

# CURRICULUM VITAE

assoc. prof. dr. ALEŠ ZAMUDA

Family name, First name: **Zamuda, Aleš** Date of birth: 23. 4. 1982 Nationality: Slovenian // CV last update: 30.6.2021

ORCID [0000-0002-3340-5624](https://orcid.org/0000-0002-3340-5624) Website: <http://www.aleszamuda.si>, <http://labraj.feri.um.si/~ales>

**SENIOR MEMBER: Institute of Electrical and Electronics Engineers (IEEE)** - IEEE is the world's largest association of technical professionals with more than 400,000 members in chapters around the world (integration in international networks); IEEE CIS member, <http://cis.ieee.org>  
**Vice Chairman of IEEE Slovenia Section** (<http://www.ieee.si>), **CIS Chapter Chair** (<https://r8.ieee.org/slovenia-cis/>); ACM SIGEVO member  
**Chairman of IEEE CIS Task Force on Benchmarking** (<http://cmte.ieee.org/cis-benchmarking>)

## SCIENTIFIC CITATIONS - Scientific excellence of the academic work

SCOPUS: 1333 (h-index 22), Google Scholar: 1791 (h-index 23, i-10 index 29)

## EDUCATION - Potential of the candidate

2012 Ph. D. in computer science, University of Maribor (UM), Slovenia  
2008 M. Sc. in computer science, University of Maribor (UM), Slovenia  
2006 B. Sc. in computer science, University of Maribor (UM), Slovenia

## WORK POSITIONS - Potential of the candidate

2020 – **Associate Professor**, UM, Faculty of Electrical Engineering and Computer Science  
2014 – **Assistant Professor (Docent)**, UM, Faculty of Electrical Engineering and Computer Science  
2006 – Teaching Assistant, UM, Faculty of Electrical Engineering and Computer Science  
before 2006 student-paid works (laboratories at UM and other companies), see <http://cv.aleszamuda.si>

## PROJECTS

2020- **EU H2020 project** holder for UM FERI part of consortium: **DAPHNE - Integrated Data Analysis Pipelines for Large-Scale Data Management, HPC, and Machine Learning**, <http://daphne-eu.github.io>  
2017-2020 COST (Cooperation in Science & Technology) Actions member: IC1406 High-Performance Modelling and Simulation for Big Data Applications (**cHiPSet**), CA15140 Improving Applicability of Nature-Inspired Optimisation by Joining Theory and Practice (**ImAppNIO**); also vice-leader for CA15140 WG3: Benchmarks and leader of IC1406 CS9: Forecasting Cryptocurrency Value by Sentiment Analysis  
2018-2020 **EU project** employed member: SmartVillages - Smart digital transformation of villages in the Alpine Space  
2017 worked under **EU ERC** project AI4REASON with team based in Prague (employed at TUO, Ostrava, CR)  
2017 **project lead** (national project): Interactive Multimedia Bulletin Boards - Adin DS: Upgrading the Transformation Server, Display Widgets, and Marketing Structures  
2015 project co-lead (national project): Adding new sales routes and the introduction of a new labeling shipments technology  
2015 project co-lead (national project): Developing a model for the demonstration of the APS system on the test data of the company  
2012- Slovenian Research Agency (ARRS) research programme (**stable funding**) employed group member: P2-0041 Computer Systems, Methodologies, and Intelligent Services  
2006 – research group member: 0796-001 Computer Architecture and Languages Laboratory

## FELLOWSHIPS AND AWARDS - Scientific excellence and innovative approach of the academic work

2018, 2019 IEEE Member Recruitment and Recovery Committee Certificate of Recognition  
2017, 2018 Publons top 1% reviewer  
2016 **Danubius Young Scientist Award, IDM (Austria)**  
2012 gold medal at **SHF, Seoul**  
2011 most important scientific results of national research programme P2-0041 at UM FEECS  
2012 most important socio-economic results of national research programme P2-0041  
2007–2010 several Top 5 rankings at **IEEE CEC** world competitions on Evolutionary Algorithms;  
2007 **IEEE Region 8 Student Paper Competition vice champion**  
2008 Andrej Perlach UM research award  
2006–2014 **four UM FEECS research awards**; UM bronze award for research, education, and profession  
2007 – international research society member: **IEEE Computational Intelligence Society**  
other several other national awards (available at <http://aleszamuda.si/w/awards>)

