



# Curriculum Vitae

Liudmyla Omelchuk

<b>PERSONAL INFORMATION</b>	<p>Omelchuk Liudmyla Leonidivna</p> <p><i>Business address:</i> Ukraine, 03680, Kyiv, 4D Glushkova av., room. 611 <i>Business phone</i> +380 (44) 521-33-45 E-mail: <a href="mailto:l.omelchuk@knu.ua">l.omelchuk@knu.ua</a>, <a href="mailto:l.omelchuk@gmail.com">l.omelchuk@gmail.com</a> <a href="https://csc.knu.ua/en/person/omelchuk">https://csc.knu.ua/en/person/omelchuk</a></p> <p><b>Scientific DB</b> ORCID: 0000-0002-2287-1304 Scopus Author ID: 57209796450, <a href="https://scholar.google.ru/citations?user=pSp98UAAAAJ&amp;user=pSp-98UAAAAJ">https://scholar.google.ru/citations?user=pSp98UAAAAJ&amp;user=pSp-98UAAAAJ</a></p> <p><b>Sex:</b> F   <b>Date of birth:</b> 28/March/1977   <b>Citizenship:</b> Ukraine</p>
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<b>Scientific degree</b>	Candidate of Physical and Mathematical Science (PhD in Computer Science)
<b>Academic degree</b>	Associate Professor of the Department of Theory and Technology of Programming
<b>University</b>	Taras Shevchemko National University of Kyiv
<b>Faculty</b>	Computer Science and Cybernetics
<b>Department</b>	Theory and Technology of Programming
<b>Position</b>	Associate Professor Guarantor of the Bachelor's Educational Program «Computer Science» Chair of the Scientific-Methodological Committee of the Faculty of Computer Science and Cybernetics

## TEACHING COURSES:

<b>Current</b>	<ol style="list-style-type: none"><li>1. Object-Oriented Programming, Bachelor</li><li>2. Programming Tools and Environments, Bachelor</li></ol>
<b>In the Past</b>	<ol style="list-style-type: none"><li>1. Programming, Bachelor</li><li>2. Mathematical Logic, Bachelor</li><li>3. Theory of Calculation, Bachelor</li><li>4. Formal Methods of Program Specification, Bachelor</li><li>5. Software Engineering, Master</li></ol>

## EXPERIENCE OF SCIENTIFIC AND PEDAGOGICAL WORK

Period (start from the last)	Stage (description)
(FROM 2019)	<b>Position:</b> Associate Professor of the Department of Theory and Technology of Programming of the Computer Science and Cybernetics Guarantor of the Bachelor's Educational Program «Computer Science» Chair of the Scientific-Methodological Committee of the Faculty of Computer Science and Cybernetics
	Taras Shevchemko National University of Kyiv 03680, Kyiv, 4D Glushkova av. <a href="https://knu.ua/en/">https://knu.ua/en/</a>
	<b>Area of activity or sector</b> Education, Methodological Work
(FROM 2014 to 2019)	<b>Position:</b> Associate Professor of the Department of Theory and Technology of Programming of the Computer Science and Cybernetics
	Taras Shevchemko National University of Kyiv 03680, Kyiv, 4D Glushkova av. <a href="https://knu.ua/en/">https://knu.ua/en/</a>
	<b>Area of activity or sector</b> Education
(FROM 2005 to 2014)	<b>Position:</b> Assistant Professor of the Department of Theory and Technology of Programming of the Computer Science and Cybernetics
	Taras Shevchemko National University of Kyiv 03680, Kyiv, 4D Glushkova av. <a href="https://knu.ua/en/">https://knu.ua/en/</a>
	<b>Area of activity or sector</b> Education

## EDUCATION AND TRAINING

Period (start from the last)	Stage (description)
(2023)	Lodz University of Technology (Poland) ECIU4Ukraine Project funded by the Polish National Agency for Academic Exchange Micro-Credentials (04.12.2023-06.12.2023).
(2023)	Lund University (Sweden) Erasmus+ mobility period for Staff Mobility for Training (02.10.2023-06.10.2023) 23 academic hours.
(2022)	Taras Shevchenko National University of Kyiv  "The Role of Guarantors of Educational Programs in the Development of the Internal Quality Assurance System of Education" (Certificate No. 566-22 dated 27.05.2022 successfully completed professional development and mastered the course with a total of 90 academic hours / 3 ECTS credits).
(2021)	Internship at the National University of Kyiv-Mohyla Academy
(2020)	National Agency for Higher Education Quality Assurance (Ukraine)  Expert in Educational Program Accreditation: Online Training", provided by the National Agency for Higher Education Quality Assurance through the Prometheus Massive Open Online Courses platform. Certificate identification number fa5d5bd1b43e48b7b573684842531379. Link: <a href="https://courses.prometheus.org.ua:18090/cert/fa5d5bd1b43e48b7b573684842531379">https://courses.prometheus.org.ua:18090/cert/fa5d5bd1b43e48b7b573684842531379</a>

