



Grzegorz Marcin Wójcik

Dr. habil., Associate Professor

Curriculum Vitae

Scientific Biography

- 18.06.2013 **Habilitation in Technical Sciences in the field of Biocybernetics and Biomedical Engineering**, *Faculty of Automatic Control, Electronics and Computer Science*, Silesian University of Technology, Gliwice, Poland.
- 13.12.2004 **Doctorate in Physical Sciences in the field of Computer Physics**, *Faculty of Mathematics, Physics and Computer Science*, Maria Curie-Skłodowska University in Lublin, Poland.
- 2000–2004 **Doctoral studies at Institute of Physics**, *Faculty of Mathematics, Physics and Computer Science*, Maria Curie-Skłodowska University in Lublin, Poland.
- 20.06.2000 **Master of Science in the field of Computer Physics**, *Faculty of Mathematics and Physics*, Maria Curie-Skłodowska University in Lublin, Poland.
- 1995–2000 **Master studies in Physics**, *Faculty of Mathematics and Physics*, Maria Curie-Skłodowska University in Lublin, Poland.
- 1991–1995 **1st Stanislaw Staszic High School in Lublin**, *Class profiled for Mathematics, Physics and Computer Science*, Poland.
- 1983–1991 **Romuald Traugutt Primary School No. 6 in Lublin**, Poland.

Places of Employment

[Maria Curie-Skłodowska University in Lublin](#)

- 14.11.2022– **Senator**, *Maria Curie-Skłodowska University in Lublin*.
- 1.10.2019– **Head of the Department of Neuroinformatics and Biomedical Engineering**, *Maria Curie-Skłodowska University in Lublin*, Faculty of Mathematics, Physics and Computer Science.
Institute of Computer Science
- 1.10.2015– **Associate Professor**, *Maria Curie-Skłodowska University in Lublin*, Faculty of Mathematics, Physics and Computer Science.
Institute of Computer Science

Maria Curie-Skłodowska University, Institute of Computer Science

ul. Akademicka 9, 20-033 Lublin, Poland

☎ +48 (81) 53-72-940 • 📠 +48 (81) 53-76-262

✉ gmwojcik@live.umcs.edu.pl • 🌐 gmwojcik.pl • in gmwojcik

🐦 gmwojcik • 🌐 gmwojcik

- 1.09.2016– **Head of Department of Neuroinformatics**, *Maria Curie-Skłodowska University in Lublin*, Faculty of Mathematics, Physics and Computer Science.
Institute of Computer Science
- 1.09.2014– **Head of Laboratory of Neuroinformatics**, *Maria Curie-Skłodowska University in Lublin*, Faculty of Mathematics, Physics and Computer Science.
Institute of Computer Science
- 1.07.2013– **Assistant Professor with Habilitation**, *Maria Curie-Skłodowska University in Lublin*, Faculty of Mathematics, Physics and Computer Science.
Institute of Computer Science
- 1.10.2005– **Assistant Professor**, *Maria Curie-Skłodowska University in Lublin*, Faculty of Mathematics, Physics and Computer Science.
Institute of Computer Science
- [Polish-Japanese Academy of Information Technology](#)
- 1.07.2021– **Senator PJATK**, Polish-Japanese Academy of Information Technology, Warsaw.
- 1.07.2021– **Head of the Department of Intelligent Systems and Data Science**, *Polish-Japanese Academy of Information Technology*, Warsaw, Faculty of Information Technology.
- 1.07.2021– **Head of "Data Science" specialisation at Computer Science 2nd degree studies**, *Polish-Japanese Academy of Information Technology*, Warsaw, Faculty of Information Technology.
- 20.10.2020– **Head of "Intelligent Data Processing Systems" specialisation at Computer Science 1st degree studies**, *Polish-Japanese Academy of Information Technology*, Warsaw, Faculty of Information Technology.
- 1.10.2018– **Head of postgraduate studies "Cybersecurity of Information and Telecommunication Systems"**, *Polish-Japanese Academy of Information Technology*, Warsaw, Faculty of Information Technology.
- 1.10.2017– **Head of postgraduate studies "Big Data Engineering"**, *Polish-Japanese Academy of Information Technology*, Warsaw, Faculty of Information Technology.
- 1.10.2017– **Associate Professor**, *Polish-Japanese Academy of Information Technology*, Warsaw, Faculty of Information Technology.
Department of Computer Networks
- [University of Economics and Innovation in Lublin](#)
- 1.10.2013– **Associate Professor**, *University of Economics and Innovation in Lublin*, Faculty of Transport and Computer Science.
30.09.2017
- 1.10.2012– **Assistant Professor**, *University of Economics and Innovation in Lublin*, Faculty of Transport and Computer Science.
30.09.2013
- 1.10.2008– **Dean's Proxy for the 1st Degree Graduate Studies in Computer Science**, *University of Economics and Innovation in Lublin*, Faculty of Transport and Computer Science.
30.09.2009
- 1.10.2007– **Lecturer**, *University of Economics and Innovation in Lublin*, Faculty of Transport and Computer Science.
30.09.2012

Maria Curie-Skłodowska University, Institute of Computer Science

ul. Akademicka 9, 20-033 Lublin, Poland

☎ +48 (81) 53-72-940 • 📠 +48 (81) 53-76-262

✉ gmwojcik@live.umcs.edu.pl • 🌐 gmwojcik.pl • in gmwojcik

🐦 gmwojcik • 🔄 gmwojcik

1st Stanislaw Staszic High School in Lublin

1.09.2004–30.09.2005 **Contract Teacher**, *1st Stanislaw Staszic High School in Lublin, Poland.*

1.09.2003–31.08.2004 **Trainee Teacher**, *1st Stanislaw Staszic High School in Lublin, Poland.*

