

Curriculum Vitae

Name and surname:	Aleš Zamuda	
Born:	April 23 1982	in Ptuj, Republic of Slovenia (RS), EU
Languages:	native Slovenian, fluent active knowledge of English and German (DSD-St.II), Croatian (good), and French (basic understanding)	
School:	1989 – 1997	Primary school Velika Nedelja, RS, EU
	1997 – 2001	Gimnazija Ptuj, RS, EU
	2001 – 2012	Faculty of Electrical Engineering and Computer Science, University of Maribor, RS, EU
Education:	2006	B. Sc. in computer science
	2008	M.Sc. in computer science
	2012	Ph.D. in computer science
Employment:	2006 –	Computer Architecture and Languages Laboratory, Faculty of Electrical Engineering and Computer Science, University of Maribor, RS, EU
Contact:	phone	+386 2 220 7404
	e-mail	ales.zamuda@uni-mb.si
	website	http://www.aleszamuda.si/

Dr. Aleš Zamuda was born on April 23 1982 in Ptuj, Slovenia. First he visited the primary school in Velika Nedelja. He pursued his passion for programming since the first grade. In primary school he began programming Logo, Basic, Pascal, and C; he also became acquainted with languages of web technology and visited private national and international summer schools on computer science. He continued his secondary education at Gimnazija Ptuj. Later he received B. Sc. degree in computer science from University of Maribor (UM) in 2006 as the first graduate of his generation and became an affiliate of the faculty. He successfully defended his masters thesis in computer science at UM in 2008 with the average mark of 10. In 2012 he successfully defended his dissertation in the field of computer science entitled “Differential Evolution for Parameterized Procedural Woody Plant Models Reconstruction” and received his PhD from University of Maribor. During secondary education and undergraduate studies he was a talented student Zois stipendist. In 2008 he was awarded with Andrej Perlach research award by UM. During graduate study he received three research awards from FERI UM and an international research award from IEEE. His bibliography includes over thirty international scientific publications with citations in Scopus and WoS.

Currently he is an affiliate of the Faculty of Electrical Engineering and Computer Science (FERI) at the UM. He is a member of the international Institute of Electrical and Electronics Engineers (IEEE) and a reviewer for several international prominent scientific journals on computer science with high impact factor. He also served in program and technical committees of major scientific conferences on computational intelligence. He won several competitions on programming, national and international; developed open source software and sold several applications. He also serves in leading university pedagogical subjects, such as Computer Architecture, Heterogeneous Computer Systems, Connectible Systems and Intelligent Services, and diploma works. His biography is selected into Marquis Who’s Who in the World 2013.

Working Experience

1. Affiliated with the Faculty of Electrical Engineering and Computer Science in Computer Architecture and Languages Laboratory, first as technical staff (2006 – 2009), later as teaching assistant (from 2009 on),
 - (a) academic title: teaching assistant (2006-),
 - (b) additional employment on a project in research program P2-0041 Computer Systems, Methodologies, and Intelligent Services (2012-),
 - (c) leading of practical computer lessons for courses: Programming I (2011/12, 2012/13), Computer Architecture (2008/9, 2009/10, 2010/11, 2011/12, 2012/13), Heterogenous Computer Systems (2008/9, 2009/10, 2010/11, 2011/12, 2012/13), Connectible Systems and Intelligent Services (2010/11, 2011/12, 2012/13), System Administration (2010/11), Programming 1 UNI (2011/12)
 - (d) leading student projects Network Games (2011–2012) and Mobile Games (2012–2013)
 - (e) member of commission for promotion of the study program at FERI (from 2007 on) and
 - (f) president of inventory central commission at FERI (2009),
2. member of the Institute of Electrical and Electronics Engineers (IEEE), IEEE Computational Intelligence Society (CIS)
 - (a) reviewer for international scientific journals with high citation index (SCI): IEEE Transactions on Evolutionary Computation, IEEE transactions on systems, man and cybernetics. Part B. Cybernetics, IEEE Computational Intelligence Magazine Information Sciences – Elsevier, Engineering Applications of Artificial Intelligence – Elsevier, International Journal of Systems Science (Taylor & Francis), Journal of industrial and management optimization, IEEE transactions on industrial electronics,
 - (b) program committee member of the IEEE congresses on evolutionary computation IEEE IEEE CEC 2011 (New Orleans, ZDA), 2013 IEEE Symposium Series on Computational Intelligence (IEEE SSCI 2013) Symposium on Differential Evolution (SDE), 11th International Conference on Artificial Intelligence and Soft Computing (ICAISC 2012) Symposium on Swarm Intelligence and Differential Evolution (SIDE), Zakopane IEEE SSCI 2011 (Paris, France), IEEE WCCI 2010 (Barcelona, Spain), IEEE CEC 2009 (Trondheim, Norway), IEEE WCCI 2008 (Hong Kong, Kitajska), IEEE CEC 2007 (Singapore), and other,
 - (c) member of Slovenian group on nature inspired algorithms and Slovenian Artificial Intelligence Society (SLAIS) and AVN.
3. B. Sc. thesis work done with honors in the Laboratory for Computer graphics and artificial intelligence entitled *Modeling and Simulation modeling tree ecosystems*, mentor full prof. dr. Nikola Guid (2006),
4. one-month practice at the Center for interdisciplinary and multidisciplinary research and studies: work on a system for e-learning Moodle in PHP (2006),
5. one-month practice in the Laboratory for Computer Graphics and Artificial Intelligence: design of a natural landscapes overgrowth simulator in C++ with Qt4 and OpenGL (2005),