## NATIONAL AND INTERNATIONAL TEACHING ACTIVITIES - Potential of the candidate

2006 – University of Maribor, FEECS, courses 1) **MSc**: Instalation and Management of Cloud Computers 2) **MSc**: Connectible Systems and Intelligent Services, 3) **BSc**: Heterogeneous Computer Systems, 4) **BSc**: Programming I, 5) **BSc**: System Administration, 6) **Bsc**: Computer Architectures, 7) **MSc**: Application Services; **BSc**: advised 8-course pedagogic team projects Network Games and Mobile Games (national TV filmed), resulting in over dozen advised B. Sc. student diplomas; 8) **PhD**: Operational research of logistic, transport, and economic systems  
2012- **ERASMUS+** invited lecturer several times at University of Las Palmas de Gran Canaria, Spain; University of Alicante, Spain; University of Chemistry and Technology, Prague; Ghent University, Belgium; Tomas Bata University in Zlin, Czech Republic

## ARTICLE PUBLICATIONS IN JOURNALS – Scientific excellence and innovative approach of the academic work, Thematic relevance of the scientific work for issues / problems of the Danube region / Central Europe, Relevance of the scientific work beyond the national borders, Potential of the candidate

- [JoCS2020] ZAMUDA, Aleš, Lloret, Elena. Optimizing Data-Driven Models for Summarization as Parallel Tasks. *Journal of computational science*, ISSN 1877-7503, 2020, vol. 42, str. 101101, ilustr., doi: 10.1016/j.jocs.2020.101101. [COBISS.SI-ID 23118358] **JCR IF=3.976 (Q1)**
- [ESWA2019] ZAMUDA, Aleš, HERNÁNDEZ SOSA, José Daniel. Success history applied to expert system for underwater glider path planning using differential evolution. *Expert systems with applications*, ISSN 0957-4174. [Print ed.], 1 April 2019, vol. 119, pp. 155-170. [COBISS.SI-ID 21833238] **JCR IF=5.452 (Q1)**
- [SWEVO2019] VIKTORIN, Adam, SENKERIK, Roman, PLUHACEK, Michal, KADAVY, Tomas, ZAMUDA, Aleš. Distance based parameter adaptation for Success-History based Differential Evolution. *Swarm and evolutionary computation*, ISSN 2210-6502, 2019, vol. 50, pp. 100462. [COBISS.SI-ID 21862422] **JCR IF=6.912 (Q1)**
- [APEN2015] GLOTIČ, Arnel, ZAMUDA, Aleš. Short-term combined economic and emission hydrothermal optimization by surrogate differential evolution. *Applied energy*, ISSN 0306-2619, 1 March 2015, vol. 141, pp. 42-56. [COBISS ID18347030] **JCR IF=5.613 (Q1)**  
The co-author is now affiliated at Siemens, Austria (Power System Planning, Scheduling and Forecasting). Thematic relevance of the scientific work for issues/problems of the Danube region: this study covers the issue of energy scheduling in Danube region, with emphasis on hydrothermal power plants, water reservoirs balancing, and consideration of thermal power plant pollution minimization at combined energy production on state level.
- [INS2014] ZAMUDA, Aleš, BREST, Janez. Vectorized procedural models for animated trees reconstruction using differential evolution. *Information sciences*, ISSN 0020-0255. [Print ed.], Sep. 2014, vol. 278, pp. 1-21, doi: 10.1016/j.ins.2014.04.037. [COBISS.SI-ID 17793558] **JCR IF=4.038 (Q1)**
- [INS2013] ZAMUDA, Aleš, BREST, Janez. Environmental framework to visualize emergent artificial forest ecosystems. *Information sciences*, ISSN 0020-0255. [Print ed.], Jan. 2013, vol. 220, pp. 522-540, doi: 10.1016/j.ins.2012.07.031. [COBISS.SI-ID 16157206] **JCR IF=3.893 (Q1)**
- [SWEVO2015] ZAMUDA, Aleš, BREST, Janez. Self-adaptive control parameters' randomization frequency and propagations in differential evolution. *Swarm and evolutionary computation*, ISSN 2210-6502, Dec. 2015, vol. 25, pp. 72-99, doi: 10.1016/j.swevo.2015.10.007. [COBISS.SI-ID 19030550] **HOT25 JCR IF= 2.963 (Q1)**