Daewoo Motor Poland

3.07.2000–14.10.2000 **Analyst Programmer**, *Daewoo Motor Poland, Lublin.*

1.05.2000–2.07.2000 **Application Programmer**, *Daewoo Motor Poland, Lublin.*

1.02.2000–30.04.2000 **Referent**, *Daewoo Motor Poland, Lublin.*

Additional

2001–2004 **Computational Neuroscience Teacher**, *Youth Academy of Skills, Ignacy Jan Paderewski Foundation for the Promotion of Alternative Forms of Education in Lublin, Idea by Piotr Kononowicz.*

Projects

- 2021–2023 – pREservIng fuNdamental rIghTs In the use of digitAl technoLogies for e-health ServicEs (REINITIALISE). Scientific Board Member, Team Member. No.: 952357
- 15.07.2021–15.07.2022 – Understanding the Brain Fog – Research on COVID-19 Post-Infectious Chronic Fatigue Syndrome. NAWA Urgency Grants. Project Coordinator. Grant No. BPN/GIN/2021/1/00019/U/00001
- 1.07.2020–15.02.2022 – Integrated system for the treatment of speech impediments – VIRTUAL SPEECH THERAPY SYSTEM – VSTS. Chief R&D Officer. No. POIR.01.01.01-00-0842/19
- 1.07.2020–31.10.2021 – EEGDigiTrack Biofeedback AI – an innovative device for personalized neurotherapy with scientifically proven effectiveness. Senior Machine Learning Researcher. No. RPMA.01.02.00-14-b459/18-00
- 2010–2012 – Autism Spectrum Disorder - Integrated Theory. Investigator. Grant of Polish Ministry of Science and National Education, No. N519 578138
- 2009–2012 – Meritorical Coordinator for ICT in the project "School of Key Competences". University of Economics and Innovation in Lublin, Poland. The project financed by the European Union from the European Social Fund and the State Budget under the Human Capital Operational Program. No. UDA-POKL.03.03.04-00-133/09/01
- 2008–2010 – Investigating of the model of primate visual system in the large-scale simulation. Head, Principal Investigator. Grant of Polish State Committee for Scientific Research, No. N519 403734

Maria Curie-Skłodowska University, Institute of Computer Science

ul. Akademicka 9, 20-033 Lublin, Poland

☎ +48 (81) 53-72-940 • 📠 +48 (81) 53-76-262

✉ gmwojcik@live.umcs.edu.pl • 🌐 gmwojcik.pl • in gmwojcik

🐦 gmwojcik • 🔄 gmwojcik

- 2009 – Meritorical Expert – content author of physics and mathematics in the project "Hand in Hand with Einstein. 2nd Edition". Betacom S.A. Warsaw, Poland. The project financed by the European Union from the European Social Fund. No. UDA-POKL.03.03.04-00-142/08-00
- 2007–2009 – Modelling and large-scale simulations of the mammalian visual cortex. Principal Investigator. Grant of Polish State Committee for Scientific Research, No. N519 01732/2120
- 2007 – Investigating the properties of the simulated mammalian visual cortex macro-neural ensembles. Project Coordinator, Principal Investigator. Grant of Maria Curie-Skłodowska University in Lublin Vice-Rector for Science
- 2004–2005 – CLUSTERIX – National Linux Cluster. Investigator. Grant of Polish State Committee for Scientific Research, No. 6T11 2003C/06098

Visits & Interships

- 2022 – Department of Cognitive and Brain Sciences, Ben-Gurion University of the Negev, Beersheba, Israel
- 2016 – Visit to Klaipeda State University of Applied Sciences, Lithuania
- 2016 – Visit to Fondo Formación Euskadi, Trapagaran, Spain
- 2015 – Visit to Transport and Telecommunication Institute, Riga, Latvia
- 2015 – Visit to Klaipeda State University of Applied Sciences, Lithuania
- 2009, 2012, 2013 – Visits to Bergen University College, Norway (financed by: FSS, EEA Grants, Norway Grants and Erasmus – Life-Long Learning)
- 2008 – Visit to Interdisciplinary Center for Neural Computations (ICNC), Hebrew University, Jerusalem, Israel
- 2006, 2009, 2010 – Visits in Dept. of Physiology, Anatomy & Genetics (DPAG), University of Oxford
- 2005 – Intership at Edinburgh Parallel Computing Centre (EPCC) and at Dept. of Computing Science and Mathematics at University of Stirling financed by HPC-Europa project, United Kingdom
- 2001 – Visit to Institute for Theoretical Computer Science at Technische Universität Graz, Austria

Awards

- 2021 – 4th Class Team Award of Rector of Maria Curie-Skłodowska University in Lublin for outstanding service for the University
- 2021 – Team Award of Rector of Maria Curie-Skłodowska University in Lublin for outstanding scientific work
- 2020 – 3 × Team Award of Rector of Maria Curie-Skłodowska University in Lublin for outstanding scientific work
- 2020 – Jubilee Award for 20 years of Service for the University
- 2018 – 2nd Class Individual Award of Rector of Maria Curie-Skłodowska University in Lublin for outstanding service for the University

Maria Curie-Skłodowska University, Institute of Computer Science

ul. Akademicka 9, 20-033 Lublin, Poland

☎ +48 (81) 53-72-940 • 📠 +48 (81) 53-76-262

✉ gmwojcik@live.umcs.edu.pl • 🌐 gmwojcik.pl • in gmwojcik

🐦 gmwojcik • 🔄 gmwojcik

- 2014 – 3rd Class Individual Award of Rector of Maria Curie-Sklodowska University in Lublin for outstanding service for the University
- 2013 – Individual Award of Rector of Maria Curie-Sklodowska University in Lublin for Habilitation
- 2012 – 3rd Class Individual Award of Rector of Maria Curie-Sklodowska University in Lublin for outstanding service for the University
- 2011 – 3rd Class Individual Award of Rector of Maria Curie-Sklodowska University in Lublin for outstanding service for the University in academic year 2010/2011