6. student work in the Laboratory for heterogeneous computing systems: implementation of distributed system for RSS news processing in .NET with CSharp (2005),
7. twice for one-month practice in Ljubljana, in the company IxtlanTeam (2001, 2002),
8. one week practice at Hermes Softlab (1998), and
9. at family company A&S, networking programming (in Clipper environment) of accounting calculations application for the Kema company (1995-1997).

Pedagogical Working Experience

1. Project coordinator for subject set of Networked Games and Mobile Games at study programs R-IT FERİ UM of 1st bologna level,
2. tutor for first class of study program R-IT FERİ UM,
3. co-mentor at several diploma works at study programs R-IT FERİ UM of 1st bologna level,
4. teaching assistant to prof. Žumer and prof. Brest at study programs R-IT FERİ UM of 1st bologna level (Computer Architectures, System Administration, and Heterogeneous Computer Systems), and 2nd bologna level of R-IT FERİ UM (Connectible Systems and Intelligent Services),
5. teaching assistant at study programme in Electrical Engineering, course Computer Science at prof. Brest (2007/2008),
6. technical assistant at Computer Architecture and Languages Laboratory FERİ UM: Programming I, Computer Science, Computer Architectures, and Principles of Programming Languages.
7. demonstrator at course Computer Science (2004/2005), and
8. demonstrator at project Computer Literation at Ljudska Univerza Ormož (1997-2003).

Technological Knowledge and Products

Technological knowledge: in-depth knowledge of C, C++, C#, Java, Delphi, PHP, Ruby programming languages; in-depth knowledge of web standards HTML, CSS, XHTML, RSS, Web 2.0, ASP.NET; in-depth knowledge of application frameworks Qt4, Win32 API, and WinForms; *SQL; in-depth knowledge of QtCreator, KDevelop, MS Visual Studio, Eclipse, JDevelop, and other IDEs, in-depth knowledge of storage formats of office suites OpenOffice.Org (Writer, Calc, Presentation) and Microsoft Office (Word, Excel, PowerPoint); in-depth knowledge of LaTeX, PDF programming; in-depth knowledge of console and graphical usage and driver programming for Linux and Windows; in-depth knowledge of BSD and Mac OS X systems, KDE and GNOME environments; programming and setup of CMS: MediaWiki, Joomla, Moodle, in-depth knowledge of OpenGL; several years of programming AI in own 2D and 3D games, computer language design, and masters thesis knowledge level in evolutionary optimization algorithms.

Products: DEMOWSA algorithm for general optimization of mathematical models or reconstruction of natural tree models, Tree Ecosystem simulation & OpenGL 3D visualization engine EcoMod, Distributed RSS viewer & crawler server for Web CMS, Web page for LabRAJ and other,

Chess engine QuTeChess, board game Four in a row (with AI opponent), game Šnops (with AI car driver), game BlowUp, game Kolo sreče.

Citations in Scientific Literature

Total citations count: Scopus – 106 (h-index: 6), Google Scholar – 251.

Citations by various: authors: 20+, countries: 15, universities: 20+ (source: ResearcherID.com).

56 citations: BREST, Janez, ZAMUDA, Aleš, BOŠKOVIĆ, 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, str. 2032-2039.

43 citations: ZAMUDA, Aleš, BREST, Janez, BOŠKOVIĆ, 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, str. 3719-3726.

41 citations: BREST, Janez, ZAMUDA, Aleš, BOŠKOVIĆ, 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, str. 415-422.

39 citations: ZAMUDA, Aleš, BREST, Janez, BOŠKOVIĆ, Borko, ŽUMER, Viljem. Differential evolution for multiobjective optimization with self adaptation. V: *CEC 2007 : 2007 Congress on Evolutionary Computation : 25-28 September 2007, Singapore*. Piscataway: Institute of Electrical and Electronics Engineers, 2007, str. 3617-3624.

18 citations: ZAMUDA, Aleš, BREST, Janez, BOŠKOVIĆ, 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, str. 195-202. [COBISS.SI-ID 13217558]

13 citations: BREST, Janez, ZAMUDA, Aleš, BOŠKOVIĆ, Borko, GREINER, Sašo, ŽUMER, Viljem. An analysis of the control parameters' adaptation in DE. V: *Advances in differential evolution*, (Studies in computational intelligence, Vol. 143). Berlin; Heidelberg: Springer, 2008, str. 89-110.