- [ASOC2016] ZAMUDA, Aleš, HERNÁNDEZ SOSA, José Daniel, ADLER, Leonhard. Constrained differential evolution optimization for underwater glider path planning in sub-mesoscale eddy sampling. *Applied soft computing*, ISSN 1568-4946. May 2016, vol. 42, pp. 93-118, doi: 10.1016/j.asoc.2016.01.038. [COBISS.SI-ID 19316502] **JCR IF=2.810 (Q1)**  
Relevance of the scientific work beyond the national borders: EU-scale collaboration
- [ASOC2014] ZAMUDA, Aleš, HERNÁNDEZ SOSA, José Daniel. Differential evolution and underwater glider path planning applied to the short-term opportunistic sampling of dynamic mesoscale ocean structures. *Applied soft computing*, ISSN 1568-4946, Nov. 2014, vol. 24, pp. 95-108, doi: 10.1016/j.asoc.2014.06.048. [COBISS.SI-ID 17953046] **JCR IF=2.810 (Q1)**  
Relevance of the scientific work beyond the national borders
- [ASOC2011] ZAMUDA, Aleš, BREST, Janez, BOŠKOVIČ, Borko, ŽUMER, Viljem. Differential evolution for parameterized procedural woody plant models reconstruction. *Applied soft computing*, ISSN 1568-4946, 2011, vol. 11, iss. 8, pp. 4904-4912, doi: 10.1016/j.asoc.2011.06.009. [COBISS.SI-ID 15175446] **JCR IF=2.612 (Q1)**
- [IJSS2013] BREST, Janez, KOROŠEC, Peter, ŠILC, Jurij, ZAMUDA, Aleš, BOŠKOVIČ, Borko, SEPESY MAUČEC, Mirjam. Differential evolution and differential ant-stigmergy on dynamic optimisation problems. *International Journal of Systems Science*, ISSN 0020-7721, 2013, vol. 44, no. 4, pp. 663-679, doi: 10.1080/00207721.2011.617899. [COBISS.SI-ID 15354390] **JCR IF=1.579 (Q1)**
- [SOCO2011] BOŠKOVIČ, Borko, BREST, Janez, ZAMUDA, Aleš, GREINER, Sašo, ŽUMER, Viljem. History mechanism supported differential evolution for chess evaluation function tuning. *Soft computing*, ISSN 1432-7643. 2011, vol. 15, no. 4, pp. 667-683, doi: 10.1007/s00500-010-0593-z. [COBISS.SI-ID 13985046] **JCR IF=1.880 (Q1)**
- [FRAI2016] H. Hamann, Y. Khaluf, J. Botev, M. Divband Soorati, E. Ferrante, O. Kosak, J.-M. Montanier, S. Mostaghim, R. Redpath, J. Timmis, F. Veenstra, M. Wahby, A. Zamuda. Hybrid Societies: Challenges and Perspectives in the Design of Collective Behavior in Self-organizing Systems. *Frontiers in Robotics and AI (editors: ZAMUDA, A., HERNÁNDEZ SOSA, J. D.,)*, 2016, vol. 3, no. 14. DOI 10.3389/frobt.2016.00014. **(JCR pending, 2000+ reads/month)**  
Relevance of the scientific work beyond the national borders: [FRAI2016] - EU-scale collaboration, with highly cited authors, several also from Danube region; participation in scientific projects – this work was done under EU FET grant, project “Florarobotica”, granted to first author (H. Hamann)
- [INF2015] ZAMUDA, Aleš, MLAKAR, Uroš. Differential evolution control parameters study for self-adaptive triangular brushstrokes. *Informatica*, ISSN 0350-5596, June 2015, vol. 39, no. 2, pp. 105-113. [COBISS.SI-ID 18828310] **(JCR-e indexed)**

## SELECTED SCIENTIFIC INTERNATIONAL CONFERENCES PUBLICATIONS, BOOK CHAPTERS

### Invited lectures and tutorials

- [MENDEL2018] ZAMUDA, Aleš. *Differential evolution for evolutionary computation challenges : invited lecture at MENDEL 2018, 24th International conference on soft computing, June 26-28, Brno, Czech Republic.*
- [WSSIP2018a] ZAMUDA, Aleš. *Differential evolution and systems, signals, and image processing : tutorial speech at WSSIP 2018 - 25th International conference on Systems, signals and image processing, 20-22 June 2018, Maribor, Slovenia.*
- [SOLOMON2016] ZAMUDA, Aleš. *Optimizacija z omejitvami in diferencialna evolucija : od upravljanja avtonomnih globokoslojnih sond do razporejanja obremenitve elektrarn : vabljeno predavanje na Solomon seminarju, Institut Jožef Stefan, 28. november, 2016.*

