

List of publications

My PhD public defence was in October 31, 2008 and on January 13, 2009 The Romanian Ministry of Education confirmed by its order No. 3030 the decision of the National Attestation Board with respect to the Ph.D. degree awarded by Babeş-Bolyai University.

A. Vescan, *Construction Approaches for Component-Based Systems*, PhD Thesis, Babeş-Bolyai University, Cluj-Napoca, Romania, 2008/2009

Books and Book chapters

A.Vescan, C-M.Pintea, Component-based Ant Systems in *Modern Paradigms in Computer Science and Applied Mathematics*, A Handbook for PhD Students and Researchers, (Eds.B.Patrut, G-C.Crisan), Akademische Verlagsgemeinschaft Munchen-AVM-GmbH & Co.KG, Munchen, Germany, 2011 (ISBN 978-3-86306-757-1)

ISI Science Citation Index Expanded

1. **A. Vescan**, C-M Pintea, P. C. Pop, Test Case Prioritization—ANT Algorithm With Faults Severity, *Logic Journal of the IGPL*, Volume 30, Issue 2, April 2022, Pages 277–288, <https://doi.org/10.1093/jigpal/jzaa061> (rank A ISI journal)
2. **A. Vescan**, C. Şerban, G. C. Crişan, Computational intelligence in software defects rules discovery. *Soft Comput* 26, 6925–6939 (2022), <https://doi.org/10.1007/s00500-021-06646-9>, (rank B ISI journal)
3. D. Opre, C. Şerban, **A. Vescan**, R. Iucu, Supporting students' active learning with a computer based tool, *Active Learning in Higher Education*, June 2022, <https://doi.org/10.1177/14697874221100465>
4. **A. Vescan**, A. Pintea, L. Linsbauer, A. Egyed. 2021. Genetic programming for feature model synthesis: a replication study. *Empirical Softw. Engg.* 26, 4 (Jul 2021), <https://doi.org/10.1007/s10664-021-09947-7> (rank A ISI journal)
5. **A. Vescan**, C. Serban. 2017. Multilevel component selection optimization toward an optimal architecture. *Soft Comput.* 21, 15, 2017, 4481–4495. <https://doi.org/10.1007/s00500-016-2472-8> (rank B ISI journal)
6. **A. Fanea**, L. Diosan, *Evolutionary Approach for Behaviour Component Composition*, *International Journal of Computers, Communication and Control*, Supplementary issue-Proceedings of the International Conference on Computers, Communications & Control, 1–3 June, Baile Felix Spa-Oradea, Romania, Eds.:Ioan Dzitac, Florin-Gheorghe Filip, Misu-Jan Manolescu, ISSN: 1841-9836, pp. 480–485, 2006 (*indexed ISI-SCI-E*).
7. **A. Fanea**, L. Diosan, *Computational Intelligence-based Model for Component Composition Analysis*, *International Journal of Computers, Communication and Control*, Supplementary issue-Proceedings of the International Conference on Computers, Communications & Control, 1–3 June, Baile Felix Spa-Oradea, Romania, Eds.:Ioan Dzitac, Florin-Gheorghe Filip, Misu-Jan Manolescu, ISSN: 1841-9836, pp. 474–479, 2006 (*indexed ISI-SCI-E*).
8. **V. Vescan**, *Optimal component selection using a multiobjective evolutionary algorithm*, *Journal of Neural Network world*, ISSN: 1210-0552, 2008 (*indexed ISI-SCI-E*), (Rank Q4 in 2009)

