

Qualifications of the individual for defining area of expertise

<i>Name/ Birth year</i>	Adrian Horzyk / 1973
<i>Title (year degree obtained) / Prof. status</i>	Ph. D. CS (2001) / research scientist DSc. (2014) / associate professor
<i>Address¹</i>	AGH University of Science and Technology, 30, Mickiewicza Ave. 30-059 Krakow, Poland phone: (+4812) 617 4659 fax: (+4812) 617 4659, mobile: +48 533307642 horzyk@agh.edu.pl , http://home.agh.edu.pl/~horzyk/
<i>Area of expertise²</i>	artificial intelligence, computational intelligence machine learning, associative neural systems, cognitive neural systems, data mining knowledge engineering, biomedical data processing.
<i>Relevant (best) publications³</i>	<ol style="list-style-type: none"> 1. J. A. Starzyk, M. Jaszuk, Ł. Maciura, A. Horzyk, Concurrent Associative Memories with Synaptic Delays, IEEE Transactions on Neural Networks and Learning Systems, DOI 10.1109/TNNLS.2020.3041048, Accepted and Preview Dec. 2020, published Aug. 2021, Vol. 32, Issue 8, pp. 3736 - 3747, Open Access, IF: 10.451 2. A. Horzyk, D. Bulanda, J. A. Starzyk, ASA-graphs for Efficient Data Representation and Processing, International Journal of Applied Mathematics and Computer Science (AMCS), Vol. 30, No. 4, 2020, pp. 717 - 731, DOI 10.34768/amcs-2020-0053, IF: 1.417 3. Basawaraj, J. A. Starzyk, A. Horzyk, Episodic Memory in Minicolumn Associative Knowledge Graphs, IEEE Transactions on Neural Networks and Learning Systems, Vol. 30, Issue 11, Nov. 2019, pp. 3505-3516, DOI: 10.1109/TNNLS.2019.2927106 (TNNLS-2018-P-9932), IF: 8.793 4. A. Horzyk, J. A. Starzyk, J. Graham, Integration of Semantic and Episodic Memories, IEEE Transactions on Neural Networks and Learning Systems, Vol. 28, Issue 12, Dec. 2017, pp. 3084 - 3095, DOI: 10.1109/TNNLS.2017.2728203, IF: 7.982.
<i>Publications statistics:</i>	Elsevier Scopus: Publications: 55, Citations: 247, H-index: 9 Google Scholar: Publications: 77, Citations: 545, H-index: 13
<i>Other⁴</i>	<p><i>didactic responsibilities</i></p> <p>2017 - to date, Lecturer at AGH-UST, "Computational Intelligence"</p> <p>2019 - to date, Lecturer at AGH-UST, "Knowledge-based Computational Intelligence and Data Mining in Biomedicine"</p> <p>2002 - to date, AGH-UST, supervision of 1 PhD, 96 Master's, 40 BSc students, with their thesis/diploma</p> <p><i>major grants (as Principal Investigator or Main Contributor)</i></p> <p>Title: The use of associative-cognitive deep neural networks for modeling knowledge, prediction and classification in the area of pathophysiology of heart diseases</p>

¹ Organisation, street address, telephone, email, web page

² With keywords characterising your field(-s) of expertise

³ Max. 10

⁴ List didactic, major grants, conference responsibilities, professional recognitions, memberships, journals, patents, etc.

	<p>Period: 2021-2023 Centre: AGH University of Science and Technology (IDUB 1570) Funds: IDUB AGH-UST: EUR 88.000 Number of persons: 4</p> <p>Title: Development of effective mechanisms for robot perception using motivated learning and self-organizing associative memory Period: 2017-2020 Centre: AGH University of Science and Technology (2016/21/B/ST7/02220) Funds: State Committee for Scientific Research: EUR 193.000 Number of persons: 6</p> <p>Title: Efficient classification based on a new type of ontogenic neural networks Period: 2003-2006 Centre: AGH University of Science and Technology (4 T11C 025 24) Funds: State Committee for Scientific Research: EUR 22.000 Number of persons: 1</p> <p><i>invited lectures</i></p> <ul style="list-style-type: none"> • CEPE 2021 “Artificial intelligence in the medical service” • ICAISC 2015 “Innovative types and abilities of neural networks based on associative mechanisms and a new associative model of neurons” <p><i>memberships</i></p> <ul style="list-style-type: none"> • Member of the Biocybernetics and Biomedical Engineering Committee of the Polish Academy of Sciences in years 2020 – 2023, • Member of the Polish Section of the IEEE Association since 2020, • IEEE Senior Member no 93112804 since 2018, • European Neural Network Society Member since 2018, • INSTICC Member no 14562 since 2017, • Board Member of the Polish Neural Network Society since 2011, • Member and co-founder of the Polish Association of Artificial Intelligence since 2009 <p><i>reviewer of papers submitted to</i></p> <ul style="list-style-type: none"> • IEEE Transactions of Neural Networks and Learning Systems • International Journal of Applied Mathematics and Computer Science • Image Processing and Communication • Journal of Computing and Informatics • Elsevier Neurocomputing <p><i>reviewer of research project applications to:</i></p> <ul style="list-style-type: none"> * National Centre for Research and Development * National Science Centre
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