### Regular conference papers

- [GECCO2019a] A. Zamuda. Binary 100-digit challenge using IEEE-754 coded numerical optimization scenarios (100b-digit) and V-shape binary distance-based success history differential evolution (DISHv). *Proceedings of the Genetic and Evolutionary Computation Conference Companion (GECCO 2019)*, 2019, pp. 1821-1828.
- [GECCO2019b] A. Zamuda, J. D. Hernández Sosa. Hot off the press in expert systems on underwater robotic missions: success history applied to differential evolution for underwater glider path planning. *Proceedings of the Genetic and Evolutionary Computation Conference Companion (GECCO 2019)*, 2019, pp. 39-40.
- [GECCO2019c] A. Zamuda. Function evaluations upto 1e+12 and large population sizes assessed in distance-based success history differential evolution for 100-digit challenge and numerical optimization scenarios (DISHchain 1e+12): a competition entry for “100-digit challenge, and four other numerical optimization competitions” at the genetic and evolutionary computation conference (GECCO) 2019. *Proceedings of the Genetic and Evolutionary Computation Conference Companion (GECCO 2019)*, 2019, pp. 11-12.
- [CEC2019a] A. Viktorin, R. Senkerik, M. Pluhacek, T. Kadavy, A. Zamuda. DISH algorithm solving the CEC 2019 100-digit challenge. *Proceedings of the 2019 IEEE Congress on Evolutionary Computation*, 2019, pp. 1-6.
- [CEC2019b] P. Bujok, A. Zamuda. Cooperative model of evolutionary algorithms applied to CEC 2019 single objective numerical optimization. *Proceedings of the 2019 IEEE Congress on Evolutionary Computation*, 2019, pp. 358-363.
- [SSCI2019] N. Karolija, A. Zamuda. On cloud-supported web-based integrated development environment for programming dataflow architectures. MILUTINOVIĆ, Veljko (ur.), KOTLAR, Milos (ur.). *Exploring the DataFlow supercomputing paradigm: example algorithms for selected applications, (Computer communications and networks (Internet), ISSN 2197-8433)*, 2019, pp. 41-51.
- [GECCO2018a] ZAMUDA, Aleš, NICOLÁU, Miguel, ZARGES, Christine. A black-box discrete optimization benchmarking (BB-DOB) pipeline survey: taxonomy, evaluation, and ranking. V: *GECCO 2018, the Genetic and Evolutionary Computation Conference Companion a recombination of the 27th International Conference on Genetic Algorithms (ICGA) and the 23rd Annual Genetic Programming Conference (GP), July 15th - 19th 2018, Kyoto, Japan*. New York: ACM = Association for Computing Machinery. 2018, str. 1777-1782.
- [WSSIP2018b] ZAMUDA, Aleš, BREST, Janez. On tenfold execution time in real world optimization problems with differential evolution in perspective of algorithm design. V: GLEICH, Dušan (ur.), PLANINŠIČ, Peter (ur.), ZAMUDA, Aleš (ur.). *Proceedings*. Danvers: IEEE. cop. 2018, str. 1-5.
- [SSCI2017] VIKTORIN, Adam, SENKERIK, Roman, KADAVY, Tomas, ZAMUDA, Aleš. Distance based parameter adaptation for differential evolution. V: *2017 IEEE Symposium Series on Computational Intelligence, November 27 to December 1, 2017, (SSCI), Honolulu, Hawaii*. Danvers: IEEE = Institute of Electrical and Electronics Engineers. 2017, str. 1-7.
- [GECCO2017] ZAMUDA, Aleš, ZARGES, Christine, ŠTIGLIČ, Gregor, HROVAT, Goran. Stability selection using a genetic algorithm and logistic linear regression on healthcare records. V: *GECCO'17 companion : proceeding of the 2017 on Genetic and Evolutionary Computation Conference Companion, July 15-19, 2017 Berlin, Germany*. New York: ACM = Association for Computing Machinery. 2017, str. 143-144.
- [CEC2017] ZAMUDA, Aleš. Adaptive constraint handling and success history differential evolution for CEC 2017 constrained real-parameter optimization. V: *Proceedings of the 2017 IEEE Congress on Evolutionary Computation*. [S. l.]: IEEE. cop. 2017, str. 2443-2450.
- [SSCI2016] VIKTORIN, Adam, SENKERIK, Roman, PLUHACEK, Michal, ZAMUDA, Aleš. Steady success clusters in differential evolution. V: *2016 IEEE Symposium Series on Computational Intelligence (SSCI) : proceedings*. IEEE SSCI, 6-9 December 2016, Athens, Greece. Piscataway: IEEE. cop. 2016, str. 1-8
- [WCCI2016a] ZAMUDA, Aleš, HERNÁNDEZ SOSA, José Daniel, ADLER, Leonhard. Improving Constrained Glider Trajectories for Ocean Eddy Border Sampling within Extended Mission Planning Time. *IEEE World Congress on Computational Intelligence (IEEE WCCI), Vancouver, Canada*, 24-29 July 2016, pp. 1727-1734.
- [WCCI2016b] ZAMUDA, Aleš, MLAKAR, U. Tiled EvoLisa Image Evolution With Blending Triangle Brushstrokes and Gene Compression DE. *IEEE World Congress on Computational Intelligence, Vancouver, Canada*, 24-29 July 2016, pp. 2618-2625.
- [EUROCAST2015] ZAMUDA, Aleš, HERNÁNDEZ SOSA, José Daniel. Underwater glider path planning and population reduction in differential evolution. V: QUESADA-ARENCEBIA, Alexis (ed.). *EUROCAST 2015: Fifteenth International Conference on Computer aided systems theory, February 8-13, 2015, Las Palmas de Gran Canaria, Spain*. [S. l.]: s. n., 2015, pp. 274-275.
- [SDE2014] BREST, Janez, ZAMUDA, Aleš, FISTER, Iztok, BOŠKOVIČ, Borko. Some improvements of the self-adaptive jDE algorithm. V: *IEEE Symposium on differential evolution, SDE 2014, December 9-12, 2014, Orlando, Florida, USA*. 2014 IEEE symposium series on computational intelligence : proceedings. Piscataway: IEEE, cop. 2014, pp. 73-80.
- [BIOMA2014a] MLAKAR, Uroš, BREST, Janez, ZAMUDA, Aleš. Differential evolution for self-adaptive triangular brushstrokes. V: *Student Workshop on Bioinspired Optimization Methods and their Applications - BIOMA 2014, 13 September 2014, Ljubljana*. ŠILC, Jurij (ur.), ZAMUDA, Aleš (ur.). *Bioinspired optimization methods and their applications : proceedings of the Student Workshop on Bioinspired Optimization Methods and their Applications - BIOMA 2014, 13 September 2014, Ljubljana, Slovenia*. Ljubljana: Jožef Stefan

