

CURRICULUM VITAE

Vakaliuk Tetiana A.

Date of birth*23.11.1983

Citizenship* Ukraine

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Personal profiles in academic databases*

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Scopus:

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Web of Science:

<https://www.webofscience.com/wos/author/record/C-3650-2016>

Google Scholar

<https://scholar.google.com.ua/citations?hl=uk&user=Ka98KhMAAAJ>

Education*

(in the chronological order)

Zhytomyr Ivan Franko State University, 2006, specialisation: Pedagogy and methods of secondary education. Mathematics and fundamentals of computer science

Zhytomyr Ivan Franko State University, 2007, specialisation: Pedagogy and methods of secondary education Mathematics, qualification: 'Master of Pedagogical Education. Mathematics Teacher'

Zhytomyr Polytechnic State University, 2020, Master's degree, specialisation 121 'Software Engineering'

Research Degree*

(in the chronological order)

Candidate of Pedagogical Sciences

Diploma: DK No. 015885 dated 10 October 2013

	<i>Specialisation: 13.00.02 – Theory and Methods of Teaching (Informatics)</i> <i>Thesis topic: ‘Preparing future informatics teachers to develop logical thinking in senior school students’</i> <i>Doctor of Pedagogical Sciences</i> <i>Diploma: DD 009011 dated 15 October 2019</i> <i>Specialisation: 13.00.10 – Information and Communication Technologies in Education</i> <i>Thesis topic: ‘Theoretical and Methodological Foundations of Designing and Using a Cloud-Oriented Learning Environment for Training Bachelor's Degree Students in Computer Science’</i>
Academic status* <i>(in the chronological order)</i>	<i>Associate Professor, Department of Applied Mathematics and Informatics</i> <i>Diploma: 12-DC No. 041246 dated 26 February 2015</i> <i>Professor, Department of Software Engineering</i> <i>Certificate: AP No. 002091 dated 26 November 2020</i>
Professional work experience* <i>(for the last 10 years)</i>	<i>01.09.2023-present, Head of the Department of Software Engineering, Zhytomyr Polytechnic State University</i> <i>09.02.2021-present – Leading Researcher, Institute of Digitalisation of Education, National Academy of Pedagogical Sciences of Ukraine</i> <i>26.08.2019-01.09.2023, Professor, Department of Software Engineering, Zhytomyr Polytechnic State University</i> <i>01.11.2013-26.08.2019 – Associate Professor, Department of Applied Mathematics and Informatics, Zhytomyr Ivan Franko State University</i>
Management of collective research projects <i>(up to 5 projects in the last 10 years)</i>	<i>Designing an information and digital health-saving environment for the university under quarantine restrictions, Zhytomyr Polytechnic State University, 01.01.2022-31.12.2023, state budget funding, https://ssdet.ztu.edu.ua/dr-0122u000973/</i>
Participation in collective research projects <i>(up to 5 projects in the last 10 years)</i>	<i>1. Contractor, Creation of electronic multilingual academic sectoral dictionaries (thesauruses), state budget, 01.01.2020-31.12.2022, https://ssdet.ztu.edu.ua/dr-0120u101262/</i> <i>2. University supervisor, Fostering Entrepreneurship through Freelancing (ENTE EF), international Erasmus+, 01.11.2024 – 31.10.2026, https://enteef.uek.krakow.pl/</i>
Individual research projects <i>(up to 5 projects in the last 10 years)</i>	<i>Creation of a model for the digital transformation of the training process for future information technology specialists, 01.01.2022-31.12.2022, Scholarship of the Verkhovna Rada of Ukraine for young scientists – doctors of science, 0122U201745</i>

Selected research
publications*

(up to 10 items, articles - in
the last 5 years, book
publications (monographs –
in the last 10 years)