Membership

- Since 2022 – Member of Yacht Club UMCS
- Since 7.06.2019 – Member of Polish Shooting Sport Association, Lublin Shooting Sport Association & SNAJPER Lublin Shooting Club
- 2016-2020 – Rector's Representative in the Council of Academic Centre of Culture "Chatka Żaka" in Lublin, Poland
- 2016-2020 – Supervisory Council Member of Centre of Transfer of Knowledge and Technology at Maria Curie-Sklodowska University in Lublin, Poland
- Since 2015 – Editorial Board Member of Bio-Algorithms and Med-Systems
- Since 2015 – Program Council of High Field Magnetic Resonance Laboratory at the ECOTECH-COMPLEX Centre in Lublin, Poland
- Since 2015 – Vice-Chairman of the Commission of Fundamentals and Applications in Chemistry, Physics and Technology, Agriculture and Medicine. Polish Academy of Sciences, Filiale in Lublin, Poland. Chairman of Section of Physics. Member since 2009
- Since 1.03.2009 – Member of National Geographic Society
- 2009-2010 – Chapter Member (area: Science) in the Competition "Promotion of the Achievements of Polish Science". Foundation OIC Poland, Lublin
- Since 8.12.2005 – Member of Polish Numismatic Society. Since 2015 Board Member of Lublin Branch

Courses

- 25 – 29.07.2022 – Intensive sailing course, Wind Hunter, Gdansk, Poland
- 16 – 17.12.2017 – Introduction to Project Management, Altkom Akademia, Lublin, Poland
- 12.02.2006 – 28.02.2006 – Changing your Mind about the Brain, workshop at Interdisciplinary Center for Neural Computations (ICNC), Hebrew University, Jerusalem, Israel
- 19.08.2002 – 13.09.2002 – EU Advanced Course In Computational Neuroscience, Obidos, Portugal
- 1999 – Novell NetWare 4.11 Administration Course (NW520)

Licenses & Certificates

- 2022 – Patent of Inland Skipper (No. PU/54986)

Maria Curie-Sklodowska University, Institute of Computer Science

ul. Akademicka 9, 20-033 Lublin, Poland

☎ +48 (81) 53-72-940 • 📠 +48 (81) 53-76-262

✉ gmwojcik@live.umcs.edu.pl • 🌐 gmwojcik.pl • in gmwojcik

🐦 gmwojcik • 🔄 gmwojcik

- 2022 – A-Class Certificate of Amateur Radio Operator (No. A-29915). Call Sign: SQ8GMW (DC.WML.5101.1697.2022.2)
- 2019 – Shooting Patent: pistol, rifle, shotgun. (No. 61325/PAT/11/2019)
- 2019 – Shooting Sport License: pistol, rifle, shotgun (No. L69023)
- 2002 – Cambridge Certificate in Advanced English (CAE), No. 8585438
- 1999 – Certified Novell Administrator (CNA) – intraNetWare, No. 9695185
- 1997 – Cambridge First Certificate in English (FCE), No. 976PL0100060
- 1994 – Driving Licence B-category

Foreign languages

English	Full professional proficiency
Russian	Basic proficiency
Polish	Native

Interests

Numismatics	Selected coins of Swiss Confederation
Shooting	Pistol. Rifle. Shotgun

Publications

E. Mikołajewska, P. Prokopowicz, Y. Chow, J. Masiak, D. Mikołajewski, G. M. Wójcik, B. Wallace, A. R. Eugene, and M. Olajossy, "From neuroimaging to computational modeling of burnout: The traditional versus the fuzzy approach—a review," *Applied Sciences*, vol. 12, no. 22, p. 11524, 2022.

A. Kawala-Sterniuk, M. Pelc, R. Martinek, and G. M. Wójcik, "Currents in biomedical signals processing—methods and applications," *Frontiers in Neuroscience*, vol. 16, 2022.

P. Schneider, G. M. Wójcik, A. Kawiak, L. Kwasniewicz, and A. Wierzbicki, "Modeling and comparing brain processes in message and earned source credibility evaluation," *Frontiers in Human Neuroscience*, vol. 16, 2022.

D. Mikołajewski, J. Masiak, E. Mikołajewska, and G. M. Wójcik, "Modelowanie obliczeniowe występowania objawów wypalenia zawodowego u informatyków i fizjoterapeutów - wyniki wstępne," *Studia i Materiały Informatyki Stosowanej*, vol. 13, no. 3, pp. 29–35, 2021.

D. Mikołajewski, J. Masiak, E. Mikołajewska, and G. M. Wójcik, "Objawy wypalenia zawodowego jako podstawa modelu obliczeniowego," *Studia i Materiały Informatyki Stosowanej*, vol. 13, no. 3, pp. 22–28, 2021.

D. Mikołajewski, J. Masiak, E. Mikołajewska, G. M. Wójcik, and J. Kopowski, "Związane z pracą niekorzystne zmiany zdrowotne w grupie zawodowej informatyków – narracyjny przegląd literatury," *Studia i Materiały Informatyki Stosowanej*, vol. 13, no. 3, pp. 13–21, 2021.

