

## Bio-inspired Distributed Systems

### 2015

- Viorica Rozina Chifu, Cristina Bianca Pop, Ioan Salomie, Bio-inspired Methods for Business Process Mining and Optimization, LAP Lambert Academic Publishing, ISBN 978-3-659-68458-6, 2015.  
<https://www.lap-publishing.com/catalog/details/store/es/book/978-3-659-68458-6/bio-inspired-methods-for-business-process-mining-and-optimization?search=Bianca>
- Cristina Bianca Pop, Viorica Rozina Chifu , Ioan Salomie, Roxana Plaian, Adela Stetco. Lifestyle Recommendation System for Treating Malnutrition. Intelligent Distributed Computing VIII, Studies in Computational Intelligence Volume 570, pp. 41-46, 2015.  
[http://link.springer.com/chapter/10.1007%2F978-3-319-10422-5\\_6](http://link.springer.com/chapter/10.1007%2F978-3-319-10422-5_6)

### 2014

- Viorica Rozina Chifu, Ioan Salomie, Cristina Bianca Pop, Alexandru Nicolae Niculici, Dumitru Samuel Suia. Exploring The Selection Of The Optimal Web Service Composition Through Ant Colony Optimization. Computing and Informatics Journal, vol. 33, no. 5, 2014.  
<http://www.cai.sk/ojs/index.php/cai/article/viewArticle/1095>
- Viorica Rozina Chifu , Cristina Bianca Pop, Ioan Salomie, Emil Stefan Chifu, Victor Rad, Marcel Antal. Hybrid Cuckoo Search-based Algorithms for Business Process Mining. Intelligent Systems'2014 - Proceedings of the 7th IEEE International Conference Intelligent Systems IS'2014, September 24-26, 2014, Warsaw, Poland, Volume 1: Mathematical Foundations, Theory, Analyses, pp. 487-498, 2014.  
[http://link.springer.com/chapter/10.1007%2F978-3-319-11313-5\\_43](http://link.springer.com/chapter/10.1007%2F978-3-319-11313-5_43)
- Ioan Salomie, Viorica Rozina Chifu, Cristina Bianca Pop. Hybridization of Cuckoo Search and Firefly Algorithms for Selecting the Optimal Solution in Semantic Web Service Composition. Book chapter in *Cuckoo Search and Firefly Algorithm: Theory and Applications*, X. S. Yang (Eds.), pp. 217-243, Springer, 2014.  
[http://link.springer.com/chapter/10.1007%2F978-3-319-02141-6\\_11](http://link.springer.com/chapter/10.1007%2F978-3-319-02141-6_11)
- Viorica Rozina Chifu, Ioan. Salomie, Emil Ștefan Chifu, Cristina Bianca Pop, Dan Valea, Madalina Lupu, M. Antal - Hybrid Invasive Weed Optimization Method for Generating Healthy Meals, International Workshop on Soft Computing Applications, Timisoara, Romania, 2014.  
<http://www.sofa2014.org/invi.html>
- Viorica Rozina Chifu, Ioan. Salomie, Emil Ștefan Chifu, B. Izabella, Cristina Bianca Pop, Marcel Antal, Cuckoo Search Algorithm for Clustering Food Offers - ICCP2014, pp. 17 - 22. <http://dx.doi.org/10.1109/ICCP.2014.6936974>

### 2013

- Viorica Rozina Chifu, Cristina Bianca Pop, Ioan Salomie, Dumitru Samuel Suia, Alexandru Niculici, Adela Negrean, Horatiu Jeflea. Optimizing the Semantic Web Service Composition Process using Bio-inspired Methods. *International Journal of Bio-Inspired Computation*, 2013, vol. 5, no. 4, pp. 226-238 , 2013, ISSN: 1758-0366.  
<http://dl.acm.org/citation.cfm?id=2508650>
- Ionut Anghel, Cristina Bianca Pop, Tudor Cioara, Ioan Salomie, Iulia Vartic. A Swarm-inspired Technique for Self-Organizing and Consolidating Data Centre Servers. Scalable Computing: Practice and Experience Journal, vol. 14, no. 2, pp. 69-82, 2013.

<http://www.scpe.org/index.php/scpe/article/view/841>

- Cristina Bianca Pop, Viorica Rozina Chifu, Ioan Salomie, Adrian Cozac, Ionut Mesaros. Particle Swarm Optimization-based Method for Generating Healthy Lifestyle Recommendations. *Proceedings of the IEEE 9th International Conference on Intelligent Computer Communication and Processing*, Cluj-Napoca, Romania, September 5-7, pp. 15-21, 2013.

