

Qualifications of the individual for defining area of expertise

<i>Name/ Birth year</i>	Piotr Szymczyk / 1963
<i>Title (year degree obtained) / Prof. status</i>	Ph. D. EE. (1997) / research scientist DSc. (2017)
<i>Address¹</i>	AGH University of Science and Technology, 30, Mickiewicza Ave. 30-059 Krakow, Poland Piotr.Szymczyk@agh.edu.pl , http://home.agh.edu.pl/~piotrs
<i>Area of expertise²</i>	real time computer systems, embedded systems, medical electronic equipment, artificial neural networks
<i>Relevant (best) publications³</i>	1. 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) 2. 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) 3. 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) 4. Szymczyk P.: Z-transform artificial neural networks, Neurocomputing ; ISSN 0925-2312. - 2015 vol. 168, s. 1207-1210. (LF) (IF2014 2.083) (Pkt. MNiSW = 30) 5. 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) 6. 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) 7. 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) 8. 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) 9. Szymczyk M., Szymczyk P.: Reliability of Cluster System with a Lot of Software Instances Lecture Notes in Computer Science, Computational Science - ICCS2004, Part 1, str. 417-420, Springer-Verlag Berlin 2004. (IF2004 0.513) 10. Piotr SZYMCHYK: Systemy operacyjne czasu rzeczywistego, Wydawnictwa AGH Kraków 2003, ISBN 83-88408-24-0

¹ Organisation, street address, telephone, email, web page² With keywords characterising your field(-s) of expertise³ Max. 10

	11. Piotr SZYMCZYK, Henryk MARCAK, Sylwia TOMECKA-SUCHOŃ, Magdalena SZYMCZYK, Mirosław GAJER, Tomisław GOŁĘBIEWSKI: Komputerowe przetwarzanie i analiza danych georadarowych, Wydawnictwo Naukowe IAE, Kraków 2015, ISBN 978-83-65003-00-3 12. Kłyś M., Szymczyk P., Szymczyk M., Gajer M.: Parallel implementation of neural networks with the use of GPGPU technology OpenCL, Measurement Automation Monitoring (formerly: Pomiary Automatyka Kontrola) ; ISSN 0032-4140, Jan. 2015, vol. 61, no. 01, s. 16-20 (Pkt. MNiSW = 11) 13. Szymczyk M., Szymczyk P.: Service Level Agreement for Outsourced Processes and Systems 12th International Conference Mixed Design of Integrated Circuits and Systems, Kraków 22-25 czerwiec 2005, Proceedings of 12th MIXDES 2005 Conference, Materiały konferencji, 2005, str. 635-638.																												
Publications statistics:	Google Scholar: Publications: 87, Citations: 181, H-index: 8																												
Other ⁴	Work experience at research institutions <table><tr><th>Data (from – to)</th><th>Institution</th><th>Position</th><th>Activities and responsibilities</th></tr><tr><td>From 01.10.2021</td><td>AGH University of Science and Technology, The Faculty of Electrical Engineering, Automatics, Computer Science and Biomedical Engineering, Department of Automatics and Biomedical Engineering</td><td>professor</td><td>Research in the field of automatics and computer science</td></tr><tr><td>01.10.1997 30.09.2021</td><td>AGH University of Science and Technology, The Faculty of Electrical Engineering, Automatics, Computer Science and Biomedical Engineering, Department of Automatics and Biomedical Engineering</td><td>Assistant professor (adiunkt)</td><td>Research in the field of automatics and computer science</td></tr><tr><td>2005 - 2008</td><td>Bielsko-Biała School of Banking and Finances Faculty of Banking and Finances Department of Informatics and Quantity Methods</td><td>Head of the Department</td><td>Managing the department</td></tr><tr><td>2004 - 2009</td><td>Bielsko-Biała School of Banking and Finances</td><td>Assistant professor (adiunkt)</td><td>Research in the field of computer science</td></tr><tr><td>2000</td><td>Ostrowiec Świętokrzyski School of Business and Entrepreneurship The Faculty of Computer Science</td><td>Assistant professor (adiunkt)</td><td>Research in the field of computer science</td></tr><tr><td>01.10.1995 - 30.09.1997</td><td>AGH University of Science and Technology, The Faculty of Electrical Engineering, Automatics and Electronics</td><td>Assistant (asystent)</td><td>Research in the field of automatics and computer science</td></tr></table>	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	2004 - 2009	Bielsko-Biała School of Banking and Finances	Assistant professor (adiunkt)	Research in the field of computer science	2000	Ostrowiec Świętokrzyski School of Business and Entrepreneurship The Faculty of Computer Science	Assistant professor (adiunkt)	Research in the field of computer science	01.10.1995 - 30.09.1997	AGH University of Science and Technology, The Faculty of Electrical Engineering, Automatics and Electronics	Assistant (asystent)	Research in the field of automatics and computer science
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⁴ List didactic, major grants, conference responsibilities, professional recognitions, memberships, journals, patents, etc.

