01-Mar-21

CURRICULUM VITAE

PERSONAL BACKGROUND

Last name:	Łukasik
First name:	Szymon
Birth:	April 22nd 1981, Szczawnica, Poland
Nationality:	Polish
E-mail:	slukasik@ibspan.waw.pl, slukasik@agh.edu.pl

PROFESSIONAL EXPERIENCE

10.2020 –	associate professor at the Faculty of Physics and Applied Computer Science, AGH University of Science and Technology (at the Faculty since 10.2014).
09.2017 –	data scientist at Synerise
07.2012 –	assistant professor at the Systems Research Institute, Polish Academy of Sciences (at the Institute since 11.2007).
11.2012 – 09.2014	assistant professor at the Department of Automatic Control, Faculty of Electrical and Computer Engineering, Cracow University of Technology (at the Department since 11.2005).
10.2004 – 06.2005	student-assistant at the Department of Automatic Control, Faculty of Electrical and Computer Engineering, Cracow University of Technology.
07.2004	internship at the ATLAS Experiment Department, Henryk Niewodniczanski Nuclear Physics Institute.
09.2003 – 06.2004	computer network administrator at the Institute of Computational Civil Engineering, Faculty of Civil Engineering, Cracow University of Technology.
07.2003	computer network administrator assistant (internship) at the Department of Medical Radiation Physics, Stockholm University.

EDUCATIONAL BACKGROUND

2020	Systems Research Institute, Polish Academy of Sciences, Habilitation in Technical Sciences, field of information technology and telecommunication. Title of the research achievement: Methods of unsupervised data processing and knowledge extraction from large datasets
04.2013-07.2013	Program in Management, Innovation and Research Commercialization at Haas School of Business, University of California Berkeley (Polish Ministry of Science and Higher Education project "Top 500 Innovators Science, Management, Commercialization")
2012	Systems Research Institute, Polish Academy of Sciences, PhD in Computer Science, with distinction. Thesis: *Data dimensionality and sample size reduction for exploratory data analysis tasks [in Polish].*
2003 – 2006	Cracow University of Technology, Faculty of Electrical and Computer Engineering, MSc studies in Automatic Control Thesis: *Identification of probabilistic density function in real-world systems using kernel density estimation [in Polish],* grade: very good.
2000 – 2005	Cracow University of Technology, Faculty of Electrical and Computer Engineering, MSc studies in Computer Science, Thesis: *Software for testing device designed for multichannel high-voltage power supplies used in silicon detectors of ATLAS experiment at CERN [in Polish]*, grade: very good, with distinction.

FOREIGN SCHOLARSHIPS AND STUDY VISITS

10.2019 – 12.2019	Visiting researcher, The Australian National University.
07.2017	Visiting scholar, Computational Intelligence Research Group, UNINOVA, Portugal, BigSkyEarth (TD1403) COST action.
07.2015-10.2015	Postdoctoral fellow, Computational Intelligence Research Group, UNINOVA, Portugal.
04.2013-07.2013	Visiting scholar, University of California Berkeley, USA.
04.2012-07.2012	Postdoctoral fellow, National Laboratory of Pattern Recognition, Institute of Automation, Chinese Academy of Sciences, China.
06.2010	Visiting researcher, Institut de Recherches Interdisciplinaires et de Développements en Intelligence Artificielle, Université Libre de Bruxelles, Belgium.
07.2005	Czech Government scholarship, Czech Technical University in Prague, Center for Machine Perception.

04.2005	Slovakian Government scholarship, Technical University of Bratislava, Department of Mathematics.
04.2004	Slovakian Government scholarship, Technical University of Bratislava, Department of Mathematics.
04.2003	Czech Government scholarship, Czech Technical University in Prague, Center for Machine Perception.

LANGUAGES SPOKEN

English	C2 level, Cambridge Certificate in Advanced English with honors;
Chinese	basic;
French	basic.

EXTRACULLICULAR INTERESTS

History of the Roman Empire, Indie rock music, Formula 1 racing.

SCIENTIFIC ACTIVITY

A. BIBLIOMETRICS

A.1. ISI Web of Science
- 517 citations, h-index: 11;

A.2. Scopus
- 680 citations, h-index: 11;

A.3. Google Scholar
- 1222 citations, h-index: 14.