<http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=6646074>

## 2012

- Cristina Bianca Pop, Viorica Rozina Chifu, Ioan Salomie, Adela Negrean, Horatiu Jeflea. Hybrid genetic algorithm for selecting the optimal or near-optimal solution in semantic Web service composition. *Proceedings of the IEEE 8th International Conference on Intelligent Computer Communication and Processing*, August 30 – September 1, 2012, Cluj-Napoca, Romania, pp. 57 - 64, ISBN: 978-1-4673-2953-8.  
<http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=6356161>
- Cristina Bianca Pop, Viorica Rozina Chifu, Ioan Salomie, Mihaela Dinsoreanu, Tudor David, Vlad Acretoaie, Aliz Nagy, Ciprian Oprisa. Biologically-inspired Clustering of Semantic Web Services. Birds or Ants Intelligence? *Concurrency and Computation: Practice & Experience Journal, Special Issue on "Intelligent Distributed Computing"*, Volume 24, Issue 6, 2012, pp. 619–633, ISSN: 1532-0626.  
<http://onlinelibrary.wiley.com/doi/10.1002/cpe.1853/abstract>
- Cristina Bianca Pop, Ionut Anghel, Tudor Cioara, Ioan Salomie, Iulia Vartic. A Swarm-inspired Data Center Consolidation Methodology. *Proceedings of the 2nd International Conference on Web Intelligence, Mining and Semantics*, June 13-15, 2012, Craiova, Romania, Article no. 41, ISBN: 978-1-4503-0915-8.  
<http://dl.acm.org/citation.cfm?id=2254180>
- Ioan Salomie, Viorica Rozina Chifu, Cristina Bianca Pop, Radu Suci. Firefly-based business process optimization. *Proceedings of the IEEE 8th International Conference on Intelligent Computer Communication and Processing*, August 30 - September 1, 2012, Cluj-Napoca, Romania, pp. 49 - 56, ISBN: 978-1-4673-2953-8.  
<http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=6356160>
- Cristina Bianca Pop, Viorica Rozina Chifu, Ioan Salomie, Tunde Kovacs, Alexandru Niculici, Samuel Suia. Business process optimization using bio-inspired methods - Ants or bees intelligence?. *Proceedings of the IEEE 8th International Conference on Intelligent Computer Communication and Processing*, August 30 - September 1, 2012, Cluj-Napoca, Romania, pp. 65 - 71, ISBN: 978-1-4673-2953-8.  
<http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=6356162>
- Viorica Rozina Chifu, Ioan Salomie, Cristina Bianca Pop, Izabella Balla, Ramona Paven. Hybrid Particle Swarm Optimization Method for Process Mining. *Proceedings of the IEEE 8th International Conference on Intelligent Computer Communication and Processing*, August 30 - September 1, 2012, Cluj-Napoca, Romania, pp. 273 - 279, ISBN: 978-1-4673-2953-8.  
<http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=6356199>

## 2011

- Viorica Rozina Chifu, Cristina Bianca Pop, Ioan Salomie, Mihaela Dinsoreanu, Samuel Suia, Alexandru Niculici. Optimizing the Semantic Web Service Composition Process using Cuckoo Search. F. M. T. Brazier, K. Nieuwenhuis, G. Pavlin, M. Warnier, C.

Badica (Eds.): *Intelligent Distributed Computing V, Proceedings of the 5th International Symposium on Intelligent Distributed Computing – IDC 2011, Delft, The Netherlands – October 2011*, Springer Berlin Heidelberg, 2012, Volume 382/2012, pp. 93-102, ISBN: 978-3-642-24012-6, DOI: 10.1007/978-3-642-24013-3\_10.

[http://link.springer.com/chapter/10.1007%2F978-3-642-24013-3\\_10](http://link.springer.com/chapter/10.1007%2F978-3-642-24013-3_10)

