

CURRICULUM VITAE: assoc. prof. dr. ALEŠ ZAMUDA

Family name, First name: **Zamuda, Aleš** Date of birth: 23. 4. 1982; Nationality: Slovenian; ORCID [0000-0002-3340-5624](https://orcid.org/0000-0002-3340-5624) Website: <http://www.aleszamuda.si>

SENIOR MEMBER: Institute of Electrical and Electronics Engineers (IEEE) - IEEE CIS member (since 2007) <http://cis.ieee.org> ; member: EurAI, SLING, ACM, SIGEVO

IEEE (Institute of Electrical and Electronics Engineers): <https://www.ieee.org/> - world's largest association of technical professionals with more than 400,000 members in chapters around the world; ACM (Association for Computing Machinery): <https://www.acm.org/>

IEEE CIS Task Force on Benchmarking Chair (<http://cmte.ieee.org/cis-benchmarking>); CIS Chapter Chair - Slovenia (<https://lr8.ieee.org/slovenia-cis/>)

SCIENTIFIC CITATIONS - SCOPUS: 1560 (h-index 22), Google Scholar: **2083** (h-index 24, i-10 index 33)

EDUCATION

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

2020 – **Associate Professor**, UM, Faculty of Electrical Engineering and Computer Science
2014 – **Assistant Professor** (Docent), UM FER1
2006 – Teaching Assistant, UM, Faculty of Electrical Engineering and Computer Science (FER1)
before 2006 student-paid works (laboratories at UM and other companies), see my website

PROJECTS

2020- **EU H2020 project** holder for UM FER1 part of consortium: **DAPHNE - Integrated Data Analysis Pipelines for Large-Scale Data Management, HPC, and Machine Learning** <https://daphne-eu.eu/> <http://daphne-eu.github.io> <https://github.com/daphne-eu/daphne>
2017-2020 **COST** (Cooperation in Science & Technology) Actions member: CA15140 Improving Applicability of Nature-Inspired Optimisation by Joining Theory and Practice (**ImAppNIO**); was also vice-leader for CA15140 WG3: Benchmarks and leader of IC1406 CS9: Forecasting Cryptocurrency Value by Sentiment Analysis IC1406 High-Performance Modelling and Simulation for Big Data Applications (**chIPSet**)
2018-2020 **EU project** (Interreg ERDF) employed member & part of funds responsible: SmartVillages - Smart digital transformation of villages in the Alpine Space
2017 worked for 3 months under **EU ERC** project AI4REASON with team based in Prague (employed at TUO, Ostrava, CR – IT4Innovations national supercomputing center)
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
2012-2006 – Slovenian Research Agency (ARRS) research programme (**stable funding**) employed group member: P2-0041 Computer Systems, Methodologies, and Intelligent Services research group member: 0796-001 Computer Architecture and Languages Laboratory

FELLOWSHIPS AND AWARDS

2022 Vice Chairman of IEEE Slovenia Section in years 2018-2021 (<http://www.ieee.si>)
2020 IEEE Slovenia Section Young Professionals Chair 2017-2020
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 **SIIF, Seoul**
2013 UM bronze award for research, education, and profession
2007–2019 several Top 5 rankings at **IEEE CEC** (world competitions), also **ACM GECCO**
2012 most important socio-economic results of national research programme P2-0041
2011 most imp. scientific res. of national research programme P2-0041 at UM FECS
2007 **IEEE Region 8 Student Paper Competition vice champion**
2008 Andrej Perlach UM research award
2006–2014 **4 UM FECS research awards**;
other several other national awards (available at <http://aleszamuda.si/w/awards>)

NATIONAL AND INTERNATIONAL TEACHING ACTIVITIES AND MOBILITY

2006 – UM FECS courses: 1) **PhD**: Operational research of logistic, transport, and economic systems; 2) **MSc**: Cloud Computing / Installation and Management of Cloud Computers 3) **MSc**: Connectable Systems and Intelligent Services, 4) **BSc**: Heterogeneous Computer Systems, 5) **BSc**: Programming I, 6) **BSc**: System Administration, 7) **BSc**: Computer Architectures, 8) **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; also, I designed few more whole study programs / modules, like for HPC
2012- on: **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 Zlín, Czech Republic; visit for 1 month through COST ImAppNIO STSM at Aberystwyth University, UK (march 2017)

