

Lista de lucrări

Centralizator: Candidat - Sabo Cosmin Nicolae

1. Activitatea didactică

1.b. Lucrări de laborator redactate și realizate practic:

| Nr. crt. | Denumire | Document doveditor |
|----------|---|---|
| 1 | Baze de date – suport curs | http://kb.cunbm.utcluj.ro/course/view.php?id=4 |
| 2 | Python – suport laborator | http://kb.cunbm.utcluj.ro/course/view.php?id=5 |
| 3 | Practica de specialitate - Proiect Individual | http://kb.cunbm.utcluj.ro/course/view.php?id=51 |

1.c. Teza doctorat:

| | |
|---|---|
| 1 | Universitatea Tehnică din Cluj-Napoca - Ingineria Sistemelor – Titlul: Optimizarea Proceselor de Afaceri |
|---|---|

2. Activitatea științifică

| 2.a. Activitatea științifică | Categoria | Punctaj |
|--|-----------|----------|
| 1. P.C. Pop, O. Matei, C. Sabo and A. Petrovan, A two-level solution approach for solving the generalized minimum spanning tree problem, European Journal of Operational Research, Elsevier, Vol. 265(2), pp. 478-487, 2018. | A* | 2 |
| 2. P.C. Pop, L. Fuksz, A. Horvat Marc and C. Sabo, A novel two-level optimization approach for clustered vehicle routing problem, Computers & Industrial Engineering, Vol. 115, pp. 304-318, 2018. | A | 2 |
| TOTAL punctaj din jurnale și conferințe din categoria A* și A | | 4 |
| 3. P.C. Pop, C. Sabo, B. Biesinger, B. Hu and G. Raidl, Solving the Two-Stage Fixed-Charge Transportation Problem with a Hybrid Genetic Algorithm, Carpathian Journal of Mathematics, Vol. 33, No. 3, pp. 365-371, 2017. | B | 2 |
| 4. C.-M. Pinteș, A. Calinescu, P.C. Pop and C. Sabo, Towards a Secure Two-stage Supply Chain Network: A Transportation-Cost Approach, in Proc. of CISIS 2016, Vol. 527, pp. 547-554, 2016. | B | 2 |
| TOTAL jurnale și conferințe din categoria B | | 4 |

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| 5. P.C. Pop, O. Matei and C. Sabo, A hybrid diploid genetic based algorithm for solving the generalized traveling salesman problem, in Proc. of HAIS 2017, Lecture Notes in Computer Science, Vol. 10334, pp. 149-160, 2017. | C | 2 |
| 6. C. Sabo, P.C. Pop, H. Valean and D. Danculescu, An innovative approach to manage heterogeneous information using relational database systems, in: Madureira A., Abraham A., Gamboa D., Novais P. (eds) Intelligent Systems Design and Applications. ISDA 2016, Advances in Intelligent Systems and Computing, Springer, Vol. 557, pp. 1-10, 2017. | C | 2 |
| 7. V. Frâncu, C. Sabo, Implementation of a UDC-based multilingual thesaurus in a library catalogue: the case of BiblioPhil, KO KNOWLEDGE ORGANIZATION 37 (3), pp. 209-215, 2010. | C | 2 |
| 8. P.C. Pop, O. Matei and C. Sabo, A New Approach for Solving the Generalized Traveling Salesman Problem, in Proc. of HM 2010, Editors M.J. Blesa et al., Lecture Notes in Computer Science, Springer, Vol. 6373, pp. 62-72, 2010. | C | 2 |
| TOTAL jurnale și conferințe din categoria C | | 8 |
| 9. P.C. Pop, C. Sabo, C. Pop Sitar and M. Craciun, A Simulated Annealing Based Approach for Solving the Generalized Minimum Spanning Tree Problem, Creative Mathematics and Informatics, Vol. 16, pp. 42-53, 2007. | D | 1 |
| 10. P.C. Pop, O. Matei and C. Sabo, A Memetic Algorithm for Solving the Generalized Minimum Spanning Tree Problem, Advances in Intelligent and Soft Computing, Springer, Vol. 96, pp. 187-194, 2011. | D | 1 |
| TOTAL jurnale și conferințe din categoria D | | 2 |
| TOTAL | | 18 |

