



<b>Name</b>	Yevheniia Sokolova
<b>Position, Department/Faculty</b>	Associate Professor, Department Software Engineering
<b>Academic Degree, Academic Title</b>	PhD of Information Technologies Associate Professor
<b>Email:</b>	y.sokolova@khai.edu
<b>Scopus Author ID:</b>	57658958800
<b>Web of Science ResearcherID:</b>	ACC-6007-2022
<b>ORCID iD:</b>	0000-0002-1497-4987
<b>Google Scholar:</b>	<a href="https://scholar.google.com.ua/citations?hl=uk&amp;user=UX5inU8AAAAJ">https://scholar.google.com.ua/citations?hl=uk&amp;user=UX5inU8AAAAJ</a>
<b>ResearchGate:</b>	<a href="https://www.researchgate.net/profile/Yevheniia-Sokolova?ev=hdr_xprf">https://www.researchgate.net/profile/Yevheniia-Sokolova?ev=hdr_xprf</a>
<b>SciProfiles:</b>	2915362

## EDUCATION:

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

Master's Degree in Software Engineering, Specialization: Software for Computer Systems and Automated Control  
Kharkiv Aviation Institute [1/09/1986-28/02/1992]

### Postgraduate/Doctoral studies:

Associate professor  
Ministry of Education and Science of Ukraine [25/02/16]

PhD in Information Technologies  
Ministry of Education and Science of Ukraine [22/04/2011]

### Additional training, certification programs:

Wildau-Kharkiv IT Bridge IV, DAAD Programme "Digital Ukraine: Ensuring Academic Success in Times of Crisis" – VR & AR in Education (Professional Development Course for Educators), 3 ECTS, Summer Semester 2025

Academic English B1: Reading, Listening, Writing and Speaking, 75 hours, Mariupol University, Mar 2025

Practical English, 90 hours, Mariupol University, Feb 2025

EPAM – Teacher's Internship, 60 hours, Feb 2025

Teaching in Times of War, 30 hours, National University of "Kyiv-Mohyla Academy", Jan 2025

IT Ukraine Association – Teacher's Internship, 180 hours, July 2024

NAQA – Training for Experts on Writing Accreditation Examination Reports, 90 hours, May 2024

Data Structure & Algorithm using C++: Zero To Mastery, 64.5 hours, Feb 2024

SSWU – TEACHERS' SMARTUP: Winter Edition 3.0, 30 hours (1 ECTS), Jan 2024

Artificial Intelligence and the Future of Education, 30 hours (1 ECTS), Nov 2023

Data Structures & Algorithms Essentials using C++, 27.5 hours, May 2023

SSWU – TEACHERS' SMARTUP: Winter Productivity, 30 hours (1 ECTS), Jan 2023

## WORK EXPERIENCE:

### Professional Career (Workplace, Years, Position):

**Associate Professor, Department of Software Engineering, *National Aerospace University*** [2011 – present] research activity, teaching: Basic Programming, C# Programming, Algorithms and Data Structures

**Expert, *National Agency for Quality Assurance in Higher Education*** [2019-Current] member of the expert group conducting accreditation examinations in the specialty 121 "Software Engineering"

**Senior Lecturer, Department of Software Engineering, *National Aerospace University*** [2001-2011] research activity, teaching: Basic Programming, C# Programming

**Assistant, Department of Software Engineering, *National Aerospace University*** [1998-2001] teaching Assistant, Basic Programming, Algorithms and Data Structures Courses

**Software Engineer, *State Enterprise Research and Design Institute «Souz»*** [1993-1998] Software Development

**Software Engineer, *Join-Stock Company «HARTRON»*** [1992-1993] Software Development

### Experience in International or National Projects:

Wildau-Kharkiv IT Bridge, DAAD Programme "Digital Ukraine: Ensuring Academic Success in Times of Crisis" [2022 – present]

## RESEARCH ACTIVITIES:

### Main Research Areas:

metaprogramming, software verification & validation, software quality, software optimization

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

Over 30 scientific publications, including indexed articles in Scopus and Web of Science databases; multiple conference proceedings and applied research outputs.