Maria Curie-Skłodowska University, Institute of Computer Science

ul. Akademicka 9, 20-033 Lublin, Poland

☎ +48 (81) 53-72-940 • 📠 +48 (81) 53-76-262

✉ gmwojcik@live.umcs.edu.pl • 🌐 gmwojcik.pl • in gmwojcik

🐦 gmwojcik • 🌐 gmwojcik

- L. Kwasniewicz, G. M. Wojcik, P. Schneider, A. Kawiak, and A. Wierzbicki, "What to believe? impact of knowledge and message length on neural activity in message credibility evaluation," *Frontiers in Human Neuroscience*, vol. 15, p. 659243, 2021.
- B. Bartosik, G. M. Wojcik, A. Brzezicka, and A. Kawiak, "Are you able to trust me? analysis of the relationships between personality traits and the assessment of attractiveness and trust," *Frontiers in Human Neuroscience*, p. 389, 2021.
- G. M. Wójcik, A. Kawiak, P. Schneider, L. Kwasniewicz, and A. Wierzbicki, "Whom to believe? understanding and modeling brain activity in source credibility evaluation," *Frontiers in Neuroinformatics*, vol. 14, p. 60, 2020.
- G. M. Wójcik, A. Kobus, J. Rogala, and U. Malinowska, "Influence of artefact removal on machine learning classification results in memory task eeg signal processing," *Bio-Algorithms and Med-Systems*, vol. 17, no. 2, p. eA30, 2021.
- K. Chlasta, G. M. Wójcik, and K. Wołk, "Liquid state machines in parallel simulations of mammalian visual system on raspberry pi.," *Bio-Algorithms and Med-Systems*, vol. 17, no. 2, p. aA36, 2021.
- A. Krajka, I. Panasiuk, A. Misiura, and G. M. Wójcik, "On the mutation model used in the fingerprinting dna," *Bio-Algorithms and Med-Systems*, vol. 16, no. 4, 2020.
- T. Krajka, A. Misiura, and G. M. Wojcik, "Simulation of the south-eastern polish subpopulations behaviour," in *2020 IEEE Conference on Computational Intelligence in Bioinformatics and Computational Biology (CIBCB)*, pp. 1–8, IEEE, 2020.
- P. Schneider, G. M. Wojcik, A. Kawiak, L. Kwasniewicz, and A. Wierzbicki, "True or false: How does our brain decide about truth?," in *2020 IEEE Conference on Computational Intelligence in Bioinformatics and Computational Biology (CIBCB)*, pp. 1–9, IEEE, 2020.
- A. Gajos-Balińska, G. M. Wójcik, and P. Stpczyński, "Cooperation of cuda and intel multi-core architecture in the independent component analysis algorithm for eeg data," *Bio-Algorithms and Med-Systems*, vol. 16, no. 3, 2020.
- A. Kawiak, G. M. Wójcik, L. Kwasniewicz, P. Schneider, and A. Wierzbicki, "Look who's talking: Modeling decision making based on source credibility," in *International Conference on Computational Science*, pp. 327–341, Springer, 2020.
- Ł. Kwaśniewicz, G. M. Wójcik, A. Kawiak, P. Schneider, and A. Wierzbicki, "How you say or what you say? neural activity in message credibility evaluation," in *International Conference on Computational Science*, pp. 312–326, Springer, 2020.
- G. M. Wojcik, *Simulations in Medicine, Irena Roterman-Konieczna, ed.*, ch. 3 Selected methods of quantitative analysis in electroencephalography, pp. 35–54. de Gruyter, 2020.
- G. M. Wójcik, J. Masiak, A. T. Kawiak, L. K. Kwasniewicz, P. Schneider, F. Postepski, and A. Gajos-Balinska, "Analysis of decision-making process using methods

Maria Curie-Skłodowska University, Institute of Computer Science
ul. Akademicka 9, 20-033 Lublin, Poland

☎ +48 (81) 53-72-940 • 📠 +48 (81) 53-76-262

✉ gmwojcik@live.umcs.edu.pl • 🌐 gmwojcik.pl • in gmwojcik

🐦 gmwojcik • 🔄 gmwojcik

of quantitative electroencephalography and machine learning tools," *Frontiers in Neuroinformatics*, vol. 13, p. 73, 2019.

G. M. Wójcik, A. Kawiak, L. Kwasniewicz, P. Schneider, and J. Masiak, "Azure machine learning tools efficiency in the electroencephalographic signal p300 standard and target responses classification," *Bio-Algorithms and Med-Systems*, vol. 15, no. 3, 2019.

W. K. Ozga, D. Zapała, P. Wierzgała, P. Augustynowicz, R. Porzak, and G. M. Wójcik, "Acoustic neurofeedback increases beta erd during mental rotation task," *Applied Psychophysiology and Biofeedback*, pp. 1–13, 2018.

P. Wierzgała, D. Zapała, G. M. Wójcik, and J. Masiak, "Most popular signal processing methods in motor-imagery bci: A review and meta-analysis," *Frontiers in Neuroinformatics*, vol. 12, p. 78, 2018.

Ł. Kwaśniewicz, P. Schneider, A. Kawiak, and G. M. Wójcik, "Comparison of mne selected functions parallelisation performance in source localisation algorithms for brain cortex activity quantitative analysis," in *Proceedings of Cracow Grid Workshop 2018*, pp. 49–51, 2018.

G. M. Wojcik, J. Masiak, A. Kawiak, L. Kwasniewicz, P. Schneider, N. Polak, and A. Gajos-Balinska, "Mapping the human brain in frequency band analysis of brain cortex electroencephalographic activity for selected psychiatric disorders," *Frontiers in Neuroinformatics*, vol. 12, p. 73, 2018.

A. Gajos-Balinska, G. M. Wojcik, and P. Stpiczynski, "Performance comparison of parallel fastica algorithm in the plgrid structures," in *ITM Web of Conferences*, vol. 21, p. 00026, EDP Sciences, 2018.

G. M. Wójcik, J. Masiak, A. Kawiak, P. Schneider, L. Kwasniewicz, N. Polak, and A. Gajos-Balinska, "New protocol for quantitative analysis of brain cortex electroencephalographic activity in patients with psychiatric disorders," *Frontiers in Neuroinformatics*, vol. 12, p. 27, 2018.

D. Kufel and G. M. Wojcik, "Analytical modelling of temperature effects on an ampa-type synapse," *Journal of Computational Neuroscience*, pp. 1–13, 2018.

A. Gajos-Balinska, G. M. Wojcik, and P. Stpiczynski, "High performance optimization of independent component analysis algorithm for eeg data," *Lecture Notes in Computer Science*, vol. 10777, pp. 495–504, 2018.

Y. Chow, J. Masiak, E. Mikołajewska, D. Mikołajewski, G. M. Wójcik, B. Wallace, A. Eugene, and M. Olajossy, "Limbic brain structures and burnout – a systematic review," *Advances in Medical Sciences*, vol. 63, pp. 192–198, 2018.

