. *Scientific journal "Computer-integrated technologies: education, science, production"*. Lutsk: LNTU Publishing House. Vol. 39. 2020. P. 122-126 (Index Copernicus).
4. Kostyuchko, S., Kyryliuk, L., Chernyashchuk, N., Bortnyk, K., Hrunjuk, S. Wireless access point with multilayer data protection algorithm. *COMPUTER-INTEGRATED TECHNOLOGIES: EDUCATION, SCIENCE, PRODUCTION*, (42), 147-151.
5. Shvayuk A., Bortnyk K.Ya., Hrynyuk S.V. Analysis of computer penetration testing methods to assess the quality of protection of user bank data // *Scientific journal "Computer-integrated technologies: education, science, production"* - Lutsk: LNTU Publishing House. - Issue 42. - 2021. - P.218-222.
6. Rymchuk, I., Kostyuchko, S., Polishchuk, M., Hrynyuk, S., & Konkevych, L. (2024). SECURITY OF COMMUNICATION PROCESSES USING VISUAL CRYPTOGRAPHY. *Electronic professional scientific publication "Cybersecurity: education, science, technology"*, 2(26), 258–267 / URL: <https://doi.org/10.28925/2663-4023.2024.26.677> .

### **Patents**

- 1) Patent UA 142710 U Ukraine, IPC B24B 5/00. The method of manufacturing a grinding wheel / V.I. Marchuk, I.V. Marchuk, S.V. Hrynyuk, L.O. Sachkovskaya; Applicant and patent owner: Lutsk National Technical University, Lutsk; statement 09.12.2019; published 06/26/2020; Bul. No. 12. - 2 p.

### **Study guides:**

- 1) Pekh P.A., Lavrenchuk S.V., Delyavskiy M.V. Hrynyuk S.V. Laboratory workshop on C/C++ programming // study guide [for technical students. special higher education app.] – Lutsk: Vezha-Druk, 2020. – 228 p.
- 2) Hrynyuk S. V., Polishchuk M. M, Melnyk K. V., Tkachuk A. A. Computer Engineering: an electronic textbook for applicants of the second (master's) level of higher education in the specialty of Computer Engineering, 2024. Reference No. 24-12, minutes of the meeting of the educational and methodological council of LNTU No. 1 dated 08/28/2024

### **Membership in scientific societies:**

- 1) Scientific society of students, postgraduates, doctoral students and young scientists of the National Technical University

### **LINK PROFILE:**

Google Scholar: [https://scholar.google.com/citations?user=XBmv\\_aUAAAJ&hl=uk](https://scholar.google.com/citations?user=XBmv_aUAAAJ&hl=uk)

Scopus ID: <https://www.scopus.com/home.uri>

ORCID: <https://orcid.org/my-orcid?orcid=0000-0002-0080-3167>