ARTICLE PUBLICATIONS IN JOURNALS

- [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](https://doi.org/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)**
- [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](https://doi.org/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](https://doi.org/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](https://doi.org/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](https://doi.org/10.1016/j.asoc.2016.01.038). [COBISS.SI-ID 19316502] **JCR IF=2.810 (Q1)**
- [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](https://doi.org/10.1016/j.asoc.2014.06.048). [COBISS.SI-ID 17953046] **JCR IF=2.810 (Q1)**
- [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](https://doi.org/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-stigmery on dynamic optimisation problems. *International Journal of Systems Science*, ISSN 0020-7721, 2013, vol. 44, no. 4, pp. 663-679. [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](https://doi.org/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](https://doi.org/10.3389/frobt.2016.00014). **(JCR pending, 2000+ reads/month)**
- [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 globokomoskih sond do razporejanja obremenitve elektram : vabljeno predavanje na Solomon seminarju, Institut Jožef Stefan, 28. 11. 2016.

Regular international scientific conference papers (indexed in Scopus); unlisted publications: 20+ national slovenian publications and other book chapter publications

- [CIDR2022] P. Damme, M. Birkenbach, C. Bitsakos, M. Boehm, F. Bonnet, F. Clorba, M. Dokter, P. Dowgiallo, A. Eleliemy, C. Faerber, G. Goumas, D. Habich, N. Hedam, M. Hofer, W. Huang, K. Innebrener, V. Karakostas, R. Kern, T. Kosar, A. Krause, D. Krems, A. Laber, W. Lehner, E. Mier, M. Paradies, B. Peischl, G. Poerwawinata, S. Psomadakis, T. Rabl, P. Ratuszniak, P. Silva, N. Skuppin, A. Starzacher, B. Steinwender, I. Tolovski, P. Tözün, W. Ulatowski, Y. Wang, I. Wroosz, **A. Zamuda**, C. Zhang, X. Xiang Zhu. DAPHNE: An Open and Extensible System Infrastructure for Integrated Data Analysis Pipelines. 12th Conference on Innovative Data Systems Research, CIDR 2022, **Chaminade, CA**, January 9-12, 2022.
- [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), **Prague, Czech Republic**, 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), [Prague, Czech Republic](#), 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, [Wellington, New Zealand](#), 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, [Wellington, New Zealand](#), pp. 358-363.
- [[CCN2019](#)] N. Karolija, **A. Zamuda**. On cloud-supported web-based integrated development environment for programming dataflow architectures. MILUTINOVIC, 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.
- [[IWSSIP2018b](#)] **ZAMUDA, Aleš**, BREST, Janez. On tenfold execution time in real world optimization problems with differential evolution in perspective of algorithm design. In: GLEICH, Dušan, PLANINŠIČ, Peter, **ZAMUDA, Aleš** (eds.). *Proceedings. Danvers: IEEE*. cop. 2018, [Maribor](#), 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, [Donostia - San Sebastián, Spain](#), 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**, MĻAKAR, U. Titled 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](#)] MĻAKAR, 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.
- [[CEC2013a](#)] **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.
- [[CEC2013b](#)] 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.
- [[CEC2012a](#)] **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.
- [[CEC2012b](#)] BREST, Janez, BOŠKOVIČ, Borko, **ZAMUDA, Aleš**, FISTER, Iztok, SEPEŠY 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.
- [[SDE2011](#)] BREST, Janez, **ZAMUDA, Aleš**, FISTER, Iztok, BOŠKOVIČ, Borko, SEPEŠY 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.
- [[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.
- [[CEC2010](#)] BREST, Janez, **ZAMUDA, Aleš**, FISTER, Iztok, SEPEŠY 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.
- [[CEC2009a](#)] **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.
- [[CEC2009b](#)] BREST, Janez, **ZAMUDA, Aleš**, BOŠKOVIČ, Borko, SEPEŠY 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. **AWARD: IEEE CIS CEC 2009 Evolutionary computation in dynamic and uncertain environments competition Winning entry**
- [[BIOMA2008](#)] BREST, Janez, **ZAMUDA, Aleš**, BOŠKOVIČ, Borko, GREINER, Sašo, SEPEŠY MAUČEC, Mirjam, ŽUMER, Viljem. Self-adaptive differential evolution with SQP local search. In: FILIPIČ, Bogdan, ŠILC, Jurij (eds.). 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.
- [[CEC2008a](#)] BREST, Janez, **ZAMUDA, Aleš**, BOŠKOVIČ, Borko, SEPEŠY 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](#). [WCCI 2008 Proceedings](#). [S. l.]: IEEE, 2008, pp. 2032-2039.
- [[CEC2008b](#)] **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.
- [[CEC2007](#)] **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.
- [[EUROCON2007](#)] **ZAMUDA, Aleš**, BREST, Janez, GUID, Nikola, ŽUMER, Viljem. Modelling, simulation and visualisation of forest ecosystems. In: 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. **AWARD: "IEEE certifies that Aleš Zamuda has been awarded second place in the 2007 Region 8 Student paper competition for presentation"**
- [[VIPSJ2006](#)] **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 VIPSJ-2006 Slovenia: Multidisciplinary, Interdisciplinary, Transdisciplinary: M+I+T++, [Bled, Slovenia](#), November 30-December 3, 2006. [Belgrade](#): IPSI, 2006, [5] f.