(2016)	Internship at the National University of Kyiv-Mohyla Academy
(2015)	Taras Shevchenko National University of Kyiv 03680, Kyiv, 4D Glushkova av. <b>Obtained qualification:</b> of the Associate Professor of the Department of Theory and Technology of Programming. Certificate 12ДІІ №044836
(2013)	Microsoft Certified Technology Specialist (Certificate No. E231-9142 dated 10.04.2013).
(2013)	Microsoft Certified Professional (Certificate No. E315-6668 dated 19.06.2013).
(2013)	Microsoft Specialist (Certificate No. E416-8854 dated 25.10.2013).
(2013)	Microsoft Certified Solutions Developer (Certificate No. E416-8853 dated 25.10.2013).
(from 1999 to 2007)	Postgraduate Student, Faculty of Cybernetics Taras Shevchenko National University of Kyiv 03680, Kyiv, 4D Glushkova av. <b>Qualification received:</b> Candidate of Physical and Mathematical Science (PhD in Computer Science), specialty 01.05.01 - Theoretical Foundations of Informatics and Cybernetics, on the topic: "Axiomatic Systems for Program Specifications over Metanominal Data", Diploma ДК № 041569
(from 1998 to 1999)	Student, Faculty of Cybernetics Taras Shevchemko University of Kyiv 03680, Kyiv, 4D Glushkova av. <b>Qualification received:</b> Master's Program (Master of Computer Science Degree)
(from 1993 to 1998)	Student, Faculty of Cybernetics Taras Shevchemko University of Kyiv 03680, Kyiv, 4D Glushkova av. <b>Qualification received:</b> Bachelor's Degree (Bachelor of Applied Mathematics Diploma)

#### Personal Skills:

Name	Level (description)
Native language	Ukrainian
Foreign Language	English, B1
Communication competence	Communicative skills developed through teaching at universities and organizing scientific competitions and conferences. Experience in conducting accreditation examinations, participating in academic councils, managing scientific and methodological committees, and fulfilling the role of the educational program guarantor, among other responsibilities.

<p>Organizational / managerial competence</p>	<p>Since 2021, Expert at the National Agency for Higher Education Quality Assurance (Ukraine).</p> <p>Since 2019, has been the Guarantor of the Bachelor's Degree Program in 'Computer Science' for Specialty 122 'Computer Sciences' at the Faculty of Computer Science and Cybernetics, Taras Shevchenko National University of Kyiv.</p> <p>Member of the project groups for the development of educational programs of the Faculty of Computer Science and Cybernetics at Taras Shevchenko National University of Kyiv for the second level of higher education in the specialty 122 'Computer Science': 'Computer Science'; 'Mathematical Methods of Artificial Intelligence' (including elements of dual education); 'Artificial Intelligence' (in English and Ukrainian languages);</p> <p>Since 2019, has been a member of the Academic Council of the Faculty of Computer Science and Cybernetics at Taras Shevchenko National University of Kyiv.</p> <p>Since 2019, has been serving as the Head of the Scientific-Methodological Committee of the Faculty of Computer Science and Cybernetics at Taras Shevchenko National University of Kyiv.</p> <p>Since 2019, has been a member of the Scientific-Methodological Council of Taras Shevchenko National University of Kyiv.</p>
<p>Digital competencies</p>	<p>Website Administration (<a href="http://www.csc.knu.ua">www.csc.knu.ua</a>, <a href="http://www.cyb.univ.ua">www.cyb.univ.ua</a>, 2016-2018).</p> <p>Programming (C#, C/C++, Java, Python, SQL).</p> <p>Microsoft Certified Technology Specialist (Certificate No. E231-9142 dated 10.04.2013)</p> <p>Microsoft Certified Professional (Certificate No. E315-6668 dated 19.06.2013).</p> <p>Microsoft Specialist (Certificate No. E416-8854 dated 25.10.2013).</p> <p>Microsoft Certified Solutions Developer (Certificate No. E416-8853 dated 25.10.2013).</p>
<p>Professional skills (of which are not listed above)</p>	<p>Known with methods of quality control in higher education.</p> <p>Organizational support for the formation of individual educational trajectories of learners.</p> <p>Rating of learners based on the level of competence development (partial qualifications, micro-qualifications).</p> <p>The involvement of students in improving programs and educational process (forms, good practices).</p>
<p>Areas of professional interests</p>	<p>Architecture of software systems.</p> <p>Programming technologies.</p> <p>Formal methods of software system development.</p> <p>Mathematical logic.</p> <p>Development and enhancement of IT-education.</p> <p>Interdisciplinary integration based on the application of a team-based approach to professional skills development.</p>