International Competitions and Awards

1. Biography listing in Marquis Who's Who in the World 2013,
2. ECiDUE at congress IEEE CEC 2009 (Trondheim, Norway): 1st place (2nd author),
3. LSGO at congress IEEE WCCI CEC 2008 (Hong Kong, China): 6th place (1st author),
4. MOEA at congress IEEE CEC 2007 (Singapore): 3rd place (1st author), and
5. IEEE Region 8 (Europe, Africa, Middle East) Student Paper Contest at conference EURO-CON 2007 (Warsaw, Poland): 2nd place (1st author).

National Competitions and Awards

1. University of Maribor Andrej Perlach's award for research work (2008) and three faculty awards for research work (2006, 2007, 2008),
2. memorial gift of Slovene Secretary of State for Ministry of Higher Education, Science, and Technology for visible results on international competitions in computer science, at reception for students, university and faculty leaders, and public research institutions (2007),
3. victory at competition of student papers at IEEE ERK, Portorose (2006)
4. first award and golden plaque at competition for most inventive and business oriented project Eureka! mladi (2008),
5. first award in national secondary school programming (2001),
6. two titles of elementary school national champion in programming (1995, 1997),
7. national champion in text formatting with Word (1997) and won 5th place at competition in using of program CorelDraw (1997),
8. in elementary school: two golden awards for chemistry (1996, 1997) and silver for mathematics (1997),
9. entry to golden book of Primary school Velika Nedelja (1997), admittance as talented scholar at mayor of Občina Ormož (1997) and mayor of Municipality Ptuj (2001),
10. website construction which won 1st place at competition of all Slovenian primary and middle schools (1996).

Computer Science Training Before Faculty Studies, Autodidacticism

1. Seminar of programming language Java at UM FERI (1999),
2. two week international camp of computer science in Zadar, Croatia (1997): dynamic programming in Pascal, OpenGL and Unix BASH, and
3. one week summer school of computer science at SERS, Maribor (1995),
4. one week summer school of programming with Sinel in Bohinj (1994),
5. in primary school, autodidactical programming of own computer games with 2D graphics, sound, and artificial intelligence; and rapid application development IDE tools: Turbo Pascal 7.0 environment (obtained as an award at national computer science competition, 1994).

Maribor, 19 October 2012

dr. Aleš Zamuda

Annex 1 - Full bibliography (source: COBISS)

ARTICLES AND OTHER COMPONENT PARTS

1.01 Original scientific article

1. ZAMUDA, Aleš, BREST, Janez. Environmental framework to visualize emergent artificial forest ecosystems. *Inf. sci.* [Print ed.], Available online 31 July 2012, doi: 10.1016/j.ins.2012.07.031. [COBISS.SI-ID 16157206]
2. ZAMUDA, Aleš, BREST, Janez. Population reduction differential evolution with multiple mutation strategies in real world industry challenges. *Lect. notes comput. sci.*, pp. 154-161, ilupp. [COBISS.SI-ID 15979542]
3. ZAMUDA, Aleš, BREST, Janez, BOŠKOVIĆ, Borko, ŽUMER, Viljem. Differential evolution for parameterized procedural woody plant models reconstruction. *Applied soft computing*, 2011, vol. 11, iss. 8, pp. 4904-4912, doi: 10.1016/j.asoc.2011.06.009. [COBISS.SI-ID 15175446]
4. BREST, Janez, KOROŠEC, Peter, ŠILC, Jurij, ZAMUDA, Aleš, BOŠKOVIĆ, Borko, SEPESY MAUČEC, Mirjam. Differential evolution and differential ant-stigmergy on dynamic optimisation problems. *Int. J. Syst. Sci.*, Available online: 26 Sep 2011, doi: 10.1080/00207721.2011.617899. [COBISS.SI-ID 15354390]
5. BOŠKOVIĆ, Borko, BREST, Janez, ZAMUDA, Aleš, GREINER, Sašo, ŽUMER, Viljem. History mechanism supported differential evolution for chess evaluation function tuning. *Soft computing*. [Tiskana izd.], 2011, vol. 15, no. 4, pp. 667-683, doi: 10.1007/s00500-010-0593-z. [COBISS.SI-ID 13985046]
6. BREST, Janez, ZAMUDA, Aleš, BOŠKOVIĆ, Borko, ŽUMER, Viljem. Globalna optimizacija problemov z velikim številom dimenzij. *Elektrotehniški vestnik*. [Slovenska tiskana izd.], 2008, vol. 75, nr. 5, pp. 299-304. [COBISS.SI-ID 13038614]
7. ZAMUDA, Aleš, BREST, Janez, BOŠKOVIĆ, Borko, ŽUMER, Viljem. Študija samoprilagajanja krmilnih parametrov pri algoritmu DEMOwSA. *Elektrotehniški vestnik*. [Slovenska tiskana izd.], 2008, vol. 75, nr. 4, pp. 223-228. [COBISS.SI-ID 12933654]

1.08 Published scientific conference contribution

8. ZAMUDA, Aleš, BREST, Janez. Tree model reconstruction innovization 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]
9. BREST, Janez, BOŠKOVIĆ, 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]
10. BREST, Janez, ZAMUDA, Aleš, FISTER, Iztok, BOŠKOVIĆ, Borko, SEPESY MAUČEC,