- Viorica Rozina Chifu, Cristina Bianca Pop, Ioan Salomie, Mihaela Dinsoreanu, Alexandru Nicolae Niculici and Dumitru Samuel Suia. Bio-inspired Methods for Selecting the Optimal Web Service Composition – Bees or Cuckoos Intelligence? *The International Journal of Business Intelligence and Data Mining*, Volume 6, No. 4, 2011, pp. 321 – 344, ISSN: 1743-8187.  
<http://www.inderscience.com/info/inarticle.php?artid=44996>
- Viorica Rozina Chifu, Cristina Bianca Pop, Ioan Salomie, Mihaela Dinsoreanu, Tudor David, Vlad Acretoaie, Ant-based Methods for Semantic Web Service Discovery and Composition. *Ubiquitous Computing and Communication Journal – Special Issue of RoEduNet*, 2011, vol. 6, no. 1, pp. 631-641, ISSN 1992-8424.  
[http://www.ubicc.org/files/pdf/521\\_521.pdf](http://www.ubicc.org/files/pdf/521_521.pdf)
- Cristina Bianca Pop, Viorica Rozina Chifu, Ioan Salomie, Mihael Dinsoreanu, Tudor David, Vlad Acretoaie. Ant-inspired Framework for Automatic Web Service Composition. *Scalable Computing: Practice and Experience - Scientific International Journal for Parallel and Distributed Computing*, vol. 12, no. 1, 2011, pp. 137-150, ISSN 1895-1767.  
<http://www.scpe.org/index.php/scpe/article/view/693>
- Cristina Bianca Pop, Viorica Rozina Chifu, Ioan Salomie, Ramona Baico, Mihaela Dinsoreanu, Georgiana Copil. A Hybrid Firefly-inspired Approach for Optimal Semantic Web Service Composition. *Scalable Computing: Practice and Experience - Scientific International Journal for Parallel and Distributed Computing*, vol. 12, no. 3, 2011, pp. 363 – 369, ISSN 1895-1767.  
<http://www.scpe.org/index.php/scpe/article/view/730>
- Aliz Nagy, Ciprian Oprisa, Ioan Salomie, Cristina Bianca Pop, Viorica Rozina Chifu, Mihaela Dinsoreanu. Particle Swarm Optimization for Clustering Semantic Web Services. *Proceedings of the 10th International Symposium on Parallel and Distributed Computing (ISPDC 2011)*, July 6-8, 2011, Cluj-Napoca, Romania, pp. 170-177, ISBN: 978-1-4577-1536-5.  
<http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=6108270>
- Cristina Bianca Pop, Monica Vlad, Viorica Rozina Chifu, Ioan Salomie, Mihaela Dinsoreanu. A Tabu Search Optimization Approach for Semantic Web Service Composition. *Proceedings of the 10th International Symposium on Parallel and Distributed Computing (ISPDC 2011)*, July 6-8, 2011, Cluj-Napoca, Romania, pp. 274-277, ISBN: 978-1-4577-1536-5.  
<http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=6108286>
- Ioan Salomie, Monica Vlad, Viorica Rozina Chifu, Cristina Bianca Pop. Hybrid Immune-inspired Method for Selecting the Optimal or a Near-Optimal Service Composition *Proceedings of the Federated Conference on Computer Science and Information Systems - FedCSIS 2011*, Szczecin, Poland, 18-21 September 2011, pp. 997-1003, ISBN: 978-1-4577-0041-5.  
<http://fedcsis.eucip.pl/proceedings/pliks/74.pdf>
- Cristina Bianca Pop, Viorica Rozina Chifu, Monica Vlad, Ioan Salomie - Cuckoo-inspired Hybrid Algorithm for Selecting the Optimal Web Service Composition - *Proceedings of the 7th IEEE International Conference on Intelligent Computer Communication and Processing (ICCP2011)*, August 25-27, 2011, Cluj-Napoca, Romania, pp. 33-40, ISBN: 978-1-4577-1479-5.