CONFERENCE ORGANIZER, PROCEEDINGS EDITOR, BOOK EDITOR

- [[GECCO2023](#)]: 2023 The Genetic and Evolutionary Computation Conference (role: Hybridization)
- [[GECCO2022](#)]: 2022 The Genetic and Evolutionary Computation Conference (role: Virtualisation Chair)
- [[Math2022](#)] [Evolutionary Algorithms in Engineering Design Optimization](#) (Editors: David Greiner, António Gaspar-Cunha, José Daniel Hernández Sosa, Edmondo Minisci, **Aleš Zamuda**). *Mathematics, MDPI*, 2022, vol. ISBN 978-3-0365-2714-7. ISBN 978-3-0365-2715-4.
- [[SEMCCO2019FANCCO2019](#)] **Aleš Zamuda**, Swagatam Das, Ponnuthurai Nagarathnam Sughanthan, 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.
- [[GECCO2019d](#)] 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, [Prague, Czech Republic](#).
- [[PPSN2018](#)] Robin Purshouse, Christine Zarges, Sylvain Cussat-Blanc, Michael G. Eptropakis, 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.
- [[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, [Maribor, Slovenia](#).
- [[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, [Kyoto, Japan](#).
- [[ImAppNIO2017](#)] Management Committee meeting: Improving Applicability of Nature-Inspired Optimisation by Joining Theory and Practice, [Portorož, Slovenia](#), 22.9.2017.
- [[ERK2017](#)] **Aleš Zamuda** (editor): Computer and Information Science section, 26th International Electrotechnical and Computer Science Conference (ERK 2017), [Portorož, Slovenia](#), 2017.
- [[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, 50+ journals): Applied soft computing, Ocean engineering, Optimization and engineering, Swarm and evolutionary computation, Applied mathematical modelling, Applied ocean research, Applied sciences, Engineering applications of artificial intelligence, Expert systems with applications, IEEE journal of oceanic engineering, IEEE transactions on automation science and engineering, IEEE transactions on evolutionary computation, IEEE transactions on systems, man, and cybernetics, Journal of parallel and distributed computing, Karbala international journal of modern science, Mathematical problems in engineering, Natural computing, Artificial intelligence, Engineering computations, Information sciences, International Journal of Biomedical Imaging, Journal of marine science and engineering, Simulation modelling practice and theory, SN Applied Sciences, Symmetry, IEEE transactions on cybernetics, Neural computing & applications, Acta polytechnica Hungarica, Algorithms, Computational intelligence and neuroscience, Journal of computational methods in sciences and engineering, Soft computing, Applied energy, European journal of operational research, Neurocomputing, IEEE transactions on industrial electronics, International journal of biodiversity and conservation, Remote sensing, African journal of business management, Applied mathematics and computation, Computational optimization and applications, Indianjournal of engineering and materials sciences, Informatica : an international journal of computing and informatics, Journal of algorithms and optimization, Journal of Applied Mathematics, Journal of computers, Journal of Ecology and the Natural Environment, IEEE transactions on systems, man, and cybernetics, IEEE computational intelligence magazine, Journal of software engineering and applications, International Journal of Systems Science, Journal of industrial and management optimization : JIMO - the ISSN numbers are available at <http://bib.aleszamuda.si>.

