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### **PROFESSIONAL AND ACADEMIC POSITIONS:**

2007 to current    Ass. Prof of Department of Software Engineering and Management Intelligent Technologies (before 2022 – Department of Software Engineering and Management Information Technologies), Educational and Scientific Institute of Computer Science and Information Technologies (before 2022 – Faculty of Computer Science and Software Engineering), National Technical University "Kharkiv Polytechnic Institute" (<https://web.kpi.kharkov.ua/asu/teaching-staff-2/>);  
Ass. Prof of Department of Cybersecurity and Information Technologies of Kharkiv National Economic University named after Semyon Kuznets (<http://www.kafcbit.hneu.edu.ua/teachers/>)  
Ass Prof. of Department of Electronic Computers of Kharkiv National University of Radio Electronics. (<https://nure.ua/en/people/staff-department-ecm/page/2>)

2005 – 2007        Head of Department of Informatics and Computer Engineering, National university of civil defense of Ukraine (<https://nuczu.edu.ua/eng/>);

2002 – 2005        Senior Lecturer of Department of Fundamental Disciplines National university of civil defense of Ukraine (<https://nuczu.edu.ua/eng/>).

### **EDUCATION:**

Ph.D. (mathematical modeling) (November, 2001) Institute of Mechanical Engineering Problems of the National Academy of Sciences of Ukraine, Kharkiv, Ukraine

Specialization: mathematical modeling and computational methods  
Specialist Degree (Economics, 5 years) (June, 1997) Kharkiv Aviation Institute, Kharkiv, Ukraine  
Concentrations: Economics and Management of Enterprise

### **COURSES TAUGHT**

Extensive teaching at all university levels: Bachelor/Master/PhD:

- Modeling and Analysis of Software (in English and Ukrainian),
- Advanced technologies and directions of development of intelligent software systems (Management) (in English and Ukrainian),
- Modern technologies for web application development (PhD) (in Ukrainian)

### **FIELDS OF RESEARCH INTEREST:**

- Strategic Management,
- Risk Management,
- Information Security,
- Data Mining,
- Machine Learning,
- Text Mining.

## **SUMMARY OF CAREER ACHIEVEMENTS**

- Prepared and published more than 70 publications, 3 collective monographs, 3 textbooks, stamped by the university, 8 articles in publications indexed in Scopus. (h-index = 7, i10-index = 4 in Google Scholar - <https://scholar.google.com/citations?user=Wyv6ESUAAA&hl=ru>; ORCID ID is <https://orcid.org/0000-0002-2426-900X>.)
- Encouraged and empowered staff to develop their careers and reach their full potential (e.g. through coaching 1 PhD students in Information Technology, 1 got their PhD degrees);
- Responsible executor of the initiative research work "Models and methods of research and design of complex systems", (01.2020 - 12.2021) K8004 №ДП – 0119U002554;
- guarantor of the EDUCATIONAL AND SCIENTIFIC PROGRAM " software engineering", second (master's) level.

## **PROFESSIONAL MEMBERSHIPS:**

- Full member of the public organization "Ukrainian Scientific and Educational IT Society", Certificate № 20-00026 FS (<https://usit.eu.org/membership-procedure>)

## **RELATED PUBLICATIONS**

### **Books**

- Ethernet technology: lab. workshop on the course Computer Networks: for students. Speciality 121 - Software Engineering, 122 - Computer Science, 126 - Information Systems and Technologies / MO Bilova [etc.]; Nat. Tech. University. Kharkiv Polytechnic inst.; - Kharkiv: NTU KhPI, 2019. - 196 p.
- Analysis of methods and technologies for developing mobile applications for the Android platform. Part 2: textbook - OV Shmatko, A.O. Polyakov, VM Fedorchenko NTU "KhPI", 2018, 320 p.
- Cybersecurity: cryptography with PYTHON: textbook / SP Evseev, OV Shmatko, OG Korol; Kharkiv National University of Economics named after S. Kuznets. - Kharkiv; Lviv: Novyi Svit-2000, 2021. - 119 p. : il. - ISBN 978-617-7519-70
- Hryshchuk R. Construction methodology of information security system of banking information in automated banking systems : monograph / R. Hryshchuk, S. Yevseev, A. Shmatko. – Vienna : Premier Publishing s. r. o., 2018. – 284 p.

### **Papers**

- Shmatko O. et al. Tokenization of Educational Assets Based on Blockchain Technologies // ScienceRise: Pedagogical Education, (3 (42), 4–10. Doi: 10.15587 / 2519-4984.2021. 232321. - 2021.
- Klyuchka Ya. O. et al. Peculiarities of blockchain technology introduction in the field of healthcare: current situation and prospects // Information processing systems. - 2021. - №. 1 (164). - P. 33-44.
- Yurchenko Olha V., Shmatko Alexander V. OVERVIEW OF METHODS AND MODELS USED TO DETECT ANOMALIES // The 5th International scientific and practical conference "The world of science and innovation" (December 9-11, 2020) Cognum Publishing House, London, United Kingdom. 2020. 1012 p. - 2020. - P. 174.

- Shmatko O. et al. Development of Methodological Foundations for Designing a Classifier of Threats to Cyber-physical Systems // Eastern-European Journal of Enterprise Technologies. - 2020. - T. 3. - №. 9. - P. 105.
- Kliuchka Y. O., Shmatko O. V. COMPARISON OF BLOCKCHAIN TECHNOLOGY AND DIRECTED ACYCLIC GRAPH DURING STORAGE AND PROCESSING OF DATA IN DISTRIBUTED UNIVERSITY. Series: System analysis, management and information technologies. - 2020. - №. 13). - P. 106-116.
- Yevseiev S. et al. Methodology of the cyber security threats risk assessment based on the fuzzy-multiple approach // International Multidisciplinary Scientific GeoConference: SGEM. - 2019. - T. 19. - №. 2.1. - P. 437-444.
- Shmatko A. V. et al. THE USE OF COMPETENCY-BASED APPROACH IN THE PROJECT TEAM FORMATION MODEL // Science and Society. - 2018. - V. 23. - P. 28.
- A new framework designed for knowledge management in distributed software development / O. Shmatko [at al.] // Modern information systems = Advanced Information Systems. - 2019. - T. 3, № 1.- P. 109-115
- Shmatko OV, Myronenko MI Information technology of software error tracking // Collection of scientific works of Kharkiv National University of the Air Force. - 2018. - №. 2. - P. 120-125.