2010

- Cristina Bianca Pop, Viorica Rozina Chifu, Ioan Salomie, Mihaela Dînşoreanu, Vlad Acreţoaie, Tudor David. Semantic Web Service Clustering for Efficient Discovery Using an Ant-based Method. Mohammad Essaaidi, Michele Malgeri, Costin Badica (Eds.): *Intelligent Distributed Computing IV, Proceedings of the 4th International Symposium on Intelligent Distributed Computing - IDC 2010, Tangier, Morocco, September 2010*, Springer Berlin Heidelberg, 2010, Volume 315, pp. 23-33, ISBN: 978-3-642-15210-8, DOI: 10.1007/978-3-642-15211-5\_3.  
[http://link.springer.com/chapter/10.1007%2F978-3-642-15211-5\\_3](http://link.springer.com/chapter/10.1007%2F978-3-642-15211-5_3)
- Cristina Bianca Pop, Viorica Rozina Chifu, Ioan Salomie, Mihaela Dînşoreanu. Immune-inspired Method for Selecting the Optimal Solution in Web Service Composition. Zoé Lacroix (Eds.) *The 35th International Conference on Very Large Databases (VLDB2009)*, Lyon, France – published in *Resource Discovery Lecture Notes in Computer Science*, Revised Papers, Springer Berlin Heidelberg, 2010, vol. 6162/2010, pp. 1-17, DOI: 10.1007/978-3-642-14415-8\_1.  
[http://link.springer.com/chapter/10.1007%2F978-3-642-14415-8\\_1](http://link.springer.com/chapter/10.1007%2F978-3-642-14415-8_1)
- Viorica Rozina Chifu, Cristina Bianca Pop, Ioan Salomie, Mihaela Dînşoreanu, Alexandru Niculici, Samuel Suia. Selecting the Optimal Web Service Composition based on a Multi-Criteria Bee-inspired Method. *Proceedings of the 12th International Conference on Information Integration and Web-based Applications & Services (iiWAS2010)*, November 8-10, 2010, Paris, France, pp. 40-47, ISBN: 978-1-4503-0421-4.  
<http://dl.acm.org/citation.cfm?id=1967497>
- Cristina Bianca Pop, Viorica Rozina Chifu, Ioan Salomie, Mihaela Dînşoreanu, Tudor David, Vlad Acreţoaie. Ant-inspired Technique for Automatic Web Service Composition and Selection. *Proceedings of the The 1st Workshop on Software Services in the 12th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC2010)*, September 23-26, 2010, Timisoara, Romania, pp. 449 – 455, ISBN 978-1-4244-9816-1.  
<http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=5715322>
- Viorica Rozina Chifu, Cristina Bianca Pop, Ioan Salomie, Mihaela Dînşoreanu, Tudor David, Vlad Acreţoaie. An Ant-inspired Approach for Semantic Web Service Clustering. *Proceedings of the 9th Romanian Educational Network International Conference (RoEduNet 2010)*, June 24-26, 2010, Sibiu, Romania, pp. 145-150, ISSN 2068-1038.  
[http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=5541584&url=http%3A%2F%2Fieeexplore.ieee.org%2Fxppls%2Fabs\\_all.jsp%3Farnumber%3D5541584](http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=5541584&url=http%3A%2F%2Fieeexplore.ieee.org%2Fxppls%2Fabs_all.jsp%3Farnumber%3D5541584)
- Viorica Rozina Chifu, Cristina Bianca Pop, Ioan Salomie, Mihaela Dînşoreanu, Alpar Köver, Roland Vachter. Web Service Composition Technique Based on a Service Graph and Particle Swarm Optimization. *The Proceedings of the 6th IEEE International Conference on Intelligent Computer Communication and Processing (ICCP2010)*, August 26-28, Cluj-Napoca, Romania, 2010, pp. 265-272, ISBN 978-1-4244-8229-0.  
<http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=5606427>
- Tudor Cioara, Cristina Bianca Pop, Ionut Anghel, Ioan Salomie, Mihaela Dinsoreanu, Irina Condor, Mihaly Fodor. Immune-inspired Technique for Optimizing Server's Energy Consumption. *Proceedings of the 2010 IEEE International Conference on Intelligent Computer Communication and Processing (ICCP2010)*, August 26-28, Cluj-Napoca, Romania, 2010, pp. 273 - 280, ISBN 978-1-4244-8228-3.  
<http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=5606424>

- Cristina Bianca Pop, Viorica Rozina Chifu, Ioan Salomie, Mihaela Dînşoreanu, Fodor Mihaly, Irina Condor - A Bee-inspired Approach for Selecting the Optimal Service Composition Solution - *Proceedings of the International Conference on Development and Application Systems (DAS 2010)*, Suceava, Romania, ISSN: 1844 5039, pp. 420-426, 2010.  
<http://www.dasconference.ro/cd2010/data/papers/D96.pdf>

## 2009

- Cristina Bianca Pop, Viorica Rozina Chifu, Ioan Salomie, Mihaela Dînşoreanu, Iulia Vartic, Monica Vlad. Immune-inspired Web Service Composition Framework. *Proceedings of the 11th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC2009)*, September 26-29, 2009, Timisoara, Romania, pp. 376-383, ISBN: 978-1-4244-5910-0.  
<http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=5460825>
- Cristina Bianca Pop, Viorica Rozina Chifu, Ioan Salomie, Mihaela Dînşoreanu. Optimal Web Service Composition Method Based on an Enhanced Planning Graph and Using an Immune-inspired Algorithm. *Proceedings of the 5th IEEE International Conference on Intelligent Computer Communication and Processing (ICCP2009)*, Cluj-Napoca, Romania, August 27-29, 2009, pp. 291-298, ISBN 978-1-4244-5007-7.  
<http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=5284746>