1. Serhiy O. Semerikov, Tetiana A. Vakaliuk, Olga B. Kanevska, Mykhailo V. Moiseienko, Ivan I. Donchev and Andrii O. Kolhatin. LLM on the edge: the new frontier. *Proceedings of the 5th Edge Computing Workshop (doors 2025)*, Zhytomyr, Ukraine, April 4, 2025. Edited by Tetiana A. Vakaliuk, Serhiy O. Semerikov. *CEUR Workshop Proceedings*, Vol. 3943, 2025. Pp. 137-161. <https://ceur-ws.org/Vol-3943/paper28.pdf> (Scopus)
2. Oleh V. Talaver, Tetiana A. Vakaliuk. A model for improving the accuracy of educational content created by generative AI. *Proceedings of the 7th International Workshop on Augmented Reality in Education (AREdu 2024)*, Kryvyi Rih, Ukraine, May 14, 2024. Edited by Serhiy O. Semerikov, Andrii M. Striuk, Maiia V. Marienko, Olha P. Pinchuk. *CEUR Workshop Proceedings*, Vol. 3918, 2025. Pp. 149–158. <https://ceur-ws.org/Vol-3918/paper372.pdf> (Scopus)
3. Mukovoz, V., Vakaliuk, T., Semerikov, S. (2024). Road Sign Recognition Using Convolutional Neural Networks. In: Faure, E., et al. *Information Technology for Education, Science, and Technics. ITEST 2024. Lecture Notes on Data Engineering and Communications Technologies*, vol. 222. pp 172–188. Springer, Cham. https://doi.org/10.1007/978-3-031-71804-5_12 (Scopus)
4. Serhiy O. Semerikov, Tetiana A. Vakaliuk, Iryna S. Mintii, Vita A. Hamaniuk, Olha V. Bondarenko, Pavlo P. Nechypurenko, Svitlana V. Shokaliuk, Natalia V. Moiseienko. Development of Digital Competencies in Immersive Cloud-Based Educational Environment. *Proceedings of the IX International Workshop on Professional Retraining and Life-Long Learning using ICT: Person-oriented Approach (3L-Person 2024)* co-located with 19th International Conference on ICT in Education, Research, and Industrial Applications (ICTERI 2024). Lviv, Ukraine, September 23, 2024. Edited by Stamatios Papadakis. *CEUR Workshop Proceedings*, Vol. 3781, 2024. Pp. 203-208. <https://ceur-ws.org/Vol-3781/paper27.pdf> (Scopus)
5. Y. O. Hodlevskyi and T. A. Vakaliuk, "Optimal Gradient Descent Algorithm for LSTM Neural Network Learning," 2024 IEEE 4th International Conference on Smart Information Systems and Technologies (SIST), Astana, Kazakhstan, 2024, pp. 245-249, doi: 10.1109/SIST61555.2024.10629398. (Scopus)
6. Vasilenko V.M., Vakaliuk T.A. Artificial intelligence in project management: analysis of current research and development prospects. *Scientific Notes of the V.I. Vernadsky Tavria National University. Series: Technical Sciences*. Volume 35 (74) No. 4, 2024. P. 60-67. <https://doi.org/10.32782/2663-5941/2024.4/10>
7. Riabko, A.V. and Vakaliuk, T.A., 2024. Physics on autopilot: exploring the use of an AI assistant for independent problem-solving practice. *Educational*