PERSONAL SKILLS:

Name	(names of publications, presentations, projects, conferences, seminars, titles of awards and prizes, membership in academies, professional and scientific associations, etc.)
Publications	<p>Author of over 50 scientific and methodological publications.</p> <p>Author of 1 textbook endorsed by the Ministry of Education and Science of Ukraine ('Technology of Programming Information Systems', 2015), 10 educational manuals, including 1 also endorsed by the Ministry of Education and Science of Ukraine ('Programming', 2011).</p>
Educational and Methodological Work	<p>Co-author of the first-level higher education standard in Ukraine for the speciality 121 'Software Engineering' in the field of knowledge 12 'Information Technologies' (Order No. 1166 dated 29.10.2018).</p> <p>Involved in the development of the second-level higher education standard in Ukraine for the speciality 121 'Software Engineering' in the field of knowledge 12 'Information Technologies' (Order No. 1424 dated 17.11.2020).</p> <p>Co-author of the project for the third-level higher education standard in Ukraine for the speciality 121 'Software Engineering' in the field of knowledge 12 'Information Technologies'.</p> <p>Involved in the development of the second-level higher education standard in Ukraine for the speciality 122 'Computer Science' in the field of knowledge 12 'Information Technologies' (Order No. 393 dated 28.04.2022).</p> <p>Involved in the development of the third-level higher education standard in Ukraine for the speciality 122 'Computer Science' in the field of knowledge 12 'Information Technologies' (Order No. 394 dated 28.04.2022).</p>
15 main publications	<p>Liudmyla Omelchuk, Andrii Kryvolap, Taras Panchenko, Nataliia Rusina, Olena Shyshatska and Oleksii Tkachenko (2023). Methods of Automated Analysis of Curricula According to the Higher Education Standard. IJCSNS International Journal of Computer Science and Network Security, VOL.23 No.11, November 2023, p .32-42.  <a href="https://doi.org/10.22937/IJCSNS.2023.23.11.4">https://doi.org/10.22937/IJCSNS.2023.23.11.4</a>.</p> <p>Omelchuk L. Extending the SMT-Lib Standard with Theory of Nominative Data [Електронний ресурс] / L. Omelchuk, O. Shyshatska // CEUR Workshop Proceedings. – 2019. – Режим доступу до ресурсу: <a href="http://ceur-ws.org/Vol-2393/paper_317.pdf">http://ceur-ws.org/Vol-2393/paper_317.pdf</a>.</p> <p>L. Omelchuk, O. Shyshatska “SMT-LIB Theory of Nominative Data”, ICTERI 2019, CCIS 1175, Springer Nature Switzerland AG 2020, pp. 89-110. – Режим доступу до ресурсу: <a href="https://link.springer.com/chapter/10.1007/978-3-030-39459-2_5">https://link.springer.com/chapter/10.1007/978-3-030-39459-2_5</a>.</p> <p>Omelchuk L. Development of the ICT-standard of higher education in Ukraine within the framework of European requirement / L. Omelchuk, O. Shyshatska, N. Rusina // CEUR Workshop Proceedings. – 2019.</p> <p>Омельчук Л.Л. Автоматизований аналіз освітньо-професійних програми «Інформатика», що реалізується на факультеті комп’ютерних наук та кібернетики, з програмами інших закладів вищої освіти за спеціальністю 122 «Комп’ютерні науки» / Л. Л. Омельчук, Н. Г. Русіна // Вісник Київського ун-ту. Серія: фіз.-мат. науки. – 2020. – №4. – С. 49–61.</p>