D. Mikołajewski, P. Prokopowicz, E. Mikołajewska, G. M. Wójcik, and J. Masiak, "Traditional versus mechatronic toys in children with autism spectrum disorders," *Acta Mechatronica - International Scientific Journal about Mechatronics*, vol. 2, no. 1, pp. 11–17, 2017.

Maria Curie-Skłodowska University, Institute of Computer Science

ul. Akademicka 9, 20-033 Lublin, Poland

☎ +48 (81) 53-72-940 • 📠 +48 (81) 53-76-262

✉ gmwojcik@live.umcs.edu.pl • 🌐 gmwojcik.pl • in gmwojcik

🐦 gmwojcik • 🌐 gmwojcik

- E. Mikołajewska, J. Masiak, D. Mikołajewski, G. M. Wójcik, and B. Augustyńska, "Neurorehabilitacja oparta na dowodach naukowych - wyzwania i zagrożenia," *Niepełnosprawność i Rehabilitacja*, no. 4, pp. 227–241, 2017.
- A. Gajos, G. M. Wojcik, and P. Stpiczyński, "Parallel independent component analysis algorithm – performance comparison for eeg signal," in *Proceedings of Cracow Grid Workshop 2017*, pp. 33–34, 2017.
- S. Kotyra and G. M. Wojcik, "The station for neurofeedback phenomenon research," *Advances in Intelligent Systems and Computing*, vol. 647, pp. 32–43, 2017.
- S. Kotyra and G. M. Wojcik, "Steady state visually evoked potentials and their analysis with graphical and acoustic transformation," *Advances in Intelligent Systems and Computing*, vol. 647, pp. 22–31, 2017.
- S. Kotyra and G. M. Wojcik, *20-th Polish Conference on Biocybernetics and Biomedical Engineering*, ch. The Station for Neurofeedback Phenomenon Research, p. 29. Kraków, 2017.
- S. Kotyra and G. M. Wojcik, *20-th Polish Conference on Biocybernetics and Biomedical Engineering*, ch. Steady State Visually Evoked Potentials and their analysis with graphical and acoustic transformation, p. 28. Kraków, 2017.
- G. M. Wojcik, *Proceedings of the International Scientific Conference Humboldt-Kolleg of Societas Humboldtiana Polonorum*, ch. Artificial Brain – An Non- Biological Intelligence Evolution Hypothesis, pp. 50–51. Kraków, 2017.
- E. Mikołajewska, D. Mikołajewski, G. M. Wójcik, B. Augustyńska, and J. Masiak, "Analiza wielkich zbiorów danych w rehabilitacji osób niepełnosprawnych," *Niepełnosprawność i Rehabilitacja*, no. 3, pp. 180–188, 2017.
- G. M. Wójcik, E. Mikołajewska, D. Mikołajewski, P. Wierzgała, A. Gajos, and M. Smolira, "Wykorzystanie egi's geodesic eeg system jako narzędzia do badań możliwości interfejsów mózg-komputer - doniesienie wstępne," *Niepełnosprawność i Rehabilitacja*, no. 2, pp. 166–181, 2016.
- Ł. Kwaśniewicz, W. Kuniszyk-Józkowiak, G. M. Wójcik, and J. Masiak, "Adaptation of the humanoid robot to speech disfluency therapy," *Bio-Algorithms and Med-Systems*, vol. 12, no. 4, pp. 169–177, 2016.
- D. Kufel and G. M. Wójcik, "Parallel computing of local field potentials in biological neural networks using lfpv," in *Proceedings of Cracow Grid Workshop 2016*, pp. 79–80, 2016.
- D. S. Kufel and G. M. Wojcik, "Analytical modelling of temperature effects on synapses," *arXiv preprint arXiv:1610.00611*, 2016.
- J. Masiak, G. M. Wójcik, A. Gajos, A. Kawiak, N. Polak, S. Kotyra, and Łukasz Kwaśniewicz, *Światowe innowacje łączące medycynę, inżynierię oraz technologie*

Maria Curie-Skłodowska University, Institute of Computer Science

ul. Akademicka 9, 20-033 Lublin, Poland

☎ +48 (81) 53-72-940 • 📠 +48 (81) 53-76-262

✉ gmwojcik@live.umcs.edu.pl • 🌐 gmwojcik.pl • in gmwojcik

🐦 gmwojcik • 🌐 gmwojcik

w diagnozowaniu i terapii autyzmu – Książka abstraktów, ch. Zastosowanie elektroencefalografów gęstej matrycy do oceny podejmowania decyzji u młodzieży z diagnozą autyzmu i zespołu Aspergera, pp. 49–50. Rzeszów, 2016.

A. Gajos and G. M. Wójcik, "Independent component analysis of eeg data for egi system," *Bio-Algorithms and Med-Systems*, vol. 12, no. 2, pp. 67–72, 2016.

G. M. Wójcik, *Osnovy nejrokibernetiki. Pod redakcją profesora Ryszarda Tadeusewicha*, ch. Zhidokostnye vychislenija v modelovanii mozga, pp. 196–211. Goriachaja linija - Telekom. Moskwa, 2015.

G. M. Wójcik, P. Wierzgala, and A. Gajos, "Evaluation of emotiv eeg neuroheadset," *Bio-Algorithms and Med-Systems*, vol. 11, no. 4, pp. 211–215, 2015.

A. Gajos, G. M. Wojcik, and P. Stpiczyński, "Concept of independent component analysis algorithm parallelisation," in *Proceedings of Cracow Grid Workshop 2015*, pp. 55–56, 2015.

G. M. Wójcik, *XLIII Zjazd Fizyków Polskich – Program i streszczenia*, ch. Badania złożoności mózgu homo sapiens: aspekty funkcjonalne i morfologiczne, p. 179. Oddział Kielecki Polskiego Towarzystwa Fizycznego, 2015.

G. M. Wojcik and M. Ważny, "Bray-curtis metrics as measure of liquid state machine separation ability in function of connections density," *Procedia Computer Science*, vol. 51, pp. 2979–2983, 2015.

