

## Qualifications of the individual for defining area of expertise

<b>Name/ Birth year</b>	<b>Piotr Szymczyk / 1963</b>
<b>Title (year degree obtained) / Prof. status</b>	Ph. D. EE. (1997) / research scientist DSc. (2017)
<b>Address<sup>1</sup></b>	AGH University of Science and Technology, 30, Mickiewicza Ave. 30-059 Krakow, Poland phone: (+4812) 6173946 <a href="mailto:Piotr.Szymczyk@agh.edu.pl">Piotr.Szymczyk@agh.edu.pl</a> , <a href="http://home.agh.edu.pl/~piotrs">http://home.agh.edu.pl/~piotrs</a>
<b>Area of expertise<sup>2</sup></b>	real time computer systems, embedded systems, medical electronic equipment, artificial neural networks
<b>Relevant (best) publications<sup>3</sup></b>	<ol style="list-style-type: none"> <li>Szymczyk M., Szymczyk P.: Automatic processing of Z-transform artificial neural networks using parallel programming, Neurocomputing; ISSN 0925-2312. - 2020 Vol. 379, s. 74-88 (LF) (IF2019 4.072) (Pkt. MNiSW 2019 = 100)</li> <li>Szymczyk P., Szymczyk M.: Identification of dynamic object using Z-Transform artificial neural network, Neurocomputing; ISSN 0925-2312. - 2018 vol. 312, s. 382-389 (LF) (IF2017 3.241) (Pkt. MNiSW = 30)</li> <li>Szymczyk M., Szymczyk P.: Neural networks based method for automatic classification of GPR data , COMPUTATIONAL TECHNOLOGIES IN ENGINEERING (TKI'2018): Proceedings of the 15th Conference on Computational Technologies in Engineering, AIP Conference Proceedings ISBN: 978-0-7354-1806-6, 2019 vol. 2078, s. 020014-1 - 020014-8 (WoS) (Pkt. MNiSW = 15)</li> <li>Szymczyk P.: Z-transform artificial neural networks, Neurocomputing ; ISSN 0925-2312. - 2015 vol. 168, s. 1207-1210. (LF) (IF2014 2.083) (Pkt. MNiSW = 30)</li> <li>Szymczyk P., Szymczyk M.: Classification of geological structure using ground penetrating radar and Laplace transform artificial neural networks, Neurocomputing ; ISSN 0925-2312. - 2015 vol. 148, s. 354-362. (LF) (IF2014 2.083) (Pkt. MNiSW = 30)</li> <li>Szymczyk P., Szymczyk M.: Supervised learning Laplace transform artificial neural networks and using it for automatic classification of geological structure, Neurocomputing ; ISSN 0925-2312. - 2015 vol. 154, s. 70-76. (LF) (IF2014 2.083) (Pkt. MNiSW = 30)</li> <li>Szymczyk P., Szymczyk M.: Non-destructive building investigation through analysis of GPR signal by S-transform, Automation in Construction ; ISSN 0926-5805. - 2015 vol. 55, s. 35-46. (LF) (IF2014 1.812) (Pkt. MNiSW = 40)</li> <li>Szymczyk P., Tomecka-Suchoń S., Szymczyk M.: Neural networks as a tool for georadar data processing, Int. J. Appl. Math. Comput. Sci., 2015, Vol. 25, No. 4, 955-960; ISSN: 1641-876X (print), 2083-8492 (online) (IF2014 1,227) (Pkt. MNiSW = 25)</li> </ol>
<b>Publications statistics:</b>	<b>Google Scholar:</b> Publications: 86, Citations: 181, H-index: 8

<sup>1</sup> Organisation, street address, telephone, email, web page<sup>2</sup> With keywords characterising your field(-s) of expertise<sup>3</sup> Max. 10

<i>Other<sup>4</sup></i>	<b>Work experience at research institutions</b>			
	Data (from – to)	Institution	Position	Activities and responsibilities
	From 01.10.2021	AGH University of Science and Technology, The Faculty of Electrical Engineering, Automatics, Computer Science and Biomedical Engineering, Department of Automatics and Biomedical Engineering	professor	Research in the field of automatics and computer science
	01.10.1997 30.09.2021	AGH University of Science and Technology, The Faculty of Electrical Engineering, Automatics, Computer Science and Biomedical Engineering, Department of Automatics and Biomedical Engineering	Assistant professor (adiunkt)	Research in the field of automatics and computer science
	2005 - 2008	Bielsko-Biała School of Banking and Finances Faculty of Banking and Finances Department of Informatics and Quantity Methods	Head of the Department	Managing the department

**Project management:**

- Analiza cyfrowych danych georadarowych przy użyciu komputerowego przetwarzania i rozpoznawania obrazów dla oceny stanu technicznego wałów przeciwpowodziowych oraz wykrywania niebezpiecznych zmian w strefach przypowierzchniowych ośrodka geologicznego (Analysis of digital ground-penetrating radar data using computer processing and image recognition for the evaluation of technical conditions of river embankments and detecting of dangerous changes in near-surface zones of geological medium.) (NCN - no UMO-2011/01/B/ST7/06178)

**Participation in projects:**

- Inteligentne, energooszczędne systemy sterowania orientowanymi systemami solarnymi (Smart, energy-efficient systems controlled by oriented solar systems) (NCN – no 6693/B/T02/2011/40)
- System inteligentnego monitoringu przestrzeni i obiektów szczególnego znaczenia – SIMPOZ (Intelligent surveillance system for monitoring of important public spaces and buildings – SIMPOZ) (MNiSW no 0128/R/t00/2010/12)

**Teaching – selected regular courses:**

- Systemy operacyjne czasu rzeczywistego (Real Time Operating Systems)
- Podstawy użytkowania systemów operacyjnych (The basic use of operating systems)
- Komputerowe systemy sterujące (Computer control systems)

<sup>4</sup> List didactic, major grants, conference responsibilities, professional recognitions, memberships, journals, patents, etc.