ISI Conference Proceedings Citation Index

1. **A. Vescan**, C. Serban, A.-D. Budur, 2021. Towards a Reliability Prediction Model based on Internal Structure and Post-Release Defects Using Neural Networks. In Evaluation and Assessment in Software Engineering (EASE 2021). Association for Computing Machinery, New York, NY, USA, 379–386, <https://doi.org/10.1145/3463274.3463363> (rank A CORE conference, workshop)
2. **A. Vescan**, C. Şerban, G. C. Crişan, "Software Defects Rules Discovery," 2021 IEEE International Conference on Software Testing, Verification and Validation Workshops (ICSTW), 2021, pp. 101-109, <https://doi.org/10.1109/ICSTW52544.2021.00028>, (rank A CORE conference, workshop)
3. C. Şerban, **A. Vescan**, (2021). Towards a Neural Network based Reliability Prediction Model via Bugs and Changes. In Proceedings of the 16th International Conference on Software Technologies - ICSOFT, ISBN 978-989-758-523-4; ISSN 2184-2833, pages 302-309. <https://doi.org/10.5220/0010600703020309>, (rank B CORE conference)
4. I. Todericiu, C. Serban, **A. Vescan**. 2021. Students perception on the impact of their involvement in the learning process: an empirical study. In Proceedings of the 3rd International Workshop on Education through Advanced Software Engineering and Artificial Intelligence (EASEAI 2021). Association for Computing Machinery, New York, NY, USA, 39–46. <https://doi.org/10.1145/3472673.3473964>, (rank A* CORE conference, workshop)
5. B. Lőrincz, B. Iudean, **A. Vescan**. 2021. Experience report on teaching testing through gamification. In Proceedings of the 3rd International Workshop on Education through Advanced Software Engineering and Artificial Intelligence (EASEAI 2021). Association for Computing Machinery, New York, NY, USA, 15–22, <https://doi.org/10.1145/3472673.3473960>, (rank A* CORE conference, workshop)
6. C. Şerban, V. Niculescu, **A. Vescan**, "Attaining competences in software quality oriented design based on cyclic learning," 2020 IEEE Frontiers in Education Conference (FIE), 2020, pp. 1-9, <https://doi.org/10.1109/FIE44824.2020.9274227>. (rank B CORE2020 conference)
7. C. Şerban, **A. Vescan**, "Towards an Evaluation Process around Active Learning based Methods," IEEE Frontiers in Education Conference (FIE), 2020, pp. 1-7, <https://doi.org/10.1109/FIE44824.2020.9273935>. (rank B CORE2020 conference)
8. **A. Vescan**, C. Şerban, "Towards a new Test Case Prioritization Approach based on Fuzzy Clustering Analysis," 2020 IEEE International Conference on Software Maintenance and Evolution (ICSME), 2020, pp. 786-788, <https://doi.org/10.1109/ICSME46990.2020.00091>, (rank A CORE conference)
9. **A. Vescan**. 2019. Does learning by doing have a positive impact on teaching model checking? In Proceedings of the 1st ACM SIGSOFT International Workshop on Education through Advanced Software Engineering and Artificial Intelligence (EASEAI 2019). Association for Computing Machinery, New York, NY, USA, 27–34, <https://doi.org/10.1145/3340435.3342717>, (rank A* CORE conference, workshop)
10. C. Serban, **A. Vescan**. 2019. Predicting reliability by severity and priority of defects. In Proceedings of the 2nd ACM SIGSOFT International Workshop on Software Qualities and Their Dependencies (SQUADE 2019). Association for Computing Machinery, New York, NY, USA, 27–34. <https://doi.org/10.1145/3340495.3342753>, (rank A* CORE conference, workshop)
11. C. Serban, **A. Vescan**. 2019. Advances in designing a student-centered learning process using cutting-edge methods, tools, and artificial intelligence: an e-learning platform. In Proceedings of the 1st ACM SIGSOFT International Workshop on Education