B. EXPERT AND SCIENTIFIC PUBLISHING DUTIES

B.1. Professional Expert
- European Commision, Horizon 2020 expert (2016-)
- National Centre for Research and Development, expert (2013-)
- "Technology Perspective Krakow-Malopolska 2020" (EU co-funded, 2010)
- "Foresight: automatic control, robotics, measurement technology" (EU co-funded, 2009)

B.2. Reviewer
- Algorithms – Web of Science indexed
- Applied Intelligence Review – Journal Citation Reports indexed
- Applied Mathematical Modeling – Journal Citation Reports indexed
- Applied Soft Computing – Journal Citation Reports indexed
- Bio-Algorithms and Med-Systems – Web of Science indexed
- Computer Languages, Systems & Structures – Journal Citation Reports indexed
- Computer Methods and Programs in Biomedicine – Journal Citation Reports indexed
- Engineering Science and Technology, an International Journal – Web of Science indexed
- Expert Systems – Journal Citation Reports indexed
- Fuzzy Sets and Systems – Journal Citation Reports indexed
- IEEE Transactions on Evolutionary Computation – Journal Citation Reports indexed
- IET Computer Vision – Journal Citation Reports indexed
- Informatics – Web of Science indexed
- Information Sciences – Journal Citation Reports indexed
- International Journal of Applied Mathematics and Computer Science – Journal Citation Reports indexed
- Internet Technology Letters – Web of Science indexed

- Journal of Applied Statistics– Journal Citation Reports indexed
- Journal of Intelligent and Fuzzy Systems – Journal Citation Reports indexed
- Knowledge-Based Systems – Journal Citation Reports indexed
- Modelling and Simulation in Engineering – Web of Science indexed
- Neural Computing and Applications – Journal Citation Reports indexed
- Sensors – Journal Citation Reports indexed
- Soft Computing – Journal Citation Reports indexed

B.3. Editor
- "Journal of Advanced Computing"
- "Technical Transactions: Automatic Control" (until 2014)

C. BOOKS, MONOGRAPHS, EDITED VOLUMES

C.9. S. Łukasik, P.A. Kowalski
Special Issue on "Nature Inspired Clustering Algorithms"
- Algorithms [submissions open], 2021.

C.8. P.A. Kowalski, S. Łukasik
„Special Section on Recent Advances in Information Technology III"
- Journal of Automation, Mobile Robotics and Intelligent Systems, vol. 14, nr 3, 2020.

C.7. P.A. Kowalski, S. Łukasik
„Special Section on Recent Advances in Information Technology II"
- Journal of Automation, Mobile Robotics and Intelligent Systems, vol. 13, nr 1, 2019.

C.6. P.A. Kowalski, S. Łukasik
„Special Section on Recent Advances in Information Technology"
- Journal of Automation, Mobile Robotics and Intelligent Systems, vol. 12, nr 1, 2018.

C.5. P. Kulczycki, P.A. Kowalski, S. Łukasik (eds.),
„Contemporary Computational Science"
- AGH University of Science and Technology, Kraków, 2018.

C.4. P. Kulczycki, L.T. Koczy, R. Mesiar, J. Kacprzyk (eds.); S. Łukasik (co-editor),
„Information Technology and Computational Physics"
- Springer, Berlin, 2017.

C.3. P.A. Kowalski, S. Łukasik, P. Kulczycki (red.),
„Proceedings of the International Conference on Computer Networks and Communication Technology"
- Atlantis Press, 2017.

C.2. P. Kulczycki, P.A. Kowalski, S. Łukasik (eds.)
"Information Technology, Computational and Experimental Physics"
- AGH University of Science and Technology Press, 2016.

C.1. S. Łukasik
"Algorithm Of Data Sample and Dimensionality Reduction for Exploratory Data Analysis Procedures" [in Polish]
- Wydawnictwo Politechniki Krakowskiej, 2013.

D. JOURNAL PAPERS AND BOOK CHAPTERS

D.40. S. Łukasik, P. A. Kowalski
"Clustering with nature-inspired metaheuristics"
- "Nature-Inspired Computation and Swarm Intelligence: Algorithms, Theory and Applications", X.-S. Yang (ed.), Academic Press/Elsevier, London, 2020, pp. 165-178.

D.39. P. A. Kowalski, S. Łukasik, M. Charytanowicz, P. Kulczycki
"Optimizing Clustering with Cuttlefish Algorithm"
- "Information Technology, Systems Research, and Computational Physics", P. Kulczycki, J. Kacprzyk, L.T. Kóczy, R. Mesiar, R. Wisniewski (eds.), Springer, Cham, 2020, pp. 34-43.