	Technology Quarterly, 2024 (1), pp.56–75. Available from: https://doi.org/10.55056/etq.671. 8. Yurii O. Hodlevskiy, Tetiana A. Vakaliuk, Oleksii V. Chyzhmotria, Olena H. Chyzhmotria and Oleh V. Vlasenko. <i>Finding Anomalies in the Operation of Automated Control Systems Using Machine Learning // Proceedings of the 4th International Workshop on Intelligent Information Technologies & Systems of Information Security, Khmelnytskyi, Ukraine, March 22–24, 2023. Edited by Tetiana Hovorushchenko, Oleg Savenko, Peter T. Popov, Sergii Lysenko. CEUR Workshop Proceedings (CEUR-WS.org, ISSN 1613-0073). Vol. 3373. Pp. 681-698. https://ceur-ws.org/Vol-3373/paper47.pdf (Scopus)</i> 9. Vakaliuk T.A., Pavlov R.V., Chyzhmotria O.V., Chyzhmotria O.G., Lysogor Yu.I. <i>Theoretical aspects of developing a web application for predicting cryptocurrency exchange rates // Information Technology and Computer Engineering, 2022, No. 1. P. 19-27 https://doi.org/10.31649/1999-9941-2022-53-1-19-27</i> 10. Mintii I.S., Vakaliuk T.A. <i>Educational component of digital competence of scientific and scientific-pedagogical workers: results of a diagnostic experiment Scientific Bulletin of the South Ukrainian National Pedagogical University named after K. D. Ushynsky. Issue 4 (149). Odessa, 2024. P. 33-39. https://doi.org/10.24195/2617-6688-2024-4-</i>
Participation in organizing committees for academic events (up to 5 items the last 10 years)	1. <i>Head, Edge Computing Workshop, international, online, Zhytomyr Polytechnic State University, 4 April 2025, https://edge.easyscience.education/2025/</i> 2. <i>Chair, 4th Yurii Ramskyi STE(A)M Workshop, international, online, Ternopil Volodymyr Hnatiuk National Pedagogical University, 14 May 2025, https://stem.easyscience.education/2025/</i> 3. <i>Co-chair, Workshop on Digital Transformation of Education, international, online, Institute of Digitalisation of Education of the National Academy of Pedagogical Sciences of Ukraine, 24 September 2025, https://digitransfed.ztu.edu.ua/</i> <i>Co-chair, XVII International Conference on Mathematics, Science and Technology Education, international, online, Kryvyi Rih State Pedagogical University, 14-16 May, 2025, https://icon-masted.easyscience.education/2025/</i>
Membership in editorial boards of academic journals (peer reviewed) (up to 5 items the last 10 years)	1. <i>Editor-in-Chief, Journal of Edge Computing, professional category B, https://acnsi.org/journal/index.php/jec/about/editorialTeam</i> 2. <i>Associate Editor – Information Technologies and Learning Tools, WoS, https://journal.iitta.gov.ua/index.php/itlt/associate</i>

	3. <i>Member of the editorial board – Educational Technology Quarterly, professional category B, https://acnsci.org/journal/index.php/etq/about/editorialTeam</i>
Editing (compiling) academic publications of research publications <i>(up to 5 items the last 10 years)</i>	1. <u>CEUR Workshop Proceedings, Vol. 3374: Proceedings of the 3rd Edge Computing Workshop (doors 2023)</u> 2. <u>CEUR Workshop Proceedings, Vol. 3553: Proceedings of the 2nd Workshop on Digital Transformation of Education (DigiTransfEd 2023) co-located with 18th International Conference on ICT in Education, Research and Industrial Applications (ICTERI 2023)</u> 3. <u>CEUR Workshop Proceedings, Vol. 3666: Proceedings of the 4th Edge Computing Workshop (doors 2024)</u> 4. <u>CEUR Workshop Proceedings, Vol. 3771: Proceedings of the 3rd Workshop on Digital Transformation of Education (DigiTransfEd 2024) co-located with 19th International Conference on ICT in Education, Research and Industrial Applications (ICTERI 2024)</u> 5. <u>CEUR Workshop Proceedings, Vol. 3943: Proceedings of the 5th Edge Computing Workshop (doors 2025)</u>
Educational activity <i>(up to 5 items the last 10 years)</i>	<i>Teaching experience - entire professional career</i>
Honors and awards <i>(up to 5 items the last 10 years)</i>	- 2016-2018 - Scholarship holder of the Cabinet of Ministers of Ukraine for young scientists; - 2020-2022 - Scholarship holder of the Cabinet of Ministers of Ukraine for young scientists; - 2021 - Letter of appreciation from the Ministry of Education and Science of Ukraine - 2022 - recipient of a named scholarship from the Verkhovna Rada of Ukraine for young scientists - doctors of science; - 2024 - 'Young Scientist of 2023' in the nomination 'Scientist with a scientometric base'
Foreign language proficiency*	English – B2