- through Advanced Software Engineering and Artificial Intelligence (EASEAI 2019). Association for Computing Machinery, New York, NY, USA, 39–45, <https://doi.org/10.1145/3340435.3342716>, (rank A* CORE conference, workshop)
12. V. Niculescu, C. Șerban, **A. Vescan**, "Does Cyclic Learning have Positive Impact on Teaching Object-Oriented Programming?," 2019 IEEE Frontiers in Education Conference (FIE), 2019, pp. 1-9, <https://doi.org/10.1109/FIE43999.2019.9028600>, (rank B CORE2020 conference)
 13. **A. Vescan**, C. Șerban, C. Chisăliță-Cretu, L. Dioșan, "Requirement dependencies-based formal approach for test case prioritization in regression testing," 2017 13th IEEE International Conference on Intelligent Computer Communication and Processing (ICCP), 2017, pp. 181-188, <https://doi.org/10.1109/ICCP.2017.8117002>, (rank C CORE2018 conference)
 14. S. Motogna, **A. Vescan**, C. Serban, P. Tirban, "An approach to assess maintainability change," 2016 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR), 2016, pp. 1-6, <https://doi.org/10.1109/AQTR.2016.7501279>.
 15. **A. Vescan**. (2016). An Evolutionary Multiobjective Approach for the Dynamic Multilevel Component Selection Problem. In: Norta, A., Gaaloul, W., Gangadharan, G., Dam, H. (eds) Service-Oriented Computing – ICSOC 2015 Workshops. ICSOC 2015. Lecture Notes in Computer Science(), vol 9586. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-662-50539-7_16, (rank A CORE conference, workshop)
 16. **A. Vescan**, C. Șerban. (2016). A Fuzzy-Based Approach for the Multilevel Component Selection Problem. In: Martínez-Álvarez, F., Troncoso, A., Quintián, H., Corchado, E. (eds) Hybrid Artificial Intelligent Systems. HAIS 2016. Lecture Notes in Computer Science(), vol 9648. Springer, Cham. https://doi.org/10.1007/978-3-319-32034-2_39, (rank C CORE2017 conference)
 17. **A. Vescan**. (2016). Case Study Method and Research Design for the Dynamic Multilevel Component Selection Problem. In: Norta, A., Gaaloul, W., Gangadharan, G., Dam, H. (eds) Service-Oriented Computing – ICSOC 2015 Workshops. ICSOC 2015. Lecture Notes in Computer Science(), vol 9586. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-662-50539-7_11, (rank A CORE conference, workshop)
 18. S. Motogna, I. Ciuciu, C. Serban, **A. Vescan**. (2015). Improving Software Quality Using an Ontology-Based Approach. In: , et al. On the Move to Meaningful Internet Systems: OTM 2015 Workshops. OTM 2015. Lecture Notes in Computer Science(), vol 9416. Springer, Cham. https://doi.org/10.1007/978-3-319-26138-6_49
 19. C. Șerban, **A. Vescan**, H. F. Pop, "A conceptual framework for component-based system metrics definition," 9th RoEduNet IEEE International Conference, 2010, pp. 73-78, <https://ieeexplore.ieee.org/document/5541595>.
 20. **A. Vescan**, "A Metrics-Based Evolutionary Approach for the Component Selection Problem," 2009 11th International Conference on Computer Modelling and Simulation, 2009, pp. 83-88, <https://doi.org/10.1109/UKSIM.2009.32>.
 21. C. Chisalita-Cretu, **A. Vescan**, "The multi-objective refactoring selection problem," Knowledge Engineering Principles and Techniques, 2009, pp. 291-298.
 22. C. Șerban, **A. Vescan**, H. F. Pop, (2009). A New Component Selection Algorithm Based on Metrics and Fuzzy Clustering Analysis. In: Corchado, E., Wu, X., Oja, E., Herrero, Á., Baruque, B. (eds) Hybrid Artificial Intelligence Systems. HAIS 2009. Lecture Notes in Computer Science(), vol 5572. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-642-02319-4_75, (rank C CORE2013 conference)