D.38. M. Charytanowicz, P. Kulczycki, S. Łukasik, P.A. Kowalski
"Image Enhancement with Applications in Biomedical Processing"
- "Information Technology, Systems Research, and Computational Physics", P. Kulczycki, J. Kacprzyk, L.T. Kóczy, R. Mesiar, R. Wisniewski (eds.), Springer, Cham, 2020, pp. 97-106.

D.37. S. Łukasik, K. Lalik, P. Sarna, P.A. Kowalski, M. Charytanowicz, P. Kulczycki
"Efficient Astronomical Data Condensation Using Fast Nearest Neighbors Search"
- "Information Technology, Systems Research, and Computational Physics", P. Kulczycki, J. Kacprzyk, L.T. Kóczy, R. Mesiar, R. Wisniewski (eds.), Springer, Cham, 2020, pp. 107-115.

D.36. S. Łukasik
"Grasshopper Optimization Algorithm "
- "Swarm Intelligence Algorithms. A Tutorial", A. Słowik (ed.), CRC Press, Boca Raton, 2020, pp. 193-206.

D.35. S. Łukasik
"Grasshopper Optimization Algorithm - Modifications and Applications"
- "Swarm Intelligence Algorithms Modifications and Applications", A. Słowik (ed.), CRC Press, Boca Raton, 2020, pp. 203-214.

D.34. A. Kumar, M. Ramachandran, A.H. Gandomi, R. Patan, S. Łukasik, R.K. Soundarapandian
"A deep neural network based classifier for brain tumor diagnosis"
- Applied Soft Computing (2019). DOI: 10.1016/j.asoc.2019.105528 **[IF=3.907, JCR, Web of Science]**.

D.33. P. Kopciewicz, S. Łukasik
"Exploiting Flower Constancy in Flower Pollination Algorithm: Improved Biotic Flower Pollination Algorithm and its Experimental Evaluation"
- Neural Computing and Applications (2019). DOI: 10.1007/s00521-019-04179-9 **[IF=4.213, JCR, Web of Science]**.

D.32. S. Łukasik, K. Lalik, P. Sarna, P.A. Kowalski, M. Charytanowicz, P. Kulczycki
„Efficient Astronomical Data Condensation using Approximate Nearest Neighbors"
- International Journal of Applied Mathematics and Computer Science, 2019 **[IF=1.694, accepted]**

D.31. P.A. Kowalski, S. Łukasik, M. Charytanowicz, P. Kulczycki
„Nature Inspired Clustering -- Use Cases of Krill Herd Algorithm and Flower Pollination Algorithm"
- Trends in Mathematics and Computational Intelligence, M.E. Cornejo et al. (eds.), Springer-Verlag, Berlin-Heidelberg, 2019, pp. 83-98. **[Web of Science]**

D.30. P.A. Kowalski, J. Świebocka-Więk, J. Kamiński, D. Gołuńska, S. Łukasik, J. Tarasiuk, P. Kulczycki
„Application of the Flower Pollination Algorithm in the Analysis of Micro-CT Scans"
- Trends in Mathematics and Computational Intelligence, M.E. Cornejo et al. (eds.), Springer-Verlag, Berlin-Heidelberg, 2019, pp. 1-9. **[Web of Science]**

D.29. M. Charytanowicz, P. Kulczycki, P. A Kowalski, S. Łukasik, Róża Czabak-Garbacz
„An evaluation of utilizing geometric features for wheat grain classification using X-ray images"
- Computers and Electronics in Agriculture, vol. 144, pp. 260-268, 2018. **[IF=2.427, JCR, Web of Science]**

D.28. P. Kulczycki, M. Charytanowicz, P.A. Kowalski, S. Łukasik
„Identification of atypical (rare) elements—a conditional, distribution-free approach"
- IMA Journal of Mathematical Control and Information, vol. 35/3, pp. 923–937. **[IF=1.358, JCR, Web of Science]**

D.27. A. Mora, T. Santos, S. Łukasik, J. Silva, A.J. Falcão, J.M. Fonseca, R.A. Ribeiro
„Land Cover Classification from Multispectral Data Using Computational Intelligence Tools: A Comparative Study"
- Information, vol. 8, no. 4, art. no 147, 2017. **[Web of Science]**

D.26. S. Łukasik, A. Moitinho, P.A. Kowalski, A. Falcão, R.A. Ribeiro, P. Kulczycki
„Survey of Object-Based Data Reduction Techniques in Observational Astronomy"
- Open Physics, vol. 14, pp. 578-586, 2016. **[IF=0.745, JCR, Web of Science]**