Mirjam. Constrained real-parameter optimization using a differential evolution algorithm. V: *IEEE SSCI2011 symposium series on computational intelligence : proceedings*. Piscataway: IEEE, cop. 2011, pp. 9-16. [COBISS.SI-ID 14952214]

11. ZAMUDA, Aleš. Diferencialna evolucija realnih industrijskih izzivov CEC 2011 = Differential evolution of RealWorld industry challenges CEC 2011. V: ZAJC, Baldomir (ur.), TROST, Andrej (ur.). *Zbornik dvajsete mednarodne Elektrotehniške in računalniške konference ERK 2011, 19.-21. september 2011, Portorož, Slovenija*, (Zbornik ... Elektrotehniške in računalniške konference ERK ...). Ljubljana: IEEE Region 8, Slovenska sekcija IEEE, 2011, zv. B, pp. 185-188. [COBISS.SI-ID 15361302]

12. ZAMUDA, Aleš, ČEP, Aleš, BREST, Janez. Optimizacija medatomskega energijskega potenciala Lennard-Jones z diferencialno evolucijo na arhitekturi CUDA = Interatomic Lennard-Jones potential energy optimization using differential evolution on CUDA architecture. V: ZAJC, Baldomir (ur.), TROST, Andrej (ur.). *Zbornik dvajsete mednarodne Elektrotehniške in računalniške konference ERK 2011, 19.-21. september 2011, Portorož, Slovenija*, (Zbornik ... Elektrotehniške in računalniške konference ERK ...). Ljubljana: IEEE Region 8, Slovenska sekcija IEEE, 2011, zv. B, pp. 197-200. [COBISS.SI-ID 15362582]

13. ZAMUDA, Aleš, BREST, Janez, BOŠKOVIĆ, 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]

14. 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, July 18-23, 2010. *WCCI 2010 Proceedings*. [S. l.]: IEEE, cop. 2010, cEC IEEE, pp. 3097-3104. [COBISS.SI-ID 14281238]

15. ZAMUDA, Aleš, BREST, Janez. Večkriterijska rekonstrukcija numerično kodiranih proceduralnih modelov dreves z diferencialno evolucijo. V: ZAJC, Baldomir (ur.), TROST, Andrej (ur.). *Zbornik devetnajste mednarodne Elektrotehniške in računalniške konference ERK 2010, Portorož, Slovenija, 20.-22. september 2010*, (Zbornik ... Elektrotehniške in računalniške konference ERK ...). Ljubljana: IEEE Region 8, Slovenska sekcija IEEE, 2010, zv. B, pp. 169-172. [COBISS.SI-ID 14408726]

16. ZAMUDA, Aleš, BREST, Janez, BOŠKOVIĆ, 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]

17. BREST, Janez, ZAMUDA, Aleš, BOŠKOVIĆ, 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]

- 18.** ZAMUDA, Aleš, BREST, Janez, ŽUMER, Viljem. Razpoznava numerično kodiranih proceduralnih modelov iz slik naravnih dreves z uporabo diferencialne evolucije. V: ZAJC, Baldomir (ur.), TROST, Andrej (ur.). *Zbornik Osemnajste mednarodne elektrotehniške in računalniške konference - ERK 2009, 21-23. september 2009, Portorož, Slovenija*. Ljubljana: IEEE Region 8, Slovenska sekcija IEEE, 2009, zv. B, pp. 171-174, ilupp. [COBISS.SI-ID 13463318]
- 19.** BREST, Janez, ZAMUDA, Aleš, BOŠKOVIĆ, 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]
- 20.** BREST, Janez, ZAMUDA, Aleš, BOŠKOVIĆ, 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]
- 21.** ZAMUDA, Aleš, BREST, Janez, BOŠKOVIĆ, 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]
- 22.** ZAMUDA, Aleš, BREST, Janez, BOŠKOVIĆ, Borko, ŽUMER, Viljem. Diferencialna evolucija za večkriterijsko optimizacijo s samoprilagajanjem in z lokalnim preiskovanjem SQP. V: ZAJC, Baldomir (ur.), TROST, Andrej (ur.). *Zbornik sedemnajste mednarodne Elektrotehniške in računalniške konference ERK 2008, 29. september - 1. oktober 2008, Portorož, Slovenija*, (Zbornik ... Elektrotehniške in računalniške konference ERK ...). Ljubljana: IEEE Region 8, Slovenska sekcija IEEE, 2008, zv. B, pp. 103-106. [COBISS.SI-ID 12695574]
- 23.** BOŠKOVIĆ, Borko, BREST, Janez, ZAMUDA, Aleš, ŽUMER, Viljem. Ratingiranje pri uglasovanju šahovskega programa z algoritmom diferencialne evolucije. V: ZAJC, Baldomir (ur.), TROST, Andrej (ur.). *Zbornik sedemnajste mednarodne Elektrotehniške in računalniške konference ERK 2008, 29. september - 1. oktober 2008, Portorož, Slovenija*, (Zbornik ... Elektrotehniške in računalniške konference ERK ...). Ljubljana: IEEE Region 8, Slovenska sekcija IEEE, 2008, zv. B, pp. 123-126. [COBISS.SI-ID 12695830]
- 24.** ZAMUDA, Aleš, BREST, Janez, BOŠKOVIĆ, Borko, ŽUMER, Viljem. Differential evolution for multiobjective optimization with self adaptation. V: *CEC 2007 : 2007 Congress on Evolutionary Computation : 25-28 September 2007, Singapore*. Piscataway: Institute of Electrical and Electronics Engineers, 2007, pp. 3617-3624. [COBISS.SI-ID 11730710]
- 25.** 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]