A. Gajos and G. M. Wójcik, "Independent component analysis of eeg data for egi system," *Bio-Algorithms and Med-Systems*, vol. 11, no. 2, p. eA23, 2015.

P. H. Wójcik and G. M. Wójcik, "Application of levenberg–marquardt algorithm for engagement detection in electroencephalographic time-series," *Bio-Algorithms and Med-Systems*, vol. 11, no. 2, p. eA23, 2015.

A. Gajos and G. M. Wojcik, "Electroencephalographic detection of synesthesia," *Annales Universitatis Mariae Curie-Sklodowska, Sectio AI: Informatica*, vol. 14, no. 3, pp. 43–52, 2014.

R. Cebryk and G. M. Wojcik, "Liquid computing and analysis of sound signals," *Annales Universitatis Mariae Curie-Sklodowska, Sectio AI: Informatica*, vol. 14, no. 3, pp. 33–42, 2014.

S. Kotyra, G. M. Wojcik, and M. Smolira, "Synchronous ssvp data acquisition system," *Annales Universitatis Mariae Curie-Sklodowska, Sectio AI: Informatica*, vol. 14, no. 3, pp. 15–20, 2014.

G. M. Wojcik and M. Ważny, "Bray-curtis dissimilarity in liquid simulations of cortical hyper-column," in *Proceedings of Cracow Grid Workshop 2014*, pp. 127–128, 2014.

M. Ważny and G. M. Wojcik, "Shifting spatial attention – numerical model of posner experiment," *Neurocomputing*, vol. 135C, pp. 139–144, 2014.

Maria Curie-Sklodowska University, Institute of Computer Science

ul. Akademicka 9, 20-033 Lublin, Poland

☎ +48 (81) 53-72-940 • 📠 +48 (81) 53-76-262

✉ gmwojcik@live.umcs.edu.pl • 🌐 gmwojcik.pl • in gmwojcik

🐦 gmwojcik • 🌐 gmwojcik

- G. M. Wójcik, E. Mikołajewska, D. Mikołajewski, P. Wierzgała, A. Gajos, and M. Smolira, "Usefulness of egi eeg system in brain computer interfaces research," *Bio-Algorithms and Med-Systems*, vol. 9, no. 2, pp. 73–79, 2013.
- K. Dobosz, D. Mikołajewski, G. M. Wójcik, and W. Duch, "Simple cyclic movements as a distinct autism feature – computational approach," *Computer Science*, vol. 14, no. 3, pp. 475–489, 2013.
- E. Mikołajewska, G. M. Wójcik, D. Mikołajewski, P. Wierzgała, and A. Gajos, "Interfejsy mózg - komputer oparte na p300 w neurorehabilitacji," *Praktyczna Fizjoterapia i Rehabilitacja*, vol. 35, pp. 30–34, 2013.
- P. Wierzgała, G. M. Wojcik, and M. Smolira, "Finding the best efficiency in actionscript based web applications on example of fft algorithm," *Bio-Algorithms and Med-Systems*, vol. 8, no. 4, pp. 373–385, 2012.
- G. M. Wójcik, *Modelowanie i eksploracja sieci neuronów biologicznych w GENESIS*. Lublin: Instytut Informatyki UMCS, 2012.
- W. Duch, W. Nowak, J. Meller, G. Osinski, K. Dobosz, D. Mikołajewski, and G. M. Wójcik, "Computational approach to understanding autism spectrum disorders," *Computer Science*, vol. 13, no. 2, pp. 47–61, 2012.
- G. M. Wojcik, "Electrical parameters influence on the dynamics of the hodgkin-huxley liquid state machine," *Neurocomputing*, vol. 79, pp. 68–78, 2012.
- G. M. Wojcik, "Self-organising criticality in the simulated models of the rat cortical microcircuits," *Neurocomputing*, vol. 79, pp. 61–67, 2012.
- G. M. Wójcik, "Obserwacja samolotów na wysokościach przelotowych," *Zeszyty Naukowe WSEI – Transport i Informatyka*, vol. 1, no. 1, pp. 23–28, 2011.
- G. M. Wójcik and S. Kotyra, *Środowisko programisty*. Lublin: Instytut Informatyki UMCS, 2011.
- G. M. Wójcik, *Obliczenia płynowe w modelowaniu mózgu*. Warszawa: Akademicka Oficyna Wydawnicza Exit, 2011.
- W. Duch, W. Nowak, J. Meller, G. Osinski, K. Dobosz, D. Mikołajewski, and G. M. Wójcik, "Consciousness and attention in autism spectrum disorders," in *Proceedings of Cracow Grid Workshop 2010*, pp. 202–211, 2011.
- P. Wierzgała and G. M. Wojcik, "Signal visualisation software for mindset ms-1000 electroencephalograph," *Bio-Algorithms and Med-Systems*, vol. 7, no. 13, pp. 83–88, 2011.
- G. M. Wójcik, *Neurocybernetyka teoretyczna pod redakcją naukową Ryszarda Tadeusiewicza*, ch. Obliczenia płynowe w modelowaniu mózgu, pp. 173–187. Wydawnictwo Uniwersytetu Warszawskiego, 2010.

Maria Curie-Skłodowska University, Institute of Computer Science
ul. Akademicka 9, 20-033 Lublin, Poland

☎ +48 (81) 53-72-940 • 📠 +48 (81) 53-76-262

✉ gmwojcik@live.umcs.edu.pl • 🌐 gmwojcik.pl • in gmwojcik

🐦 gmwojcik • 🌐 gmwojcik

M. Zukowski, W. A. Kaminski, D. Stanislawek, J. J. Ruthe, G. M. Wojcik, and M. Falski, "Modelling eutheria's visual cortex using snml language," *Bio-Algorithms and Med-Systems, Supplement*, vol. 10, no. 6, p. 233, 2010.