D.25. P.A. Kowalski, S. Łukasik
"Training Neural Networks with Krill Herd Algorithm"
- Neural Processing Letters, vol. 44, pp. 5-17, 2016. **[IF=1.620, JCR, Web of Science]**

D.24. D. Domańska, S. Łukasik
"Handling high-dimensional data in air pollution forecasting tasks"
- Ecological Informatics, vol. 34, pp. 70-91, 2016. **[IF=2.020, JCR, Web of Science]**

D.23. M. Charytanowicz, J. Niewczas, P. Kulczycki, P.A. Kowalski, S. Łukasik
"Discrimination of Wheat Grain Varieties Using X-Ray Images"
- Information Technologies in Biomedicine, E. Pietka, P. Badura, J. Kawa, W. Wieclawek (eds.), Springer-Verlag, Berlin-Heidelberg, 2016, pp. 39-50. **[Web of Science]**

D.22. S. Łukasik, P.A. Kowalski
"Study of Flower Pollination Algorithm for Continuous Optimization"
- Intelligent Systems' 2014, P. Angelov et al. (eds.), Springer, pp. 451-459, 2015. **[Web of Science]**

D.21. P.A. Kowalski, S. Łukasik
"Experimental Study of Selected Parameters of the Krill Herd Algorithm"
- Intelligent Systems' 2014, P. Angelov et al. (eds.), Springer, pp. 473-485, 2015. **[Web of Science]**

D.20. P. Kulczycki, S. Łukasik
"An Algorithm for Reducing Dimension and Size of Sample for Data Exploration Procedures"
- International Journal of Applied Mathematics and Computer Science, vol. 24, pp. 133-149, 2014. **[IF=1.227, JCR, Web of Science]**

D.19. P. Kulczycki, M. Charytanowicz, P.A. Kowalski, S. Łukasik
"Exemplary Applications of the Complete Gradient Clustering Algorithm in Bioinformatics, Management and Engineering"
- „Issues and Challenges of Intelligent Systems and Computational Intelligence", L.T. Kóczy, C. Pozna, J. Kacprzyk (eds.), Springer, pp. 119-132, 2014.

D.18. P. Kulczycki, S. Łukasik

"Reduction of Dimension and Size of Data Set by Parallel Fast Simulated Annealing"

- „Issues and Challenges of Intelligent Systems and Computational Intelligence", L.T. Kóczy, C. Pozna, J. Kacprzyk (eds.), Springer, pp. 273-290, 2014.

D.17. S. Łukasik, P. Kulczycki

"Using Topology Preservation Measures for Multidimensional Intelligent Data Analysis in the Reduced Feature Space"

- Lecture Notes in Artificial Intelligence, vol. 7895, pp. 184-193, 2013. **[Web of Science]**

D.16. S. Łukasik, M. Haręza, M. Kaczor

"Document content mining for authors' identification task"

- Technical Transactions: Automatic Control, vol. 1-AC, pp. 3-15, 2013.

D.15. P. Kulczycki, M. Charytanowicz, P.A. Kowalski, S. Łukasik

"The Complete Gradient Clustering Algorithm: Properties in Practical Applications"

- Journal of Applied Statistics, vol. 39, pp. 1211-1224, 2012. **[IF=0.449, JCR, Web of Science]**

D.14. S. Łukasik, P. Kulczycki

"Using Topology Preservation Measures for High-Dimensional Data Analysis in the Reduced Feature Space" [in Polish]

- Czasopismo Techniczne Politechniki Krakowskiej, seria: Automatyka, vol. 1-AC, pp. 5-16, 2012.

D.13. D. Falkiewicz, S. Łukasik

"Fuzzy modelling algorithm with Particle Swarm Optimization" [in Polish]

- Czasopismo Techniczne Politechniki Krakowskiej, seria: Automatyka, vol. 1-AC, pp. 41-54, 2012.

D.12. S. Łukasik, P. Kulczycki

"An Algorithm for Sample and Data Dimensionality Reduction Using Fast Simulated Annealing"

- Lecture Notes in Artificial Intelligence, vol. 7120, pp. 152-161, 2011. **[Web of Science]**

D.11. M. Dziedzic, S. Łukasik

"Differential Evolution in Hard-Constrained Clustering" [in Polish]

- Czasopismo Techniczne Politechniki Krakowskiej, seria: Elektrotechnika, vol. 1-E, pp. 3-20, 2010.