- 26.** BOŠKOVIĆ, Borko, BREST, Janez, ZAMUDA, Aleš, ŽUMER, Viljem. Uглашеvanje šahovskega programa BBChess z uporabo algoritma diferencialne evolucije. V: ZAJC, Baldomir (ur.), TROST, Andrej (ur.). *Zbornik Šestnajste mednarodne Elektrotehniške in računalniške konference ERK 2007, 24. -26. september 2007, Portorož, Slovenija*. Ljubljana: IEEE Region 8, Slovenska sekcija IEEE, 2007, zv. B, pp. 73-76. [COBISS.SI-ID 11760662]
- 27.** BREST, Janez, ZAMUDA, Aleš, BOŠKOVIĆ, Borko, ŽUMER, Viljem. Večkriterijska optimizacija: primerjava algoritmov v MOjDE in DEMO. V: ZAJC, Baldomir (ur.), TROST, Andrej (ur.). *Zbornik Šestnajste mednarodne Elektrotehniške in računalniške konference ERK 2007, 24. -26. september 2007, Portorož, Slovenija*. Ljubljana: IEEE Region 8, Slovenska sekcija IEEE, 2007, zv. B, pp. 85-88. [COBISS.SI-ID 11773718]
- 28.** ZAMUDA, Aleš, BREST, Janez, BOŠKOVIĆ, Borko, ŽUMER, Viljem. Večkriterijska optimizacija: eksperimentalni rezultati algoritmov MOjDE in DEMO. V: ZAJC, Baldomir (ur.), TROST, Andrej (ur.). *Zbornik Šestnajste mednarodne Elektrotehniške in računalniške konference ERK 2007, 24. -26. september 2007, Portorož, Slovenija*. Ljubljana: IEEE Region 8, Slovenska sekcija IEEE, 2007, zv. B, pp. 89-92. [COBISS.SI-ID 11773974]
- 29.** 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 VIPSI-2006 Slovenia : Multidisciplinary, Interdisciplinary, Transdisciplinary: M+I+T++, Bled Slovenia, November 30-December 3, 2006*. Belgrade: IPSI, 2006, [5] f. [COBISS.SI-ID 11005206]
- 30.** ZAMUDA, Aleš, STRNAD, Damjan. Interaktivni modelirnik realističnih animiranih dreves. V: ZAJC, Baldomir (ur.). *Zbornik trinajste mednarodne elektrotehniške in računalniške konference ERK 2004, 27. - 29. september 2004, Portorož, Slovenija*. Ljubljana: IEEE Region 8, Slovenska sekcija IEEE, [2004?], zv. B, pp. 11-14. [COBISS.SI-ID 9058326]

1.12 Published scientific conference contribution abstract

- 31.** ZAMUDA, Aleš. Interaktivno gojenje ekosistemov z operatorji evolucije. V: FILIPIČ, Bogdan (ur.), MERNIK, Marjan (ur.), PAPA, Gregor (ur.). *Zbornik povzetkov delavnic "Algoritmi po vzorih iz narave" v študijskem letu 2007/2008 : Ljubljana, september 2008*. Ljubljana: Institut "Jožef Stefan", 2008, pp. 11. [COBISS.SI-ID 12755478]
- 32.** ZAMUDA, Aleš. Diferencialna evolucija z večkriterijsko optimizacijo s samoprilagajanjem in z lokalnim preiskovanjem SQP. V: FILIPIČ, Bogdan (ur.), MERNIK, Marjan (ur.), PAPA, Gregor (ur.). *Zbornik povzetkov delavnic "Algoritmi po vzorih iz narave" v študijskem letu 2007/2008 : Ljubljana, september 2008*. Ljubljana: Institut "Jožef Stefan", 2008, pp. 22. [COBISS.SI-ID 12756502]
- 33.** ZAMUDA, Aleš. Testne funkcije in metrike za večkriterijsko optimzacijo. V: FILIPIČ, Bogdan (ur.), MERNIK, Marjan (ur.), PAPA, Gregor (ur.). *Zbornik povzetkov delavnic "Algoritmi po vzorih iz narave" v študijskem letu 2006/2007 : Ljubljana, september 2007*. Ljubljana: Institut "Jožef Stefan", 2007, pp. 13. [COBISS.SI-ID 12763670]