23. **A. Vescan**, C. Grosan, "Two Evolutionary Multiobjective Approaches for the Component Selection Problem," 2008 Eighth International Conference on Intelligent Systems Design and Applications, 2008, pp. 395-400, <https://doi.org/10.1109/ISDA.2008.24>, (rank C CORE conference)
24. **A. Vescan**, C. Grosan, H. F. Pop, *Evolutionary Algorithms for the Component Selection Problem*, Proceedings of the 2nd International Workshop on Evolutionary Techniques in Data Processing, 1–5 September, Turin, Italy, ISBN: 1529-4188, pp. 509 – 513, 2008 (*ISI Proceeding*).
25. **A. Vescan**, "An evolutionary multiobjective approach for the component selection problem," 2008 First International Conference on the Applications of Digital Information and Web Technologies (ICADIWT), 2008, pp. 252-257, <https://doi.org/10.1109/ICADIWT.2008.4664354>.
26. **A. Vescan**. 2008. Component Adaptation Architectures A Formal Approach. In Proceedings of the 12th international conference on Knowledge-Based Intelligent Information and Engineering Systems, Part III (KES '08). Springer-Verlag, Berlin, Heidelberg, 319–326. https://doi.org/10.1007/978-3-540-85567-5_40, (rank B CORE conference)
27. **A. Vescan**, C. Grosan, (2008). A Hybrid Evolutionary Multiobjective Approach for the Component Selection Problem. In: Corchado, E., Abraham, A., Pedrycz, W. (eds) Hybrid Artificial Intelligence Systems. HAIS 2008. Lecture Notes in Computer Science(), vol 5271. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-540-87656-4_21, (rank C CORE2013 conference)
28. **A. Vescan**, "Restraint Order Component Model Execution," 2006 Eighth International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, 2006, pp. 195-200, <https://doi.org/10.1109/SYNASC.2006.66>, (rank C CORE2013 conference)
29. Z. I. Lazar, **A. Fanea**, D. Petrascu, V. Ciobotariu-Boer and B. Parv, "COMODI: on the graphical user interface," Seventh International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC'05), 2005, pp. 5 pp.-, <https://doi.org/10.1109/SYNASC.2005.27>, (rank C CORE2013 conference)

International conferences papers

1. C.-M. Tiutin and **A. Vescan**. 2022. Test case prioritization based on neural networks classification. In Proceedings of the 2nd ACM International Workshop on AI and Software Testing/Analysis (AISTA 2022). Association for Computing Machinery, New York, NY, USA, 9–16. <https://doi.org/10.1145/3536168.3543300>, (rank A CORE conference, workshop)
2. V. Niculescu, C. Șerban, **A. Vescan**, (2022). Towards an Overhead Estimation Model for Multithreaded Parallel Programs. In Proceedings of the 17th International Conference on Evaluation of Novel Approaches to Software Engineering - ENASE, ISBN 978-989-758-568-5; ISSN 2184-4895, pages 502-509. <https://doi.org/10.5220/0011083400003176>, (rank B CORE conference)
3. **A. Vescan**, C. Chisalita-Cretu, C. Serban, L. Diosan. 2021. On the use of evolutionary algorithms for test case prioritization in regression testing considering requirements dependencies. In Proceedings of the 1st ACM International Workshop on AI and Software Testing/Analysis (AISTA 2021). Association for Computing Machinery, New York, NY, USA, 1–8. <https://doi.org/10.1145/3464968.3468407>, (rank A CORE conference, workshop)
4. **A. Vescan**, C. Serban, 2020. Facilitating model checking learning through experiential learning. In Proceedings of the 2nd ACM SIGSOFT International Workshop on Education through Advanced Software Engineering and Artificial Intelligence (EASEAI 2020).

Association for Computing Machinery, New York, NY, USA, 13–19, <https://doi.org/10.1145/3412453.3423196>, (rank A* CORE conference, workshop)