D.10. M. Charytanowicz, J. Niewczas, P. Kulczycki, P.A. Kowalski, S. Łukasik, S. Żak
"A Complete Gradient Clustering Algorithm for Features Analysis of X-ray Images"
- Information Technologies in Biomedicine, Ewa Pietka, Jacek Kawa (eds.), Springer-Verlag, Berlin-Heidelberg, 2010, pp. 15-24. **[Web of Science]**

D.9. S. Łukasik, M. Wicha, P. Kulczycki
"Simulated Annealing Algorithm for Radio Frequency Assignment" [in Polish]
- Studia i materialy Polskiego Stowarzyszenia Zarzadzania Wiedza, vol. 31, pp. 98-107, 2010.

D.8. S. Łukasik, S. Żak
"Firefly Algorithm for Continuous Constrained Optimization Tasks"
- Lecture Notes in Artificial Intelligence, vol. 5796, pp. 97-106, 2009. **[Web of Science]**

D.7. P. Kulczycki, S. Łukasik
"Redukcja wymiaru i licznosci proby dla potrzeb syntezy statystycznego ukladu wykrywania uszkodzen" [in Polish]
- Systemy wykrywajace, analizujace i tolerujace usterki, Z. Kowalczuk (ed.), PWNT, Gdansk (Poland), 2009, pp. 139-146.

D.6. P.A. Kowalski, S. Łukasik, M. Charytanowicz, P. Kulczycki
"Data-Driven Fuzzy Modeling and Control with Kernel Density Based Clustering Technique"
- Polish Journal of Environmental Studies, vol. 17, no 4C, pp. 83-87, 2008.

D.5. S. Łukasik
"Identification of Probabilistic Density in Real-World Systems Using Kernel Density Estimation" [in Polish]
- Czasopismo Techniczne Politechniki Krakowskiej, seria: Elektrotechnika, vol. 1-E, pp. 3-13, 2008.

D.4. S. Łukasik, Z. Kokosiński, G. Świętoń
"Parallel Simulated Annealing Algorithm for Graph Coloring Problem"
- Lecture Notes in Computer Science, vol. 4967, pp. 229-238, 2008. **[Web of Science]**

D.3. S. Łukasik, P.A. Kowalski, M. Charytanowicz, P. Kulczycki
"Fuzzy Model Identification Using Kernel-Density-Based Clustering"
- Developments in Fuzzy Sets, Intuitionistic Fuzzy Sets, Generalized Nets and Related Topics. Applications. Volume II, Krassimir Atanassov, Panagiotis Chountas, Janusz Kacprzyk, Maciej Krawczak, Pedro Melo-Pinto, Eulalia Schmidt, Sławomir Zadrożny (eds.), EXIT Publishing House, Warsaw, 2008, pp. 135-146.

D.2. S. Łukasik
"Parallel Computing of Kernel Density Estimates with MPI"
- Lecture Notes in Computer Science, vol. 4489, pp. 726-734, 2007. **[Web of Science]**

D.1. S. Łukasik
"Parallel Genetic Algorithms for Graph Coloring Problem using Message Passing Paradigm"
- Journal of Electrical Engineering, vol. 56, no 12/s, pp. 123-125, 2005.

E. SELECTED CONTRIBUTIONS TO SCIENTIFIC CONFERENCES

E.36. P.A. Kowalski, M. Kusy, S. Kubasiak, S. Łukasik
„Probabilistic neural network - parameters adjustment in classification task"
- 2020 International Joint Conference on Neural Networks (IJCNN), Glasgow, 19-24 July 2020, pp. 1-8. **[Web of Science]**

E.35. P.A. Kowalski, K. Franus, S. Łukasik
„Crow Search Algorithm for continuous optimization tasks"
- 6th international conference on Control, Decision and Information Technologies 23-26 April 2019, pp. 7-12.

E.34. S. Łukasik, M. Smęt, J. Królewski
„Generating Textual Descriptions for Recommendation Results using Fuzzy Linguistic Summaries"
- 2018 IEEE International Conference on Fuzzy Systems, 8-13 July 2018, Rio de Janeiro, pp. 2724-2728. **[Web of Science]**

E.33. P.A. Kowalski, S. Łukasik, M. Charytanowicz, P. Kulczycki
"Optimizing Clustering with Cuttlefish Algorithm"
- 3rd Conference on Information Technology, Systems Research and Computational Physics, 2-5 July 2018, Kraków.

E.32. M. Charytanowicz, P. Kulczycki, S. Łukasik, P.A. Kowalski
"Image enhancement with applications in biomedical processing"
- 3rd Conference on Information Technology, Systems Research and Computational Physics, 2-5 July 2018, Kraków.