S. Kotyra and G. M. Wojcik, "Test signal generators for mindset ms-1000 electroencephalograph with data acquisition system for linux os," *Bio-Algorithms and Med-Systems*, vol. 7, no. 13, pp. 77–82, 2011.

S. Kotyra and G. M. Wojcik, "Test signal generators for mindset ms-1000 electroencephalograph with data acquisition system for linux os," *Bio-Algorithms and Med-Systems, Supplement*, vol. 10, no. 6, pp. 93–94, 2010.

K. Dmitruk and G. M. Wojcik, "Modelling simple 3d scene based on rapid face tracking and objects recognition," *Annales Universitatis Mariae Curie-Sklodowska, Sectio AI: Informatica*, vol. 10, no. 2, pp. 63–68, 2010.

G. M. Wojcik and J. A. Garcia-Lazaro, "Analysis of the neural hypercolumn in parallel pcsim simulations," *Procedia Computer Science*, vol. 1, no. 1, pp. 845–854, 2010.

S. Kotyra and G. M. Wojcik, "Developing brain electric activity acquisition software for linux," *Annales Universitatis Mariae Curie-Sklodowska, Sectio AI: Informatica*, vol. 10, no. 1, pp. 7–14, 2011.

G. M. Wojcik and J. A. Garcia-Lazaro, "Investigating dynamics of mammalian cortical hypercolumn in parallel pcsim simulations," in *Proceedings of Cracow Grid Workshop 2009*, pp. 246–254, 2010.

B. J. Grzyb, E. Chinellato, G. M. Wojcik, and W. A. Kaminski, "Facial expression recognition based on liquid state machines built of alternative neuron models," in *IJCNN, IEEE*, pp. 1011–1017, 2010.

B. J. Grzyb, E. Chinellato, G. M. Wojcik, and W. A. Kaminski, "Which model to use for the liquid state machine?," in *IJCNN, IEEE*, pp. 1018–1024, 2010.

S. Kotyra and G. M. Wojcik, "The system of electric brain activity acquisition from eeg equipment for linux os," *Annales Universitatis Mariae Curie-Sklodowska, Sectio AI: Informatica*, vol. 8, no. 1, pp. 151–155, 2008.

B. J. Grzyb, G. M. Wojcik, and W. A. Kaminski, "The choice of the model of neuron and its influence on the properties and computational efficiency of liquid state machine," *Polish Journal of Environmental Studies*, vol. 17, no. 3B, pp. 548–552, 2008.

G. M. Wojcik and W. A. Kaminski, "Self-organised criticality as a function of connections' number in the model of the rat somatosensory cortex," in *Computational Science – ICCS 2008*, vol. 5101 of *Lecture Notes in Computer Science*, pp. 620–629, Springer, 2008.

G. M. Wojcik and W. A. Kaminski, "Nonlinear behaviour in mpi-parallelised model of the rat somatosensory cortex," *Informatica*, vol. 19, no. 3, pp. 461–470, 2008.

Maria Curie-Sklodowska University, Institute of Computer Science

ul. Akademicka 9, 20-033 Lublin, Poland

☎ +48 (81) 53-72-940 • 📠 +48 (81) 53-76-262

✉ gmwojcik@live.umcs.edu.pl • 🌐 gmwojcik.pl • in gmwojcik

🐦 gmwojcik • 🔄 gmwojcik

- G. M. Wojcik and W. A. Kaminski, "Liquid computing efficiency as a function of neural cell's electrical parameters," in *Modelling, Identification, and Control*, pp. 78–82, ACTA Press, 2008.
- J. J. Ruthe, G. M. Wojcik, W. A. Kaminski, D. Stanislawek, M. Zukowski, and M. Falski, "Investigating dynamics of mammalian cortical hypercolumn in parallel pcsim simulations," in *Proceedings of Cracow Grid Workshop 2007*, pp. 492–498, 2008.
- G. M. Wojcik, W. A. Kaminski, J. J. Ruthe, D. Stanislawek, M. Zukowski, and M. Falski, "Neural activity and new methods of computational analysis in the model of mammalian brain cortex," *Annales Universitatis Mariae Curie-Sklodowska, Sectio AI: Informatica*, vol. 6, pp. 49–55, 2008.
- G. M. Wojcik, W. A. Kaminski, and P. Matejanka, "Self-organised criticality in a model of the rat somatosensory cortex," in *Parallel Computing Technologies*, vol. 4671 of *Lecture Notes in Computer Science*, pp. 468–475, Springer, 2007.
- G. M. Wojcik and W. A. Kaminski, "Liquid state machine and its separation ability as function of electrical parameters of cell," *Neurocomputing*, vol. 70, no. 13–15, pp. 2593–2697, 2007.
- G. M. Wojcik and W. A. Kaminski, "Pattern separation in the model of mammalian visual system," in *PARELEC 2006*, IEEE Computer Society Press, pp. 309–312, 2006.
- G. M. Wojcik and W. A. Kaminski, "Liquid computations and large simulations of the mammalian visual cortex," in *Computational Science – ICCS 2006*, vol. 3992 of *Lecture Notes in Computer Science*, pp. 94–101, Springer, 2006.
- G. M. Wojcik and W. A. Kaminski, "Computational ability of lsm ensemble in the model of mammalian visual system," *Annales Universitatis Mariae Curie-Sklodowska, Sectio AI: Informatica*, vol. 5, pp. 309–314, 2006.
- G. M. Wojcik and W. A. Kaminski, "Grid-based simulations of mammalian visual system," in *Proceedings of Cracow Grid Workshop 2005*, pp. 384–389, 2006.
- G. M. Wojcik, "Large simulations of mammalian visual system," in *Science and Supercomputing in Europe*, pp. 290–295, HPC-Europa Annual Project Directory, 2005.
- G. M. Wojcik and W. A. Kaminski, "Large scalable simulations of mammalian visual cortex," in *Parallel Processing and Applied Mathematics*, vol. 3911 of *Lecture Notes in Computer Science*, pp. 399–405, Springer, 2005.
- G. M. Wojcik and W. A. Kaminski, "Large parallel simulations of mammalian visual system," in *Varia Informatica*, pp. 101–105, Polskie Towarzystwo Informatyczne, 2005.
- G. M. Wojcik and W. A. Kaminski, "Neuronal movement detector in the model of simulated mammalian visual system," *Bio-Algorithms and Med-Systems*, vol. 1, no. 1, pp. 321–324, 2005.