		Department of Automatics		
01.10.1991 - 30.09.1995	AGH University of Science and Technology, The Faculty of Electrical Engineering, Automatics, and Electronics	Doctorate studies (unpaid leave of absence, scholarship)	Research in the field of computer science	
05.01.1988 - 30.09.1991	AGH University of Science and Technology, The Faculty of Electrical Engineering, Automatics and Electronics Department of Automatics	Technical position	Maintenance of computer equipment, overseeing of equipment during lectures, contribution in creating new laboratories	
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) Participation in the organizing committee of scientific conferences: - KES-2015 19th Annual International Conference on Knowledge-Based and Intelligent Information & Engineering Systems, Singapore 7, 8 & 9 Sept. 2015 - KES IDT 2015 INTELLIGENT DECISION TECHNOLOGIES - SMART DIGITAL FUTURES 2015 Sorrento, Italy 17-19 June 2015 - The conference: „Systemy Czasu Rzeczywistego” (Real Time Systems) 2004 - The conference: „Systemy Czasu Rzeczywistego” (Real Time Systems) 2003 - The conference: „Systemy Czasu Rzeczywistego” (Real Time Systems) 2002 - The conference: „Systemy Czasu Rzeczywistego” (Real Time Systems) 2001 - The conference: „Systemy Czasu Rzeczywistego” (Real Time Systems) 2000 Membership in organizations and scientific societies: - Polska Akademia Nauk Oddział w Krakowie - członek Komisji Ergonomicznej (Polish Academy of Sciences Branch in Krakow - a member of the Ergonomic Commission) - Polska Akademia Umiejętności - członek Komisji Ergonomii (Polish Academy of Arts and Sciences - a member of the Ergonomic Commission) - Polskie Towarzystwo Sieci Neuronowych (Polish Society of Neural Networks)				

	• Polskie Towarzystwo Matematyczne, Oddział Krakowski (Polish Mathematical Society, Branch Krakow) • Polskie Towarzystwo Informatyczne (Polish Information Processing Society) • Polskie Towarzystwo Ergonomiczne (Polish Ergonomics Society) • Polskie Towarzystwo Inżynierii Biomedycznej (Polish Society of Biomedical Engineering) Reviewing national or international projects and publications in national and international journals: • Publications in the journal “International Journal of Applied Mathematics and Computer Science” (Impact Factor: 1.390), ISSN: 1641-876X • Publications in the journal „Expert Systems with Applications” (Impact Factor: 2.240, ISSN: 0957-4174) • Publications in the journal „Neural Computing and Applications” (Impact Factor: 1.569, ISSN: 0941-0643) • Publications in the journal „Automation in Construction” (Impact Factor: 1.812 , ISSN: 0926-5805) • Publications in the journal „Applied Energy” (Impact Factor: 5.613, ISSN: 0306-2619) • Publications in the journal „Journal of Health & Medical Informatics” (Impact Factor: 1.98, ISSN: 2157-7420) • Publications in the journal „Przegląd Elektrotechniczny” (ISSN 0033-2097) • Papers and conference proceedings at the Conference KES IDT 2015 INTELLIGENT DECISION TECHNOLOGIES • Papers and conference proceedings at the Conference „Systemy Czasu Rzeczywistego” 2004 • Papers and conference proceedings at the Conference „Systemy Czasu Rzeczywistego” (Real Time Systems) 2003 • Papers and conference proceedings at the Conference „Systemy Czasu Rzeczywistego” (Real Time Systems) 2002 • Papers and conference proceedings at the Conference „Systemy Czasu Rzeczywistego” (Real Time Systems) 2001 • Papers and conference proceedings at the Conference „Systemy Czasu Rzeczywistego” (Real Time Systems)2000 Teaching – list of 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) • Informatyka czasu rzeczywistego (Real Time Computer Science) • Informatyka (Computer Science) • Techniki mobilne (Mobile Technology) • Algorytmy i struktury danych (Algorithms and Data Structures) • Modelowanie systemów (Modelling of systems) • Techniki komunikacji w organizacjach gospodarczych (Communication techniques in business organizations) • Zarządzanie informacją (Information management) • Systemy operacyjne Unix / Linux (Operating systems Unix / Linux) • Systemy operacyjne (Operating systems)
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28.05.25

	• Programowanie Komputerów (Computer Programming) • Bazy danych (Database)
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