

Qualifications of the individual for defining area of expertise

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| <i>Name/ Birth year</i> | Magdalena Szymczyk / 1964 |
| <i>Title (year degree obtained) / Prof. status</i> | Ph. D. EE. (1999) / research scientist |
| <i>Address¹</i> | AGH University of Science and Technology, 30, Mickiewicza Ave. 30-059 Krakow, Poland phone: (+4812) 6173946 Magdalena.Szymczyk@agh.edu.pl , http://home.agh.edu.pl/mszymcz |
| <i>Area of expertise²</i> | parallel computing programming of embedded systems, reliability and security of embedded systems |
| <i>Relevant (best) publications³</i> | <ol style="list-style-type: none"> 1. Szymczyk M., Szymczyk P.: Automatic processing of Z-transform artificial neural networks using parallel programming, <i>Neurocomputing</i>; 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, <i>Neurocomputing</i>; 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 , <i>COMPUTATIONAL TECHNOLOGIES IN ENGINEERING (TKI'2018): Proceedings of the 15th Conference on Computational Technologies in Engineering, AIP Conference Proceedings</i> ISBN: 978-0-7354-1806-6, 2019 vol. 2078, s. 020014-1 - 020014-8 (WoS) (Pkt. MNiSW = 15) 4. Szymczyk P., Szymczyk M.: Classification of geological structure using ground penetrating radar and Laplace transform artificial neural networks, <i>Neurocomputing</i> ; ISSN 0925-2312. - 2015 vol. 148, s. 354-362. (LF) (IF2014 2.083) (Pkt. MNiSW = 30) 5. Szymczyk P., Szymczyk M.: Supervised learning Laplace transform artificial neural networks and using it for automatic classification of geological structure, <i>Neurocomputing</i> ; ISSN 0925-2312. - 2015 vol. 154, s. 70-76. (LF) (IF2014 2.083) (Pkt. MNiSW = 30) 6. Szymczyk P., Szymczyk M.: Non-destructive building investigation through analysis of GPR signal by S-transform, <i>Automation in Construction</i> ; ISSN 0926-5805. - 2015 vol. 55, s. 35-46. (LF) (IF2014 1.812) (Pkt. MNiSW = 40) 7. Szymczyk P., Tomecka-Suchoń S., Szymczyk M.: Neural networks as a tool for georadar data processing, <i>Int. J. Appl. Math. Comput. Sci.</i>, 2015, Vol. 25, No. 4, 955-960; ISSN: 1641-876X (print), 2083-8492 (online) (IF2014 1,227) (Pkt. MNiSW = 25) 8. Szymczyk M., Szymczyk P.: Reliability of Cluster System with a Lot of Software Instances <i>Lecture Notes in Computer Science, Computational Science - ICCS2004, Part 1</i>, str. 417-420, Springer-Verlag Berlin 2004. (IF2004 0.513) |
| <i>Publications statistics:</i> | Google Scholar: Publications: 83, Citations: 126, H-index: 6 |

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

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

³ Max. 10

| <i>Other</i> ⁴ | Work experience at research institutions | | | |
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| | Data (from – to) | Institution | Position | Activities and responsibilities |
| | From 01.05.1999 | 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 |
| | 2004 - 2009 | Bielsko-Biała School of Banking and Finances | Assistant professor (adiunkt) | Research in the field of computer science |
| | 01.10.1995 - 30.04.1997 | AGH University of Science and Technology, The Faculty of Electrical Engineering, Automatics and Electronics Department of Automatics | Assistant (asystent) | Research in the field of automatics and computer science |
| 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 | |
| Participation in projects: | | | | |
| <ul style="list-style-type: none"> 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) 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/t00/20) | | | | |
| Teaching – list of regular courses: | | | | |
| <ul style="list-style-type: none"> Informatyka (Computer Science) Grafika komputerowa (Computer Graphics) Architektury komputerów (Computer Architecture) Algorytmy i struktury danych (Algorithms and Data Structures) Programowanie Komputerów (Computer Programming) Bazy danych (Database) | | | | |

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