34. ZAMUDA, Aleš. Večkriterijska optimizacija: eksperimentalni rezultati algoritmov MOjDE in DEMO. V: FILIPIČ, Bogdan (ur.), MERNIK, Marjan (ur.), PAPA, Gregor (ur.). *Zbornik povzetkov delavnic "Algoritmi po vzorih iz narave" v študijskem letu 2006/2007 : Ljubljana, september 2007*. Ljubljana: Institut "Jožef Stefan", 2007, pp. 28. [COBISS.SI-ID 12768534]

35. ZAMUDA, Aleš, GUID, Nikola. Modeliranje, simulacija in upodabljanje gozdov. V: ZAJC, Baldomir (ur.), TROST, Andrej (ur.). *Zbornik petnajste mednarodne Elektrotehniške in računalniške konference ERK 2006, 25. - 27. september 2006, Portorož, Slovenija*, (Zbornik ... Elektrotehniške in računalniške konference ERK ...). Ljubljana: IEEE Region 8, Slovenska sekcija IEEE, 2006, zv. B, pp. 391-392. [COBISS.SI-ID 10776598]

1.16 Independent scientific component part or a chapter in a monograph

36. BREST, Janez, ZAMUDA, Aleš, BOŠKOVIĆ, Borko, GREINER, Sašo, ŽUMER, Viljem. An analysis of the control parameters' adaptation in DE. V: *Advances in differential evolution*, (Studies in computational intelligence, Vol. 143). Berlin; Heidelberg: Springer, 2008, pp. 89-110. [COBISS.SI-ID 12503830]

37. BOŠKOVIĆ, Borko, GREINER, Sašo, BREST, Janez, ZAMUDA, Aleš, ŽUMER, Viljem. An adaptive differential evolution algorithm with opposition-based mechanisms, applied to the tuning of a chess program. V: *Advances in differential evolution*, (Studies in computational intelligence, Vol. 143). Berlin; Heidelberg: Springer, 2008, pp. 287-298. [COBISS.SI-ID 12504854]

MONOGRAPHS AND OTHER COMPLETED WORKS

2.08 Doctoral dissertation

38. ZAMUDA, Aleš. *Diferencialna evolucija za rekonstrukcijo parametriziranih proceduralnih drevesnih modelov : doktorska disertacija*. [Maribor: A. Zamuda], 2012. XXII, 164 pp., ilupp. <http://dkum.uni-mb.si/Dokument.php?id=30084> . [COBISS.SI-ID 16001302]

2.09 Master's thesis

39. ZAMUDA, Aleš. *Samoprilagajanje krmilnih parametrov pri algoritmu diferencialne evolucije za večkriterijsko optimizacijo : magistrsko delo*. Maribor: [A. Zamuda], 2008. XVI, 112 pp., graf. prikazi, tabele. <http://dkum.uni-mb.si/Dokument.php?id=6502> . [COBISS.SI-ID 12461846]

2.11 Undergraduate thesis

40. ZAMUDA, Aleš. *Modeliranje, simulacija in upodabljanje drevesnih ekosistemov : diplomska naloga univerzitetnega študijskega programa*, (Fakulteta za elektrotehniko, računalništvo in informatiko, Diplomski dela univerzitetnega študija). Maribor: [A. Zamuda], 2006. 98 f., ilupp. [COBISS.SI-ID 10822166]

2.12 Final research report

41. ZAZULA, Damjan, GUID, Nikola, ŽALIK, Borut, OJSTERŠEK, Milan, MERNIK, Marjan, BREST, Janez, HOLOBAR, Aleš, PODGORELEC, David, KOLMANIČ, Simon, KOSAR, Tomaž, ZAMUDA, Aleš, BOŠKOVIĆ, Borko, FISTER, Iztok. *Računalniški sistemi, metodologije*

in inteligentne storitve : letno poročilo o rezultatih raziskovalnega programa v letu 2009 : programska skupina P2-0041. Maribor: Fakulteta za elektrotehniko, računalništvo in informatiko, 2010. 1 mapa (loč. pag.). [COBISS.SI-ID 14078486]

42. ZAZULA, Damjan, ŽUMER, Viljem, GUID, Nikola, ŽALIK, Borut, OJSTERŠEK, Milan, RIZMAN ŽALIK, Krista, MERNIK, Marjan, PODGORELEC, David, POTOČNIK, Božidar, BREST, Janez, KOLMANIČ, Simon, LENIČ, Mitja, STRNAD, Damjan, CIGALE, Boris, GOMBOŠI, Matej, REBERNAK, Damijan, HOLOBAR, Aleš, KRIVOGRAD, Sebastian, DIVJAK, Matjaž, MUNDA, Jurij, KLAJNŠEK, Gregor, ZADRAVEC, Mirko, HERIC, Dušan, KOSAR, Tomaž, DOMITER, Vid, HORVAT, Marjan, TUTEK, Simon, NERAT, Andrej, ŠPELIČ, Denis, PIVEC, Boštjan, BREZOVNIK, Janez, ISTENIČ, Rok, OBRUL, Denis, ZAMUDA, Aleš. *Računalniški sistemi, metodologije in inteligentne storitve : zaključno poročilo o rezultatih raziskovalnega programa v obdobju 2004-2008.* Maribor: Fakulteta za elektrotehniko, računalništvo in informatiko, 2009. 1 mapa (loč. pag.). [COBISS.SI-ID 14079766]