Maria Curie-Sklodowska University, Institute of Computer Science

ul. Akademicka 9, 20-033 Lublin, Poland

☎ +48 (81) 53-72-940 • 📠 +48 (81) 53-76-262

✉ gmwojcik@live.umcs.edu.pl • 🌐 gmwojcik.pl • in gmwojcik

🐦 gmwojcik • 🔄 gmwojcik

G. M. Wojcik and W. A. Kaminski, *Modelowanie Cybernetyczne Systemów Biologicznych pod redakcją Ireny Roterman-Koniecznej*, ch. Neuronal Movement Detector in the Model of Simulated Mammalian Visual System, p. 63. Księgarnia Akademicka, 2005.

G. M. Wojcik and W. A. Kaminski, "Investigating mammalian visual system with methods of informational theory," *Annales Universitatis Mariae Curie-Sklodowska, Sectio AI: Informatica*, vol. 3, pp. 145–152, 2005.

G. M. Wojcik and W. A. Kaminski, "Liquid state machines and large simulations of mammalian visual system," in *Proceedings of Cracow Grid Workshop 2004*, pp. 439–447, 2005.

G. M. Wojcik and W. A. Kaminski, "Informational theory application for the investigation of simulated mammalian visual system," in *Sztuczna Inteligencja w Inżynierii Biomedycznej*, 2004.

W. A. Kamiński, G. M. Wójcik, R. Hamwi, Łukasz Marianowicz, and J. Klimkiewicz, "Właściwości sztucznych sieci neuronów biologicznych," *Zamojskie Studia i Materiały*, vol. 6, no. 1, pp. 169–188, 2004.

G. M. Wojcik and W. A. Kaminski, "Multidimensional mutual information in biological visual system," *Artificial Intelligence Studies*, vol. 19/04, pp. 13–18, 2004.

G. M. Wójcik and W. A. Kamiński, "Informacyjna energia wiązania w modelowanym układzie wzrokowym," in *Obliczenia naukowe*, pp. 153–159, Polskie Towarzystwo Informatyczne, 2004.

G. M. Wojcik and W. A. Kaminski, "Hebbian encoding in biological visual system," *Annales Universitatis Mariae Curie-Sklodowska*, vol. 2, pp. 309–314, 2004.

W. A. Kaminski and G. M. Wojcik, "Liquid state machine built of hodgkin-huxley neurons," *Informatica*, vol. 15, no. 1, pp. 39–44, 2004.

W. A. Kamiński and G. M. Wójcik, "Informacja względna w maszynie neuronalnej hhlsm," *Sztuczna Inteligencja – organizacje wirtualne*, vol. 18/03, pp. 29–33, 2003.

G. M. Wojcik and W. A. Kaminski, "Liquid state machine built of hodgkin-huxley neurons and pattern recognition," in *Computational Neuroscience – Trends in Research*, pp. 245–251, Elsevier, 2004.

G. M. Wojcik and W. A. Kaminski, "Liquid state machine built of hodgkin-huxley neurons and pattern recognition," *Neurocomputing*, vol. 58–60, pp. 245–251, 2004.

W. A. Kaminski and G. M. Wojcik, "Liquid state machine built of hodgkin-huxley neurons – pattern recognition and informational entropy," *Annales Universitatis Mariae Curie-Sklodowska, Sectio AI: Informatica*, vol. 1, pp. 107–113, 2003.

G. M. Wójcik and W. A. Kamiński, "Badania maszyn neuronalnych hhlsm metodami fizyki statystycznej," in *Obliczenia naukowe*, pp. 9–16, Polskie Towarzystwo Informatyczne, 2003.

Maria Curie-Sklodowska University, Institute of Computer Science

ul. Akademicka 9, 20-033 Lublin, Poland

☎ +48 (81) 53-72-940 • 📠 +48 (81) 53-76-262

✉ gmwojcik@live.umcs.edu.pl • 🌐 gmwojcik.pl • in gmwojcik

🐦 gmwojcik • 🔄 gmwojcik

W. A. Kaminski and G. M. Wojcik, "Geometrical properties of phase space for the simulated biological-like neural networks," *International Journal of Non-linear Phenomena in Complex Systems*, vol. 5, no. 2, pp. 155–160, 2002.

W. A. Kamiński and G. M. Wójcik, "Maszyna neuronalna lsm na sztucznych neuronach biologicznych," *Sztuczna Inteligencja*, vol. 17/02, pp. 49–58, 2002.

W. A. Kamiński and G. M. Wójcik, "Maszyna neuronalna lsm na sztucznych neuronach biologicznych," *Informatyka Stosowana*, vol. S2/02, pp. 131–137, 2002.

W. A. Kamiński and G. M. Wójcik, "Geometryczne właściwości przestrzeni fazowej symulowanych układów sztucznych neuronów biologicznych," *Sztuczna Inteligencja*, vol. 16/01, pp. 67–75, 2001.

W. A. Kamiński and G. M. Wójcik, "Właściwości geometryczne przestrzeni fazowej symulowanych układów sztucznych neuronów biologicznych," *Informatyka Stosowana*, vol. S2/01, pp. 102–108, 2001.

Maria Curie-Skłodowska University, Institute of Computer Science

ul. Akademicka 9, 20-033 Lublin, Poland

☎ +48 (81) 53-72-940 • 📠 +48 (81) 53-76-262

✉ gmwojcik@live.umcs.edu.pl • 🌐 gmwojcik.pl • in gmwojcik

🐦 gmwojcik • 🌐 gmwojcik