5. O.-C. Modoi, **A. Vescan**, Environmental Protection and Social Entrepreneurship Activities: The Vision of the Young People. *Environmental Sciences Proceedings*. 2021; 9(1):15. <https://doi.org/10.3390/environsciproc2021009015>
6. **A. Vescan**, C. M. Pintea, P. C. Pop, (2020). Solving the Test Case Prioritization Problem with Secure Features Using Ant Colony System. In: Martínez Álvarez, F., Troncoso Lora, A., Sáez Muñoz, J., Quintián, H., Corchado, E. (eds) *International Joint Conference: 12th International Conference on Computational Intelligence in Security for Information Systems (CISIS 2019) and 10th International Conference on European Transnational Education (ICEUTE 2019)*. CISIS ICEUTE 2019 2019. *Advances in Intelligent Systems and Computing*, vol 951. Springer, Cham. https://doi.org/10.1007/978-3-030-20005-3_7
7. **A. Vescan**, C. Grosan, S. Yang, "A hybrid evolutionary multiobjective approach for the dynamic component selection problem," 2011 11th International Conference on Hybrid Intelligent Systems (HIS), 2011, pp. 714-721, <https://doi.org/10.1109/HIS.2011.6122196>, (rank C CORE2013 conference)
8. C.-M. Pintea, **A. Vescan**, Bio-inspired components for a bandwidth problem, abstract book "Gheorghe Vrănceanu" National Conference on Mathematics and Informatics with international participation NCMI2011 Bacau, pp.15, 2011
9. C. Serban, **A. Vescan** and H. F. Pop, "A Formal Model for Component-Based System Assessment," 2010 Second International Conference on Computational Intelligence, Modelling and Simulation, 2010, pp. 261-266, <https://doi.org/10.1109/CIMSiM.2010.20>.
10. **A. Vescan**, H. F. Pop, *The Component Selection Problem as a Constraint Optimization Problem*, Proceedings of the Work In Progress Session of the 3rd IFIP TC2 Central and East European Conference on Software Engineering Techniques, Brno, Czechia, 13–15 October, 2008.
11. **A. Vescan**, "Pareto Dominance-Based Approach for the Component Selection Problem," 2008 Second UKSIM European Symposium on Computer Modeling and Simulation, 2008, pp. 58-63, <https://doi.org/10.1109/EMS.2008.16>.
12. **A. Vescan**, H.F. Pop, Automatic Configuration for the Component Selection Problem, Proceedings of the 5th international conference on Soft computing as transdisciplinary science and technology (Workshop on Autonomous Autonomic Software-based Systems (ASBS)), 27-31 October, Cergy-Pontoise, France, ISBN: 978-1-60558-046-3, pp. 479–483, 2008, <http://sigappfr.acm.org/cstst08/>
13. C. M. Pintea, **V. Vescan**, *The Labyrinth Problem: Component Model with Pharaoh System*, Proceedings of International Conference on Fundamental Science, ICFS 2007, Applied mathematics and computer science section, 9–10 November, Oradea, Romania, ISBN 978-973-759-367-2, pp. 82–86, 2007.
14. **A. Vescan**, *Modeling component compositions and assembly execution*, Proceedings of the Second Annual International Conference of Students, Post-graduates and Young Scientists, Computer Science and Engineering, Publishing House of Lviv Polytechnic National University, 4–6 October, Lviv, Ukraine, ISBN: 978-966-553-649-9, pp. 20–24, 2007.
15. **A. Vescan** *Components ordered assembly construction based on temporal restraint*, Proceedings of the 3rd Doctoral Workshop on Mathematical and Engineering Methods in Computer Science, 26–28 October, Znojmo, Czechia, Eds.: Ludek Matyska, David Antos, Milan Ceska, Mojmir Kretinsky, Petr Hlineny, Publisher Ing. Zdenek Novotny CSc., ISBN: 978-80-7355-077-6, pp. 249–256, 2007.

16. **A. Vescan**, C. M. Pintea, *Ant System. A component based-model*, Proceedings of the 2nd International Conference on Intelligence Computer Communication and Processing, 1–2 September, Cluj-Napoca, Romania, IEEE Press, Vol. 2, ISBN (10)973-662-235-5, pp. 23–28, 2006 (*indexed IEEE*).
17. **A. Vescan**, S. Motogna, *Syntactic automata-based component composition*, The 32nd EURO-MICRO Software Engineering and Advanced Applications (SEAA), Proceedings of the Work in Progress session, 29 August – 1 September, Cavtat/Dubrovnik, Croatia, ISBN 3-902457-11-2, pp. 13–14, 2006, (rank C CORE conference, work in progress session)
18. **A. Fanea**, C. M. Pintea, *Comparative models for a combinatorial problem*, Proceedings of the 6th International Conference Communications, 8–10 June, Bucharest, Romania, IEEE Press, ISBN 978-973-718-479-5, pp. 253–256, 2006 (*indexed IEEE*).