2.21 Software

43. ZAMUDA, Aleš, STRNAD, Damjan, BREST, Janez, BOŠKOVIČ, Borko. *Drevo.* [s. l.: s. n., 2007]. 1 CD ROM. <http://labraj.uni-mb.si/~ales/codes/drevo.zip>. [COBISS.SI-ID 11607062]

44. BOŠKOVIČ, Borko, BREST, Janez, ZAMUDA, Aleš. *Šahovski program BBChess 1.1.* Maribor: [s. n., 2007]. 1 CD ROM. http://labraj.uni-mb.si/images/6/6e/BBChess1.1_src.tar.bz. [COBISS.SI-ID 11873046]

45. ZAMUDA, Aleš, BREST, Janez. *FastFractal "DoubleDip" C++2Java Interface.* Maribor: [s. n., 2008]. 1 CD ROM. <http://www.cs.bham.ac.uk/research/projects/ecb/data/150/cec08-f7-cpp-with-sources-1.0RC1.zip>, <http://nical.ustc.edu.cn/conferences/cec2008/lsgo/LSGO.CEC08.Benchmark.zip>. [COBISS.SI-ID 12207894]

46. ZAMUDA, Aleš. *DECMOSA-SQP.* Maribor: [s. n., 2009]. 1 CD ROM. <http://web.mysites.ntu.edu.sg/epnsugan/PublicSite/Shared%20Documents/CEC2009-MOEA/Codes/raw-unchanged-source-of-DECMOSA-SQP-CEC09.tar>, <http://labraj.uni-mb.si/~ales/codes/raw-unchanged-source-of-DECMOSA-SQP-CEC09.tgz>. [COBISS.SI-ID 14134550]

PERFORMED WORKS (EVENTS)

3.14 Invited lecture at foreign university

47. ZAMUDA, Aleš. *Heterogeneous computer system in the view of ubiquitous computing and connectible intelligent services : lecture on the Universidad de Las Palmas de Gran Canaria, Canaru Islands, Spain, EU, 7-11 May, 2012 (ERASMUS teaching staff mobility programme).* 2012. [COBISS.SI-ID 15993110]

3.25 Other performed works

48. ZAMUDA, Aleš. *Evolucijska rekonstrukcija drevesnih modeli : razvojno-raziskovalni prispevek*

Laboratorija za računalniške arhitekture in jezike na Delavnici programske skupine Računalniški sistemi, metodologije in inteligentne storitve, Fakulteta za elektrotehniko, računalništvo in informatiko Maribor, 10. februar 2011. Maribor, 2011. [COBISS.SI-ID 15296534]

49. BOŠKOVIČ, Borko, GREINER, Sašo, ZAMUDA, Aleš. *Tečaj Linux : tečaj za Dravske elektrarne Maribor (DEM) in Holding slovenskih elektrarn (HSE), Maribor, 4.-12. junij 2009.* Maribor: Fakulteta za elektrotehniko, računalništvo in informatiko, Laboratorij za računalniške arhitekture in jezike, 2009. [COBISS.SI-ID 13264662]

SECONDARY AUTHORSHIP

Co-Supervisor for Undergraduate Theses (1st cycle Bologna study programme)

50. MLINAR, Tilen. *Aplikacija za prikaz sledenja vozil na operacijskem sistemu iOS : diplomsko delo univerzitetnega študijskega programa.* Maribor: [T. Mlinar], 2011. VIII, 27 f., ilupp. <http://dkum.uni-mb.si/Dokument.php?id=24719> . [COBISS.SI-ID 15650070]

51. KUKOVIČ, Denis. *Izdelava spletljaja za Kolab in Sharepoint 2010 : diplomsko delo univerzitetnega študijskega programa.* Maribor: [D. Kukovič], 2011. VII, 43 f., ilupp. <http://dkum.uni-mb.si/Dokument.php?id=26163> . [COBISS.SI-ID 15872534]

52. ČEP, Aleš. *Optimizacija medatomskega potenciala Lennard-Jones s paralelno diferencialno evolucijo : diplomsko delo univerzitetnega študijskega programa.* Maribor: [A. Čep], 2011. IX, 27 f., ilupp. <http://dkum.uni-mb.si/Dokument.php?id=24817> . [COBISS.SI-ID 15353622]

53. BREŇČIČ, Boštjan. *Optimizacija s čebelami : diplomsko delo univerzitetnega študijskega programa.* Maribor: [B. Brenčič], 2011. VII, 29 f., ilupp. <http://dkum.uni-mb.si/Dokument.php?id=25254> . [COBISS.SI-ID 15371286]