Institute, 2014, pp. 105-116.

18. [CECC2013a] ZAMUDA, Aleš, BREST, Janez, MEZURA-MONTES, Efrén. Structured population size reduction differential evolution with multiple mutation strategies on CEC 2013 real parameter optimization. V: [2013 IEEE CEC], June 20-23, 2013, **Cancun, Mexico**. IEEE Congress on Evolutionary Computation. [S. l.]: IEEE, cop. 2013, pp. 1925-1931. [COBISS.SI-ID 17008150] Relevance of the scientific work beyond the national borders – collaboration with co-author from Mexico
19. [CECC2013b] BREST, Janez, BOŠKOVIČ, Borko, ZAMUDA, Aleš, FISTER, Iztok, MEZURA-MONTES, Efrén. Real parameter single objective optimization using self-adaptive differential evolution algorithm with more strategies. V: [2013 IEEE CEC], June 20-23, 2013, **Cancun, Mexico**. IEEE Congress on Evolutionary Computation. [S. l.]: IEEE, cop. 2013, pp. 377-383. [COBISS 17007126]
20. [CECC2012a] ZAMUDA, Aleš, BREST, Janez. Tree model reconstruction innovation using multi-objective differential evolution. V: IEEE World Congress on Computational Intelligence, **Brisbane, Australia**. IEEE WCCI 2012. [S. l.]: IEEE, 2012]. IEEE CEC, pp. 575-582. [COBISS.SI-ID 16116758]
21. [CECC2012b] BREST, Janez, BOŠKOVIČ, Borko, ZAMUDA, Aleš, FISTER, Iztok, SEPESY MAUČEC, Mirjam. Self-adaptive differential evolution algorithm with a small and varying population size. V: IEEE World Congress on Computational Intelligence, **Brisbane, Australia**. IEEE WCCI 2012. [S. l.]: IEEE, 2012], IEEE CEC, pp. 2827-2834. [COBISS.SI-ID 16116502]
22. [SDE2011] BREST, Janez, ZAMUDA, Aleš, FISTER, Iztok, BOŠKOVIČ, Borko, SEPESY MAUČEC, Mirjam. Constrained real-parameter optimization using a differential evolution algorithm. V: IEEE SSCI2011 symposium series on computational intelligence, **Paris, France**: proceedings. Piscataway: IEEE, cop. 2011, pp. 9-16. [COBISS.SI-ID 14952214]
23. [BIOMA2010] ZAMUDA, Aleš, BREST, Janez, BOŠKOVIČ, Borko, ŽUMER, Viljem. Woody plants model recognition by differential evolution. V: FILIPIČ, Bogdan (ur.), ŠILC, Jurij (ur.). Bioinspired optimization methods and their applications : proceedings of the Fourth International Conference on Bioinspired Optimization Methods and their Applications, BIOMA 2010, 20-21 May 2010, Ljubljana, Slovenia. Ljubljana: Jožef Stefan Institute, 2010, pp. 205-215. [COBISS.SI-ID 14126102]
24. [CECC2010] BREST, Janez, ZAMUDA, Aleš, FISTER, Iztok, SEPESY MAUČEC, Mirjam. Large scale global optimization using self-adaptive differential evolution algorithm. V: IEEE World Congress on Computational Intelligence, **Barcelona, Spain**, July 18-23, 2010. WCCI 2010 Proceedings. [S. l.]: IEEE, cop. 2010, CEC IEEE, pp. 3097-3104. [COBISS.SI-ID 14281238]
25. [CECC2009a] ZAMUDA, Aleš, BREST, Janez, BOŠKOVIČ, Borko, ŽUMER, Viljem. Differential evolution with self-adaptation and local search for constrained multiobjective optimization. V: 2009 IEEE Congress on Evolutionary Computation, IEEE CEC 2009, 18th to 21st May 2009, **Trondheim, Norway**: programme & abstracts. Piscataway: IEEE, 2009, pp. 195-202. [COBISS.SI-ID 13217558]