International journals papers

1. C. Tiutin, M. Trifan, **A. Vescan**, (2020). Defect Prediction-Based Test Case Prioritization. *Studia Universitatis Babeş-Bolyai Informatica*, 65(2), 78-93., <https://doi.org/10.24193/subbi.2020.2.06>
2. A. Budur, C. Şerban, **A. Vescan**, (2019). Predicting Reliability of Object-Oriented Systems Using a Neural Network. *Studia Universitatis Babeş-Bolyai Informatica*, 64(2), 65-79. <https://doi.org/10.24193/subbi.2019.2.05>
3. A. Miclaus, S. Petrescu, **A. Vescan** (2019). Embedded Systems with Component-Based GPU Support: A State of the Art. *Studia Universitatis Babeş-Bolyai Informatica*, 64(1), 67-76. <https://doi.org/10.24193/subbi.2019.1.06>
4. **A. Vescan**, Third Case Study for the Dynamic Multilevel Component Selection. *Studia Universitatis Babeş-Bolyai Informatica*, [S.l.], v. 62, n. 1, p. 15-31, may 2017. ISSN 2065-9601.
5. C. Serban, **A. Vescan**, H. F. Pop, Preliminary Measurements in Identifying Design Flaws. *Studia Universitatis Babeş-Bolyai Informatica*, [S.l.], v. 62, n. 1, p. 60-74, may 2017. ISSN 2065-9601
6. S. Motogna, C. Serban, **A. Vescan**, Metrics-Based Refactoring Strategy and Impact on Software Quality, *Studia Universitatis Babeş-Bolyai Informatica*, p. 83-90, 2015
7. **A. Vescan**, H. F. Pop, Automatic Criteria-based Configuration for the Component Selection Problem, *International Journal of Computer Information Systems and Industrial Managements Applications*, Vol. 4, pp. 641-647, 2012 (ISSN 2150-7988)
8. C-M.Pintea, **A. Vescan**, Bio-inspired components for a bandwidth problem, *Scientific Studies and Research, Seria Mathematics and Informatics*, 21(1), 185-192 , 2011 (ISSN 2067-3566)
9. **A. Vescan**, C. Grosan, Evolutionary Multiobjective Approach for Multilevel Component Composition, *Studia Universitatis Babeş-Bolyai Informatica*, pp. 18-32, 2010
10. **A. Vescan**, M. Frentiu, Teaching Model Checking to Undergraduates, *Studia Universitatis Babeş-Bolyai Informatica*, pp. 45-50, 2010
11. C. M. Pintea, **A. Vescan**, *Component-based Ant System for a Biobjective Assignment Problem*, *Studia Universitas Babes-Bolyai, Seria Informatica*, Vol. LII, No. 2, pp. 21–32, 2007.
12. C. Serban, **A. Vescan**, *Metrics-based selection of a component-based system development*, Special Issue of *Studia Universitatis Babes-Bolyai, Seria Informatica*, Proceedings of the International Conference on Knowledge Engineering: Principles and Techniques, 6–8 June, Cluj-Napoca, Romania, University Press, ISSN:1224-869X, pp. 324–331, 2007.