E.31. S. Łukasik, K. Lalik, P. Sarna, P.A. Kowalski, M. Charytanowicz, P. Kulczycki
"Efficient Astronomical Data Condensation using Approximate Nearest Neighbors
- 3rd Conference on Information Technology, Systems Research and Computational Physics, 2-5 July 2018, Kraków.

E.30. S. Łukasik, P.A. Kowalski, M. Charytanowicz, P. Kulczycki
"Data Clustering with Grasshopper Optimization Algorithm"
- 2017 Federated Conference on Computer Science and Information Systems, Prague, 3-6 September 2017. **[Web of Science]**

E.29. P.A. Kowalski, S. Łukasik, M. Charytanowicz, P. Kulczycki
"On the Use of Nature Inspired Metaheuristic in Computer Game"
- 2017 Federated Conference on Computer Science and Information Systems, Prague, 3-6 September 2017. **[Web of Science]**

E.28. P.A. Kowalski, S. Łukasik, P. Kulczycki
"Methods of Collective Intelligence in Exploratory Data Analysis: A Research Survey" [invited talk]
- International Academic Conference on Computer Networks and Communication Technology, Xiamen (China), 16-18 December 2016.

E.27. P.A. Kowalski, S. Łukasik, M. Charytanowicz, P. Kulczycki
"Comparison of Krill Herd Algorithm and Flower Pollination Algorithm in Clustering Task"
- 8th European Symposium on Computational Intelligence and Mathematics, Sofia (Bulgaria), 5-8 October 2016, pp. 31-36.

E.26. P. Kulczycki, M. Charytanowicz, P.A. Kowalski, S. Łukasik
"Atypical (Rare) Elements Detection – A Conditional Nonparametric Approach"
- Computational Modeling of Objects Presented in Images: Fundamentals, Methods, and Applications, Niagara Falls (USA), 21-23 September 2016. **[Web of Science]**

E.25. P.A. Kowalski, S. Łukasik, M. Charytanowicz, P. Kulczycki
"Clustering based on the Krill Herd Algorithm with Selected Validity Measures"
- 2016 Federated Conference on Computer Science and Information Systems, Gdańsk, 11-14 September 2016, pp. 79-87. **[Web of Science]**

E.24. S. Łukasik, P.A. Kowalski, M. Charytanowicz, P. Kulczycki
"Clustering using Flower Pollination Algorithm and Calinski-Harabasz Index"
- 2016 IEEE Congress on Evolutionary Computation, Vancouver (Canada), 24-29 July 2016, pp. 2724-2728. [Web of Science]

E.23. S. Łukasik, P. Kulczycki
"Evaluating Dissimilarity Measures for Topology Preservation Indices Used in Multidimensional Data Analysis"
- Congress of Information Technology, Computational and Experimental Physics, Kraków (Poland), 18-20 December 2015.

E.22. S. Łukasik, P.A. Kowalski
"Study of Flower Pollination Algorithm for Continuous Optimization"
- IEEE Intelligent Systems, Warsaw (Poland),24-26 September 2014.

E.21. P.A. Kowalski, S. Łukasik
"Experimental Study of Selected Parameters of the Krill Herd Algorithm"
- IEEE Intelligent Systems, Warsaw (Poland),24-26 September 2014.

E.20. K. Ząbkiewicz, S. Łukasik, P. Kulczycki
"Genetic Programming Based Rule Classifier for Data Streams with Heterogeneous Features"
- 6th Győr Symposium and 3rd Hungarian-Polish and 1st Hungarian-Romanian Joint Conference on Computational Intelligence, Gyor (Hungary), 15-18 September 2014, pp. 109-117.

E.19. P.A. Kowalski, S. Łukasik
"Tuning Neural Networks with Krill-Herd Algorithm"
- 6th Győr Symposium and 3rd Hungarian-Polish and 1st Hungarian-Romanian Joint Conference on Computational Intelligence, Gyor (Hungary), 15-18 September 2014, pp. 119-128.

E.18. S. Łukasik, P.A. Kowalski
"Fully Informed Swarm Optimization Algorithms: Basic Concepts, Variants and Experimental Evaluation"
- 2014 Federated Conference on Computer Science and Information Systems, Warsaw (Poland), 7-10 September 2014, pp. 155 – 161.