26. [CECC2009b] BREST, Janez, ZAMUDA, Aleš, BOŠKOVIČ, Borko, SEPESY MAUČEC, Mirjam, ŽUMER, Viljem. Dynamic optimization using self-adaptive differential evolution. V: 2009 IEEE Congress on Evolutionary Computation, IEEE CEC 2009, 18th to 21st May 2009, **Trondheim, Norway**: programme & abstracts. Piscataway: IEEE, 2009, pp. 415-422. [COBISS.SI-ID 13217814]
- AWARD: IEEE Computational Intelligence Society CEC 2009 Evolutionary computation in dynamic and uncertain environments competition Winning entry certificate
27. [BIOMA2008] BREST, Janez, ZAMUDA, Aleš, BOŠKOVIČ, Borko, GREINER, Sašo, SEPESY MAUČEC, Mirjam, ŽUMER, Viljem. Self-adaptive differential evolution with SQP local search. V: FILIPIČ, Bogdan (ur.), ŠILC, Jurij (ur.). Bioinspired optimization methods and their applications: proceedings of the Third International Conference on Bioinspired Optimization Methods and their Applications, BIOMA 2008, 13-14 October 2008, Ljubljana, Slovenia. Ljubljana: Jožef Stefan Institute, 2008, pp. 59-69. [COBISS.SI-ID 12707862]
28. [CECC2008a] BREST, Janez, ZAMUDA, Aleš, BOŠKOVIČ, Borko, SEPESY MAUČEC, Mirjam, ŽUMER, Viljem. High-dimensional real-parameter optimization using self-adaptive differential evolution algorithm with population size reduction. V: IEEE World Congress on Computational Intelligence, **Hong Kong**, June 1-6, 2008. WCCI 2008 Proceedings. [S. l.]: IEEE, 2008, pp. 2032-2039. [COBISS.SI-ID 12328982]
29. [CECC2008b] ZAMUDA, Aleš, BREST, Janez, BOŠKOVIČ, Borko, ŽUMER, Viljem. Large scale global optimization using differential evolution with self-adaptation and cooperative co-evolution. V: IEEE World Congress on Computational Intelligence, **Hong Kong**, June 1-6, 2008. WCCI 2008 Proceedings. [S. l.]: IEEE, 2008, pp. 3719-3726. [COBISS.SI-ID 12329238]
30. [CECC2007] ZAMUDA, Aleš, BREST, Janez, BOŠKOVIČ, Borko, ŽUMER, Viljem. Differential evolution for multiobjective optimization with self adaptation. V: CEC 2007: 2007 IEEE Congress on Evolutionary Computation : 25-28 September 2007, **Singapore**. Piscataway: Institute of Electrical and Electronics Engineers, 2007, pp. 3617-3624. [COBISS.SI-ID 11730710]
31. [EUROCON2007] ZAMUDA, Aleš, BREST, Janez, GUID, Nikola, ŽUMER, Viljem. Modelling, simulation and visualisation of forest ecosystems. V: The International Conference on Computer as a tool, **Warsaw, Poland**, September 9-12, 2007. Region 8 Eurocon 2007: proceedings. Piscataway, NJ: IEEE Service Center, [2007], pp. 2600-2606. [COBISS.SI-ID 11643926] AWARD: "IEEE certifies that Aleš Zamuda has been awarded second place in the 2007 Region 8 Student paper competition for presentation"
32. [VIPS2006] ZAMUDA, Aleš, BREST, Janez, GUID, Nikola, ŽUMER, Viljem. Construction of virtual trees within ecosystems with ecomod tool. V: International Conference on Advances in the Internet, Processing, Systems and Interdisciplinary Research, Bled, November 30-December 3, 2006. Proceedings of the VIPS2006 Slovenia: Multidisciplinary, Interdisciplinary, Transdisciplinary: M+I+T++, Bled Slovenia, November 30-December 3, 2006. **Belgrade**: IPSI, 2006, [5] f. [COBISS-ID 11005206]