54. ROJKO, Lovro. *Umetna inteligenca za simulacijo vožnje avtomobila po dirkalni progi : diplomsko delo univerzitetnega študijskega programa.* Maribor: [L. Rojko], 2011. IX, 32 f., ilupp. <http://dkum.uni-mb.si/Dokument.php?id=24818> . [COBISS.SI-ID 15623702]

55. BEZGET, Jan. *Iskanje in vizualizacija poti na morju : diplomsko delo visokošolskega strokovnega študijskega programa.* Maribor: [J. Bezget], 2010. VII, 43 pp., ilupp. <http://dkum.uni-mb.si/Dokument.php?id=17525> . [COBISS.SI-ID 14733334]

56. OSTOJIČ, Danijel. *Klici oddaljenih spletnih storitev in spletni založniški sistem : diplomsko delo univerzitetnega študijskega programa.* Maribor: [D. Ostojič], 2010. X, 48 pp., ilupp. <http://dkum.uni-mb.si/Dokument.php?id=17420> . [COBISS.SI-ID 14758166]

57. ŠTRUC, Nace. *Paralelno programiranje s pomočjo standarda OpenMP : diplomska naloga univerzitetnega študijskega programa.* Maribor: [N. Štruc], 2010. 32 pp., ilupp. <http://dkum.uni-mb.si/Dokument.php?id=17207> . [COBISS.SI-ID 14511126]

58. JURŠIČ, Janko. *Problem simetričnega trgovskega potnika in optimizacija z genetskimi algoritmi : diplomsko delo univerzitetnega študijskega programa.* Maribor: [J. Juršič], 2010. VI, 26 f., ilupp. <http://dkum.uni-mb.si/Dokument.php?id=18399> . [COBISS.SI-ID 14782742]

59. PAJNIK, Aleš. *Spletni založniški sistem "Joomla!" : diplomsko delo univerzitetnega študijskega programa*. Maribor: [A. Pajnik], 2010. IX, 34 pp., ilupp.

<http://dkum.uni-mb.si/Dokument.php?id=17960> . [COBISS.SI-ID 14772502]

60. REBSELJ, Boris. *Vizualizacija zgradb s programskima vmesnikoma Google Maps in Google Earth : diplomsko delo visokošolskega strokovnega študijskega programa*. Maribor: [B. Rebselj],

2010. VIII, 52 f., ilupp. <http://dkum.uni-mb.si/Dokument.php?id=19933> . [COBISS.SI-ID 14915350]

Referee

61. *Engineering applications of artificial intelligence*. Zamuda, Aleš (reviewer 2010, 2011). [Print ed.]. Swansea: Pineridge Press, 1988-. ISSN 0952-1976. [COBISS.SI-ID 25396224]

62. *IEEE transactions on evolutionary computation*. Zamuda, Aleš (reviewer 2007, 2008, 2009, 2010, 2011, 2012). [Print ed.]. New York: Institute of Electrical and Electronics Engineers, 1997-. ISSN 1089-778X. [COBISS.SI-ID 16940805]

63. *IEEE transactions on industrial electronics*. Zamuda, Aleš (reviewer 2009). [Print ed.]. New York: Institute of Electrical and Electronics Engineers, 1982-. ISSN 0278-0046. [COBISS.SI-ID 8726789]

64. *IEEE transactions on systems, man and cybernetics. Part B. Cybernetics*. Zamuda, Aleš (reviewer 2009, 2010, 2012). [Print ed.]. New York (N.Y.): Institute of Electrical and Electronics Engineers, 1996-. ISSN 1083-4419. [COBISS.SI-ID 16640005]

65. *Informatika*. Zamuda, Aleš (reviewer 2010, 2011). Ljubljana: Slovene Society Informatika, 1977-. ISSN 0350-5596. [COBISS.SI-ID 746244]

66. *Information sciences*. Zamuda, Aleš (reviewer 2011, 2012). [Print ed.]. New York: North-Holland, 1968-. ISSN 0020-0255. [COBISS.SI-ID 25613056]

67. *International Journal of Systems Science*. Zamuda, Aleš (reviewer 2010, 2011). London: Taylor & Francis. ISSN 0020-7721. [COBISS.SI-ID 25657856]

68. *Journal of industrial and management optimization*. Zamuda, Aleš (reviewer 2008). Springfield, Mo.: American Institute of Mathematical Sciences, 2005-. ISSN 1547-5816. [COBISS.SI-ID 12967190]

69. *Journal of software engineering and applications*. Zamuda, Aleš (reviewer 2012). [Petaluma, CA]: Scientific Research Publishing, Inc., 2008-. ISSN 1945-3116.

<http://www.srpublishing.org/scirp/Journal/Home.aspx?JournalID=45> . [COBISS.SI-ID 515574041]

70. *Memetic computing*. Zamuda, Aleš (reviewer 2012). Heidelberg; Berlin: Springer. ISSN 1865-9292. <http://www.springerlink.com/content/121309> . [COBISS.SI-ID 518445081]

71. *Swarm and evolutionary computation*. Zamuda, Aleš (reviewer 2011, 2012). Amsterdam: Elsevier. ISSN 2210-6502. [COBISS.SI-ID 16140310]