13. **A. Fanea**, L. Diosan, *Component Based Model Using P Systems*, International Journal of Information Technology and Intelligent Computing, Proceedings of the 8th International Conference on Artificial Intelligence on Soft Computing, 25–29 June, Zacopane, Poland, ISSN: 1895-8648, vol.1 no.3, pp. 499–508, 2006, <http://itic.wshe.lodz.pl>
14. **A. Vescan**, S. Motogna, *Syntactic analysis of component composition*, Journal of Pure Mathematics and Applications, Proceedings of the 6th Joint Conference on Mathematics and Computer Science, 12–15 July, Pecs, Hungary, Vol. 17, No. 3 - 4, pp. 527—537, 2006 (*indexed cover-by-cover by Mathematical Reviews*), <http://www.bke.hu/puma>
15. **A. Fanea**, S. Motogna, L. Diosan, L., *Automata-Based Component Composition Analysis*, Studia Universitas Babes-Bolyai, Seria Informatica, Vol. L, No. 1, pp. 13–20, 2006.
16. **A. Fanea**, L. Diosan, *Components Execution Order using Genetic Algorithms*, Studia Universitas Babes-Bolyai, Seria Informatica, Volume L, No. 2, pp. 23–32, 2005.
17. **A. Vescan**, Dependencies in the Component Selection Problem, Creative Mathematics and Informatics, pp.532-537, 2008
18. C. Serban, **A. Vescan**, H. F. Pop, Selection based on Fuzzy Clustering Analysis, Creative Mathematics and Informatics, pp.505-510, 2008.
19. **A. Vescan**, H. F. Pop, Constraint Optimization-based Component Selection Problem, Studia Universitatis Babes-Bolyai, series Informatica, Vol. LIII, 2/2008, pp. 3-14
20. C. Serban, **A. Vescan**, Metrics-based selection of a component assembly, Special Issue of Studia Universitatis Babes-Bolyai, Seria Informatica: Proceedings of The International Conference on Knowledge Engineering: Principles and Techniques, 6 -8 June, Cluj-Napoca, Romania, University Press, pp.324 - 331, ISBN:978-973-610-556-2, 2007
21. L. Diosan, **A. Fanea**, D. Dumitrescu, Genetic algorithms based on Ising machine, International Journal of Information Technology and Intelligent Computing, ISSN: 1895-8648, vol.1 no.3, pp. 585 - 594, 2006, <http://itic.wshe.lodz.pl>
22. Z. I. Lazar, B. Pârv, **A. Fanea**, J. R. Heringa, S. W. de Leeuw, COMODI: Guidelines for a Component-Based Framework for Scientific Computing, Studia Universitatis Babes-Bolyai, Informatica, Vol. XLIX, No. 2, pp. 91 - 101, 2004.

National conferences papers

1. **A. Fanea**, *Specification, Construction and Execution of a Component-Based Model*, Proceedings of Cluj Computer Science Academic Colloquium, 1–2 June, Cluj-Napoca, Romania, pp. 87–92, 2005.
2. **A. Fanea**, S. Motogna, *A Formal Model For Component Composition*, Proceedings of Cluj Academic Days National Symposium, 14–22 June, Cluj-Napoca, Romania, pp. 160–167, 2004.
3. **A. Fanea**, L. Diosan, *Designing a Component-Based Machine Using Multi Expression Programming*, Proceedings of Cluj Computer Science Academic Colloquium, 1–2 June, Cluj-Napoca, Romania, pp. 93–98, 2005.

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1. **A. Vescan**, C. M. Pinte, *Ant Colony Component-based System for Traveling Salesman Problem*, Journal of Applied Mathematical Science, ISSN 1312-885X, Vol. 1, No. 28, pp. 1347–1357, 2007.
2. C. Serban, **A. Vescan**, *Metrics for Component-based Development*, Creative mathematics and informatics, ISSN: 1843-441X, Vol. 16, pp. 143–150, 2007.

3. **A. Vescan**, S. Motogna, Overview and Architecture of a Component Modeling Tool, Creative Mathematics and Informatics, vol. 16, pp. 159 - 165, ISSN: 1843-441X, 2007
4. **A. Fanea**, C. M. Pintea, *A component based-model for a NP-hard problem*, Annals of Oradea University, Fascicola Matematica, Vol. XII, pp. 91–100, 2005, http://stiinte.uoradea.ro/en/auofm_contents.htm