OTHER PUBLICATIONS 20+ national slovenian publications and other book chapter publications

## CONFERENCE ORGANIZER, PROCEEDINGS EDITOR

1. [SEMCCO2019FANCCO2019] Aleš Zamuda, Swagatam Das, Ponnuthurai Nagaratnam Suganthan, Bijaya Ketan Panigrahi. 7-th Joint International Conferences on Swarm, Evolutionary and Memetic Computing Conference (SEMCCO 2019) & Fuzzy And Neural Computing Conference (FANCCO 2019), Maribor, Slovenia, 10-12 July 2019.
2. [GECCO2018d] Carola Doerr, Pietro S. Oliveto, Thomas Weise, Borys Wróbel, Aleš Zamuda. 2019 Genetic and Evolutionary Computation Conference (GECCO 2019) Black-Box Discrete Optimization Benchmarking (BB-DOB@GECCO) Workshop.
3. [PPSN2018] Robin Purshouse, Christine Zarges, Sylvain Cussat-Blanc, Michael G. Epitropakis, Marcus Gallagher, Thomas Jansen, Pascal Kerschke, Xiaodong Li, Fernando G. Lobo, Julian Miller, Pietro S. Oliveto, Mike Preuss, Giovanni Squillero, Alberto Tonda, Markus Wagner, Thomas Weise, Dennis Wilson, Borys Wróbel, Aleš Zamuda. Parallel problem solving from nature - PPSN XV: 15th International Conference, Coimbra, Portugal, September 8-12, 2018, Proceedings. Part II, (Lecture notes in computer science, ISSN 0302-9743, 11102). Cham: Springer. cop. 2018, pp. 490-497.
4. [IWSSIP2018c] GLEICH, Dušan (editor), PLANINŠIČ, Peter (editor), ZAMUDA, Aleš (editor). 2018 25th International Conference on Systems, Signals and Image Processing (IWSSIP). Danvers: IEEE, cop. 2018. ISBN 978-1-5386-6979-2.
5. [GECCO2018b] Pietro S. Oliveto, Markus Wagner, Thomas Weise, Borys Wróbel, Aleš Zamuda. 2018 Genetic and Evolutionary Computation Conference (GECCO 2018) Black-Box Discrete Optimization Benchmarking (BB-DOB@GECCO) Workshop.
6. [ImAppNIO2017] Management Committee meeting: Improving Applicability of Nature-Inspired Optimisation by Joining Theory and Practice, Portorož, Slovenia, 22.9.2017.
7. [ERK2017] Aleš Zamuda (editor): Computer and Information Science section, 26th International Electrotechnical and Computer Science Conference (ERK 2017), Portorož, Slovenia, 2017.
8. [BIOMA2014b] Jurij Šilc (chair), Aleš Zamuda (chair): The Student Workshop on Bioinspired Optimization Methods and their Applications (BIOMA 2014). Co-organized in Ljubljana, Slovenia with PPSN 2014, 13. 9. 2014.