E.17. S. Łukasik, P. Kulczycki
"Topology Preservation Measures and their Applications in Multidimensional Data Analysis"
- International Congress on Control and Information Processing 2013, The Second International Conference on Automatic Control and Information Technology 2013, Kraków (Poland), 7-8 December 2013, CD: Lukasik_Kulczycki_-_ICCIP_2013 (6 pages).

E.16. S. Łukasik, K. Bury, K. Jakubik
"Parallel Fully-Informed Swarm Algorithms"
- International Congress on Control and Information Processing 2013, The Second Polish-Hungarian Joint Conference on Computational Intelligence 2013, Kraków (Poland), 7-8 December 2013, CD: Lukasik_Bury_et_al_-_ICCIP_2013 (5 stron).

E.15. S. Łukasik, P. Kulczycki
"Using Topology Preservation Measures for Multidimensional Intelligent Data Analysis in the Reduced Feature Space"
- 12th International Conference – Artificial Intelligence and Soft Computing, Zakopane (Poland), 9-13 June 2013.

E.14. P. Kulczycki, M. Charytanowicz, P.A. Kowalski, S. Łukasik
"Exemplary Applications of the Complete Gradient Clustering Algorithm in Bioinformatics, Management and Engineering"
- First Hungarian-Polish Joint Conference on Computational Intelligence, Gyor (Hungary), pp. 102-106, 24-26 September 2012.

E.13. P. Kulczycki, S. Łukasik
"Reduction of Dimension and Size of Data Set by Parallel Fast Simulated Annealing"
- First Hungarian-Polish Joint Conference on Computational Intelligence, Gyor (Hungary), pp. 112-116, 24-26 September 2012.

E.12. S. Łukasik, P. Kulczycki
"An Algorithm for Sample and Data Dimensionality Reduction Using Fast Simulated Annealing"
- 7th International Conference on Advanced Data Mining and Applications (ADMA 2011), Beijing (China), 17-19 December 2011.

E.11. S. Łukasik
"Facts, conjectures and improvements for the Firefly Algorithm"
- Evolutionary Algorithms and Global Optimization (KAEiOG 2011), Warsaw (Poland), 21-22 September 2011.

E.10. S. Łukasik, M. Wicha, P. Kulczycki
"Algorytm symulowanego wyżarzania dla problemu przydziału częstotliwości radiowych" [in Polish]
- Badania Operacyjne i Systemowe (BOS), Bydgoszcz (Poland), 20-22 September 2010.

E.9. S. Łukasik
"Algorytm świetlika i jego zastosowanie w problemach optymalizacji" [in Polish]
- Przetwarzanie i analiza sygnałów w systemach wizji i sterowania, Słok (Poland), 23-25 June 2010.

E.8. S. Łukasik, P. Kulczycki
"Data dimensionality and sample size reduction for fuzzy modeling and control"
- Tenth International Conference on Fuzzy Set Theory and Applications (FSTA 2010), Liptovsky Jan (Slovakia), pp. 94-95, 1-5 February 2010.

E.7. S. Łukasik, S. Żak
"Firefly Algorithm for Continuous Constrained Optimization"
- 1st International Conference on Computational Collective Intelligence Semantic Web, Social Networks & Multiagent Systems (ICCCI), Wroclaw (Poland), 5-8 October, 2009.

E.6. P. Kulczycki, S. Łukasik
"Redukcja wymiaru i licznosci proby dla potrzeb syntezy statystycznego ukladu wykrywania uszkodzen" [in Polish]
- IX Miedzynarodowa Konferencja Diagnostyka Procesow i Systemow (DPS), Gdansk (Poland), 7-9 September, 2009.

E.5. S. Łukasik, P.A. Kowalski, M. Charytanowicz, P. Kulczycki
"Fuzzy Models Synthesis with Kernel-Density Based Clustering Algorithm"
- Fuzzy Systems and Knowledge Discovery (FSKD), Jinan (China), 18-20 October 2008, Proceedings: „Fifth International Conference on Fuzzy Systems and Knowledge Discovery", Jun Ma, Yilong Yin, Jian Yu, Shuiheng Zhou (eds.), vol. 3, IEEE Computer Society, Los Alamitos (USA), 2008, pp. 449-453.

E.4. S. Łukasik, Z. Kokosiński, G. Świętoń
"Parallel Simulated Annealing Algorithm for Graph Coloring Problem"
- International Conference on Parallel Processing and Applied Mathematics (PPAM), Gdansk (Poland), 9-12 September 2007.