2.a. Impactul rezultatelor

| Numarul publicati ei care citeaza | Referinta bibliografica a publicatiei k care citeaza | S_k | $\sum_k S_k$ | n_i | $\frac{\sum_k S_k}{\max(1, n_i - 2)}$ |
|---|---|-------|--------------|-------|---------------------------------------|
| | P.C. Pop, O. Matei, C. Sabo and A. Petrovan, A two-level solution approach for solving the generalized minimum spanning tree problem, European Journal of Operational Research, Vol. 265(2), pp. 478-487, 2018. | | 30 | 4 | 15 |
| 1. | M.B. Akçay, H. Akcan and C. Evrendilek, All Colors Shortest Path problem on trees, Journal of Heuristics, March 2018 DOI10.1007/s10732-018-9370-4. | 8 | | | |
| 2. | E.G. de Sousa, R.C. de Andrade and A.C. Santos, A Multigraph Formulation for the Generalized Minimum Spanning Tree | 2 | | | |

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|--|---|----|---|--|-----|
| | Problem, ISCO 2018, Lecture Notes in Computer Science, Vol. 10856, pp. 133-143, 2018. | | | | |
| 3. | P.A. Miranda, C.A. Blazquez, Carlos Obreque, J. Maturana-Ross, G. Gutierrez-Jarpa, The bi-objective insular traveling salesman problem with maritime and ground transportation costs, <i>European Journal of Operational Research</i> (2018), doi: 10.1016/j.ejor.2018.05.009 | 12 | | | |
| 4 | P.C. Pop, O. Matei and C.M. Pinteá, A two-level diploid genetic based algorithm for solving the family traveling salesman problem, in Proc. of GECCO 2018, Association for Computing Machinery, Kyoto, Japan, 2018. | 8 | | | |
| P.C. Pop, L. Fuksz, A. Horvat Marc and C. Sabo, A novel two-level optimization approach for clustered vehicle routing problem, <i>Computers & Industrial Engineering</i> , Vol. 115, pp. 304-318, 2018. | | 16 | 4 | | 8 |
| 1. | F.G. Tari and Z. Hashemi, Prioritized K-mean clustering hybrid GA for discounted fixed charge transportation problems, <i>Computers & Industrial Engineering</i> , Vol. 126, pp. 63-74, 2018, https://doi.org/10.1016/j.cie.2018.09.019 . | 8 | | | |
| 2. | P.C. Pop, O. Matei and C.M. Pinteá, A two-level diploid genetic based algorithm for solving the family traveling salesman problem, in Proc. of GECCO 2018, Association for Computing Machinery, Kyoto, Japan, 2018. | 8 | | | |
| P.C. Pop, C. Sabo, B. Biesinger, B. Hu and G. Raidl, Solving the two-stage fixed-charge transportation problem with a hybrid genetic algorithm, <i>Carpathian Journal of Mathematics</i> , Vol. 33, No. 3, pp. 365-371, 2017. | | 12 | 5 | | 4 |
| 1. | Hong, J., Diabat, A., Panicker, V.V., Rajagopalan, S., A two-stage supply chain problem with fixed costs: An ant colony optimization approach, <i>International Journal of Production Economics</i> (2018), doi: 10.1016/j.ijpe.2018.07.019, Vol. 204, pp. 214-226, 2018. | 12 | | | |
| P.C. Pop, O. Matei and C. Sabo, A hybrid diploid genetic based algorithm for solving the generalized traveling salesman problem, in Proc. of HAIS 2017, Lecture Notes in Computer Science, Vol. 10334, pp. 149-160, 2017. | | 28 | 3 | | 28 |
| 1. | R. Bernardino and A. Paías, Solving the family traveling salesman problem, <i>European Journal of Operational Research</i> , in Press, https://doi.org/10.1016/j.ejor.2017.11.063 | 12 | | | |
| 2. | M.B. Akçay, H. Akcan and C. Evrendilek, All Colors Shortest Path problem on trees, <i>Journal of Heuristics</i> , March 2018 DOI10.1007/s10732-018-9370-4. | 8 | | | |
| 3. | P.C. Pop, O. Matei and C.M. Pinteá, A two-level diploid genetic based algorithm for solving the family traveling salesman problem, in Proc. of GECCO 2018, Association for Computing Machinery, Kyoto, Japan, 2018. | 8 | | | |
| C. Sabo, P.C. Pop, H. Valean and D. Danciulescu, An innovative approach to manage heterogeneous information using relational database systems, in: Madureira A., Abraham A., Gamboa D., Novais P. (eds) <i>Intelligent Systems Design and Applications. ISDA 2016, Advances in Intelligent Systems and Computing</i> , Springer, Vol. 557, pp. 1-10, 2017. | | 5 | 4 | | 2.5 |