## Reviewer for scientific journals (most JCR Q1, 30+ journals) - integration in international networks

Acta polytechnica Hungarica, African journal of business management, Algorithms, Applied energy, Applied mathematical modelling, Applied mathematics and computation, Applied soft computing, Artificial intelligence, Computational intelligence and neuroscience, Computational optimization and applications, Engineering applications of artificial intelligence, Engineering computations, European journal of operational research, Expert systems with applications, IEEE computational intelligence magazine, IEEE journal of oceanic engineering, IEEE transactions on automation science and engineering, IEEE transactions on cybernetics, IEEE transactions on evolutionary computation, IEEE transactions on industrial electronics, IEEE transactions on systems, man, and cybernetics, Indian journal of engineering and materials sciences, Informatica : an international journal of computing and informatics, Information sciences, International journal of biodiversity and conservation, International Journal of Systems Science, Journal of algorithms and optimization, Journal of Applied Mathematics, Journal of computational methods in sciences and engineering, Journal of computers, Journal of Ecology and the Natural Environment, Journal of industrial and management optimization : JIMO, Journal of marine science and engineering, Journal of software engineering and applications, Karbala international journal of modern science, Mathematical problems in engineering, Memetic computing, Natural computing, Neural computing & applications, Neurocomputing, Remote sensing, Simulation modelling practice and theory, Soft computing, Swarm and evolutionary computation, Symmetry - the ISSN numbers are available at <http://bib.aleszamuda.si>.

75+ scientific conferences committees member - integration in international networks:

AR4MET (Bali: 2015; Batam: 2016), Big Data Pipelines (Hyderabad: 2019), part of HiPC: IEEE International Conference on High Performance Computing, Data and Analytics, BIOMA (Ljubljana: 2014, 2016; Paris: 2018; Brussels: 2020), CEC (Singapore: 2007; Hong Kong: 2008; Trondheim: 2009; Barcelona: 2010; New Orleans: 2011; Vancouver: 2016; San Sebastian: 2017; Wellington: 2019), CSOC (Zlin: 2015; Prague: 2016), CISIS (Torino: 2017), ECC (Malaga: 2017), ECMS (Wilhelmshaven: 2018; Caserta: 2019), ERK (Portorož: 2010, 2016, 2017, 2019), EUROGEN (Glasgow: 2015; Madrid: 2017; Guimarães: 2019), EUROPAR (Turin: 2018; Göttingen: 2019), EvoApplications, part of EvoStar (Amsterdam: 2017; Seville 2020), FABE (Mykonos Island: 2015; Rhodes Island: 2017), FUTURECOMP (Venice: 2014; Nice: 2015; Rome: 2016; Athens: 2017; Barcelona: 2018; Nice: 2020), GECCO (Berlin: 2017; Kyoto: 2018; Prague: 2019), IACIET (Jaipur: 2014), ICACCI (Greater Noida: 2014; Aluva: 2015; Jaipur: 2016; Manipal: 2017), ICAISC (Zakopane: 2014, 2015, 2016, 2017), ICCGI (Rome: 2019), ICCME (Athens: 2015), ICEM (Rome: 2010; Marseille: 2012), ICIA (Pillaichavadi: 2016), ICIT (Dubai: 2014), ICFNN (Rome: 2019), ICOA (2015), IPIC (Orlando: 2015), ISSN (Saint Petersburg: 2016), PPSN (Ljubljana: 2014; Edinburgh: 2016; Coimbra: 2018; Leiden: 2020), RESEECs (Bandung: 2017), REAT 2017 (Dubai: 2017), SASO FAS\*W SOCO (Augsburg, 2016; Umeå: 2019), SEMCCO (Chennai: 2010, 2011), SIRS (Trivandrum: 2015; Trivandrum: 2019), SPICES (Kozhikode: 2015), SSCI SDE (Paris: 2011; Singapore: 2013; Orlando: 2014; Cape Town: 2015), WMSCI (Orlando: 2015, 2016), WMTSC (Saint Kitts and Nevis: 2019; Kota Kinabalu: 2020). More in recent years, see the PUBLONS profile.

EDITOR for journals: **Swarm and Evolutionary Computation** (Elsevier, Q1, IF=7.177), also for several other journals (see webpage).

PROJECT EXPERT EVALUATOR: **H2020** (FET-PROACT) and COST (cooperation actions).