	<p>Омельчук Л.Л. Аналіз освітньо-професійних програм за спеціальністю 122 Комп'ютерні науки в розрізі програмних результатів навчання / Л. Л. Омельчук, Н. Г. Русіна // Вісник Київського ун-ту. Серія: фіз.-мат. науки. – 2021. – №1. – С. 89–101.</p> <p>Омельчук Л.Л. Порівняння освітніх програм в розрізі досяжності компетентностей і результатів навчання обов'язковими освітніми компонентами / Л. Л. Омельчук, Н. Г. Русіна // Вісник Київського ун-ту. Серія: фіз.-мат. науки. – 2021. – №3. – С. 129–136.</p> <p>Омельчук Л. Л. Автоматизований аналіз освітньо-професійних програми «Інформатика», що реалізується на факультеті комп'ютерних наук та кібернетики, з програмами інших закладів вищої освіти за спеціальністю 122 «Комп'ютерні науки» / Л. Л. Омельчук, Н. Г. Русіна. // Вісник Київського ун-ту. Серія: фіз.-мат. науки. – 2020. – №4. – С. 49–61.</p> <p>Омельчук Л. Л. Зміст дисциплін циклу професійної та практичної підготовки фахівців з інформатики / Л. Л. Омельчук // Збірник наукових праць "Вісник НТУУ "КПІ". Філософія. Психологія. Педагогіка". – 2014. – № 1. – С. 103–109.</p> <p>L.Omelchuk / Composition-nominative specification languages of the object - oriented programs //European Cooperation – Warsaw. Poland. 2015. – Vol 4. p. 76-84.</p> <p>Технології програмування інформаційних систем: методи, засоби, інструменти: підручник (гриф МОН України) / К.М.Лавріщева, М.С.Нікітченко, Л.Л. Омельчук. – К.: ВПЦ "Київський університет", 2015. - 367с.</p> <p>Зубенко В.В., Омельчук Л.Л. Програмування : навчальний посібник (гриф МОН) // К.: ВПЦ "Київський університет", 2011.- 624 с. (Гриф надано Міністерством освіти і науки України (лист № 1.4.18-Г-2020 від 29.08.08)).</p> <p>Розробка та впровадження галузевої рамки кваліфікацій в галузі знань «Інформаційні технології» / В.А. Заславський, М.С. Нікітченко, Л.Л. Омельчук, О.М. Ямкова. – Київ: Київський національний університет, 2016. «Добродій» – 88 с.</p> <p>Омельчук Л.Л. Об'єктно-орієнтоване програмування. Лабораторний практикум: навчальний посібник / Л.Л. Омельчук, А.О. Свистунов – Київ 2023. - 320 с. <a href="http://csc.knu.ua/uk/filer/canonical/1694795611/2328/">http://csc.knu.ua/uk/filer/canonical/1694795611/2328/</a> .</p> <p>Омельчук Л.Л. Інструментальні середовища та технології програмування. Лабораторний практикум: навчальний посібник / Л.Л. Омельчук, А.О. Свистунов. – Київ 2023. - 160 с. <a href="http://csc.knu.ua/uk/filer/canonical/1682272182/2242/">http://csc.knu.ua/uk/filer/canonical/1682272182/2242/</a>.</p>
Awards	<p>Certificate of Achievement from Taras Shevchenko National University of Kyiv for achievements in educational, scientific, and pedagogical work (2014).</p> <p>Certificate of Achievement for educational, scientific, and pedagogical work (2016).</p> <p>Letter of Appreciation from the Ministry of Education and Science of Ukraine (2018).</p>



	Certificate of Achievement from the Ministry of Education and Science of Ukraine (2019).
Participation in International Educational Projects	<p>Judge at the QS Reimagine Education Awards 2023" (<a href="https://www.credential.net/65b7675c-a0d2-4cd8-aac0-c77faa8911a8#gs.08bpqw">https://www.credential.net/65b7675c-a0d2-4cd8-aac0-c77faa8911a8#gs.08bpqw</a>).</p> <p>CPEA-LT-2016/10003 "Advanced Joint Educational and Research Program on Risk Management in Industry and Services in the Context of Global Economic, Technological, and Environmental Changes: Extended Version" (since 2022);</p> <p>Erasmus+ project 562013-EPP-1-2015-1-PLEPPKA2-CBHE-SP "Quality Assurance System in Ukraine: Development on the Base of ENQA Standards and Guidelines" QUAERE (2016-2018) (<a href="http://www.tempus.univ.kiev.ua/QUAERE/">http://www.tempus.univ.kiev.ua/QUAERE/</a>);</p> <p>Participated in the international Erasmus+ project 562013-EPP-1-2015-1-PLEPPKA2-CBHE-SP "Quality Assurance System in Ukraine: Development on the Base of ENQA Standards and Guidelines" QUAERE (2016-2018) (<a href="http://www.tempus.univ.kiev.ua/QUAERE/">http://www.tempus.univ.kiev.ua/QUAERE/</a>);</p> <p>TEMPUS project 30601-TEMPUS-1-2012-1-PL-TEMPUS-SMHES "Informatics and Management: Bologna-Style Qualifications Frameworks" under the Tempus-INARM program (2012-2015) (<a href="http://www.univ.kiev.ua/news/5759">http://www.univ.kiev.ua/news/5759</a>).</p>