110+ scientific conferences committees member: ACCSE (Lisbon: 2020), ANTYCOVID-19 (2020 online), AR4MET (Bali: 2015; Batam: 2016), ASHPC (Maribor: 2023), Big Data Pipelines (Hyderabad: 2019), BIOMA (Ljubljana: 2014, 2016; Paris: 2018; Brussels: 2020; Maribor: 2022), IEEE CEC (Singapore: 2007; Hong Kong: 2008; Trondheim: 2009; Barcelona: 2010; New Orleans: 2011; Vancouver: 2016; San Sebastian: 2017; Rio de Janeiro: 2018; Wellington: 2019; Glasgow: 2020; Krakow: 2021; Padua: 2022; Chicago: 2023), CSOC (Zlin: 2015; Prague: 2016), CISIS (Torino: 2017), DASA (Sakheer: online 2020; Chiang Rai: 2022), ECC (Malaga: 2017), ECMS (Wilhelmshaven: 2018; Caserta: 2019), ERK (Portorož: 2010, 2016, 2017, 2019, 2020, 2021, 2022), EUROGEN (Glasgow: 2015; Madrid: 2017; Guimarães: 2019; Athens: 2021), Euro-Par (Turin: 2018; Göttingen: 2019), EvoApplications, part of EvoStar (Amsterdam: 2017; Seville: 2020; online: 2021; Madrid: 2022; Brno: 2023), 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; Cancun: 2020; Lille (online): 2021; Boston: 2022), IACIET (Jaipur: 2014), IACCCI (Greater Noida: 2014; Aluva: 2015; Jaipur: 2016; Manipal: 2017), ICAISC (Zakopane: 2014, 2015, 2016, 2017, 2020), ICCGI (Rome: 2019), ICCME (Athens: 2015), ICEM (Rome: 2010; Marseille: 2012), ICIA (Pillaichavadi: 2016), ICIT (Dubai: 2014), ICFNW (Rome: 2019), ICOA (2015), IPIC (Orlando: 2015), INTAP (Agder: online 2020), MODA at ISC HPC (Digital: 2021, Hamburg: 2022, 2023), ISNN (Saint Petersburg: 2016), IWSSIP (Maribor: 2018), PPSN (Ljubljana: 2014; Edinburgh: 2016; Coimbra: 2018; Leiden: 2020; Dortmund: 2022), RESEECs (Bandung: 2017), REAT 2017 (Dubai: 2017), SASO FAS'W SOCO (Aguascalientes: 2016; Umeå: 2019; Washington: 2021), SEMCCO (Chennai: 2010, 2011; Maribor: 2019), SIRS (Trivandrum: 2015; Trivandrum: 2019), SPICES (Kozhikode: 2015), SSCI SDE (Paris: 2011; Singapore: 2013; Orlando: 2014; Cape Town: 2015), SYNASC (Tsimisoa: 2020; online 2021), WMSCI (Orlando: 2015, 2016, 2018), WMTSC (Saint Kitts and Nevis: 2019; Kota Kinabalu: 2020). More in recent years, see the Clarivate profile or my [webpage site](#).

Served as editor for journals like **Swarm and Evolutionary Computation** and several other journals (see [webpage](#)).

PROJECT EXPERT EVALUATOR: EU [H2020](#) (FET-PROACT), [EU MSCA-PE, COST](#) (cooperation actions), [SPIRIT SI](#).