E.3. S. Żak, S. Łukasik
"The Application of Parallel Genetic Algorithms in Resource Allocation Problems" [in Polish]
- Krakow Young Scientists Conference, 21-23 września 2006, In Proceedings: „Materiały konferencyjne Krakowskiej Konferencji Młodych Uczonych", Academica Publishing House, Krakow, 2006, pp. 171-179.

E.2. S. Łukasik
"Parallel Genetic Algorithms for Graph Coloring Problem using Message Passing Paradigm"
- International Conference in Applied Mathematics (ISCAM 2005), Bratislava (Slovakia), pp. 20, 15-16 April 2005.

E.1. S. Łukasik
"Jordan Canonical Form and some of its applications in modern control engineering"
- International Conference in Applied Mathematics (ISCAM 2004), Bratislava (Slovakia), pp. 22, 16-17 April 2004.

F. AWARDS

- AGH University of Science and Technology, Group Prize for outstanding teaching activities, 2018.
- AGH University of Science and Technology, Group Prize for outstanding organizational activities, 2016.
- Winner of business plan competition organized in the framework of "B-Innovative - Entrepreneurship for Better Business in Europe" project, 2013.
- Member of the Polish Government "Top 500 Innovators Science, Management, Commercialization Program" (EU co-funded), 2013.
- Postdoctoral scholarship in the framework of "Information technologies: research and their interdisciplinary applications " project (EU co-funded), 2013.
- Cracow University of Technology Rector Individual Prize for outstanding scientific achievements, 2012.

G. PROJECTS

- Project coordinator, "The development of inference technology and prediction of Consumer behavior for automation marketing and sales processes", R&D project in the framework of EU co-funded Regional Operational Programme for the Małopolska Region for 2014-2020, budget: approx. 1 mln EUR,
- Grant coordinator, R&D award in the framework of EU co-funded "Po-Po-Jutrze: center for incorporation of social innovations" project, European Social Fund under the Operational Program Knowledge Education Development, 2016-2017.

H. COMMITTES

- Event chair: Doctoral Symposium on Recent Advances in Information Technology (DS–RAIT'13, DS–RAIT'15, DS–RAIT'16, DS–RAIT'17, DS–RAIT'18, DS–RAIT'19, DS–RAIT'20)
- Event co-chair: 2nd International Symposium on Mechanical Design, Manufacturing and Automation (ISMDMA 2018)
- Steering Committee Member: 3rd Conference on Information Technology, Systems Research and Computational Physics, 6th International Symposium CompIMAGE'18 - Computational Modeling of Objects Presented in Images: Fundamentals, Methods, and Applications.

- Program Committee Member: International Multi-Conference on Computing in the Global Information Technology (ICCGI 2015, ICCGI 2016, ICCGI 2017 & ICCGI 2018), Tenth International Conference on Future Computational Technologies and Applications - Future Computing 2018, Special Session on Engineering Applications of Evolutionary Computation (CEC 2017 & CEC 2018 & CEC 2020).
- Scientific Coordinator: IEEE Intelligent Systems '14.

I. MEMBERSHIP IN ORGANIZATIONS

- Top 500 Innovators association (member of the program board),
- IEEE and IEEE Computational Intelligence Society.

J. SKILLS AND INTERESTS

- C/C++ and MATLAB programming, with special emphasis on parallel and distributed code (OpenMP, MPI, CUDA etc.),
- Exploratory data analysis (using Python, SPSS, Statistica, MATLAB),
- Collective intelligence and nature-inspired heuristic algorithms,
- Computer networking and administration (mainly UNIX-based servers), CISCO Networking Academy Instructor.

K. TEACHING AND SUPERVISION

- Current teaching duties: "Fundamentals of Data Science", "Image Processing", "Exploratory Data Analysis", "Matlab Numerical Computing Environment and its Applications", "Methods of Computational Intelligence" at AGH University of Science and Technology (lectures and laboratory exercises),
- Former teaching duties: "Exploratory Data Analysis", "Computer Networks", "Engineering Statistics", "Fundamentals of Control Engineering, "Parallel and Distributed Computing", "Control Engineering", "Information Technology", "Computer Control Systems", "Probability in Technical Applications" at AGH University of Science and Technology and Cracow University of Technology (both for Polish and international students, lectures and laboratory exercises),
- Supervisor for Phd thesis, Sergiy Tkachuk, project started, 2020.
- Auxiliary supervisor for Phd thesis, Grzegorz Gołaszewski, commencement of procedure: December 2018,
- Supervision of over than 10 already defended MSc and BSc thesis in Computer Science and Control Engineering.