### Monographs, Textbooks:

Co-author of 1 monograph in the fields of Software Tools for Automated Testing of Complex Technical Systems.

### **Participation in Scientific Conferences:**

Regular participant (more 50) and speaker at international and national scientific conferences on marketing, education strategy, digital transformation, and sustainable university development (Ukraine, Poland, England, Germany, online forums).

## **TEACHING ACTIVITIES:**

### **Courses Taught:**

Basic Programming, C# Programming, Algorithms and Data Structures

### **Author Courses, Academic Programs:**

Author of the course "C# Programming", "Algorithms and Data Structures",  
Developer of academic content for "Basic Programming", "C# Programming", "Algorithms and Data Structures"

### **Methodological Materials, Textbooks:**

Co-author of textbooks in the field of programming  
Developed electronic resources and video materials for hybrid and online teaching (LMS: Moodle, Google Classroom)

## **GRANTS AND PROJECTS:**

### **Participation in International and National Projects:**

Wildau-Kharkiv IT Bridge, DAAD Programme "Digital Ukraine: Ensuring Academic Success in Times of Crisis" [2022 – present]

## **PROFESSIONAL ACHIEVEMENTS AND AWARDS:**

### **Honorary Titles:**

**Honorary Certificate from the National Aerospace University** National Aerospace University – Kharkiv Aviation Institute [2024]

### **Acknowledgment from the Kharkiv City Mayor**

Kharkiv City Council [2020]

### **Membership in Professional Associations:**

Kharkiv IT-Cluster [2021- present]

## **SELECTED PUBLICATIONS:**

### **Key Articles (Scopus, WoS, others):**

Manzhos, Y., Sokolova, Y. THE METHOD OF DATA COMPRESSION IN INTERNET OF THINGS COMMUNICATION | МЕТОД СТИСНЕННЯ ДАНИХ У МЕРЕЖІ ІНТЕРНЕТ РЕЧЕЙ, Radioelectronic and Computer Systems, 2020, (4), pp. 57–67

Yuriy S. Manzhos, Yevheniia V. Sokolova A Method of IoT Information Compression // International Journal of Computing 21 (1), 100-110.

Manzhos, Y.; Sokolova, Y. A Software Verification Method for the Internet of Things and Cyber-Physical Systems. *Computation* 2023, 11, 135. <https://doi.org/10.3390/computation11070135>

Manzhos, Y., & Sokolova, Y. (2024). A type system for formal verification of cyber-physical systems C/C++ software. *Radioelectronic and Computer Systems*, 2024(1), 127-142. doi:<https://doi.org/10.32620/reks.2024.1.11>

Manzhos, Y., Sokolova, Y. The Software Development Lifecycle of Cyber-Physical Systems. *ВІСНИК ХНТУ* No 1, 2024, 237-245 DOI <https://doi.org/10.35546/kntu2078-4481.2024.1.33>

Kirilenko, O., Ryzhkova, V., Rybalko, L., Zahrebelnyi, O., & Sokolova, Y. (2024). The use of the SmartCat platform for the development of soft skills in masters of philology. *Amazonia Investiga*, 13(76), 247-257. <https://doi.org/10.34069/AI/2024.76.04.20>

### **Books, Chapters in Collective Monographs:**

Turkin I. B., Lushchev P. A., Sokolova E. V. *Programmnye sredstva dlya avtomatizatsii ispytaniy slozhnykh tekhnicheskikh kompleksov* [Monograph]. Kharkiv: National Aerospace University, 2012. 212 p.

### **ADDITIONAL INFORMATION:**

#### **Language Proficiency:**

Ukrainian — Native, English — [Intermediate]

**Driving Licence:** Category B

**Personal Qualities:** Responsible, self-motivated, open-minded

#### **IT Skills:**

Productivity Tools: Microsoft Office (Word, Excel, PowerPoint), Google Drive

Development Tools: Microsoft Visual Studio

Educational Platforms: Google Classroom, Moodle

Communication & Collaboration: Zoom, Google Meet, Social Media

#### **Social and Community Activities:**

Charity during the full-scale invasion of russia