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|---|---|----|---|----|--|
| 1. | R.S. de Madariaga, A. Muñoz, A.L. Castro, O.M. Gil, M.P Carrasco, Executing Complexity-Increasing Queries in Relational (MySQL) and NoSQL (MongoDB and Exist) Size-Growing ISO/EN 13606 Standardized I Databases, Journal of Visualized Experiments, DOI: 10.3791/57439, art. no. e57439, 2018. | 4 | | | |
| 2. | D. CONSTANTIN, E. CLIPICI, A.F. ȘTEFAN, A Comparative Study for ICA Multiunit Algorithms, pp. 1-9, 3 rd Int. Conf. on Artificial Intelligence and Applications, Chennai, India, 2017. | 1 | | | |
| C.-M. Pinte, A. Calinescu, P.C. Pop and C. Sabo, Towards a Secure Two-stage Supply Chain Network: A Transportation-Cost Approach, in Proc. of CISIS 2016, Vol. 527, pp. 547-554, 2016. | | 6 | 4 | 3 | |
| 1. | C.-M Pinte, A. Calinescu, C. Pop Sitar, P.C. Pop; Towards secure & green two-stage supply chain networks, Logic Journal of the IGPL, https://doi.org/10.1093/jigpal/izv028 , in Press, 2018. | 2 | | | |
| 2. | Pinte CM., Crișan G.C., Pop P., Towards Secure Transportation Based on Intelligent Transport Systems. Novel Approach and Concepts. In: Graña M. et al. (eds) Int. Joint Conference SOCO'18-CISIS'18-ICEUTE'18, Advances in Intelligent Systems and Computing, Vol. 771, pp. 469-477, 2019. | 4 | | | |
| P.C. Pop, O. Matei and C. Sabo, A Memetic Algorithm for Solving the Generalized Minimum Spanning Tree Problem, Advances in Intelligent and Soft Computing, Springer, Vol. 96, pp. 187-194, 2011. | | 8 | 3 | 8 | |
| 1. | G. Bergantinos, M. Gomez-Rua, N. Llorca, M. Pulido and J. Sanchez-Soriano, A new rule for source connection problem, <i>European Journal of Operational Research</i> , Vol. 234, Issue 3, pp. 780–788, 2014. ISSN: 03772217 | 8 | | | |
| P.C. Pop, O. Matei and C. Sabo, A New Approach for Solving the Generalized Traveling Salesman Problem, in Proc. of HM 2010, Editors M.J. Blesa et al., Lecture Notes in Computer Science, Springer, Vol. 6373, pp. 62-72, 2010. | | 45 | 3 | 45 | |
| 15. | C. Archetti, F. Carrabs and R. Cerulli, The set orienting problem, <i>European Journal of Operational Research</i> , Vol. 267(1), pp. 264-272, 2018 https://doi.org/10.1016/j.ejor.2017.11.009 . | 12 | | | |
| 14. | P.C. Pop, O. Matei and C.M. Pinte, A two-level diploid genetic based algorithm for solving the family traveling salesman problem, in Proc. of GECCO 2018, Association for Computing Machinery, Kyoto, Japan, 2018. | 8 | | | |
| 13. | H. Jafarzadeh, N. Moradinasab and M. Elyasi, An Enhanced Genetic Algorithm for the Generalized Traveling Salesman Problem, <i>Engineering, Technology & Applied Science Research</i> Vol. 7, No. 6, 2260-2265, 2017. | 1 | | | |
| 12. | M. Chen, X. Li and K. Tang, Optimal air-move path generation based on MMAS algorithm, <i>International Journal of Production Research</i> , Taylor & Sons, Vol. 52, Issue 24, pp. 7310-7323, 2014. | 4 | | | |
| 11. | J.Y. Kanda and A. de Carvalho, Using Meta-learning to Recommend Meta-heuristics for the Traveling Salesman Problem, <i>IEEE 10th International Conference on Machine Learning and Applications</i> , Vol. 1, pp. 346-351, 2011. | 2 | | | |

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|---|---|----|---|---|--|
| 10. | X Li and M Chen, A novel algorithm for solving cutting tool path generation, International Conference on Information Science, Electronics and Electrical Engineering (ISEEE), Vol. 1, pp. 43-45, 2014. | 2 | | | |
| 9. | C.M. Pinteá, Advances in Bio-inspired Computing for Combinatorial Optimization Problems, Intelligent Systems Reference Library, Vol. 57, pp. 1-186, 2014. | 2 | | | |
| 8. | M. Lian-Ming, The Continuous Selective Generalized Traveling Salesman Problem: An Efficient Ant Colony System, in Proc. of 8-th IEEE Int. Conf. on Natural Computation, ICNC 2012, pp. 1242-1246, 2012. | 2 | | | |
| 7. | L.-M. Mou, An efficient ant colony system for solving the new generalized traveling salesman problem, in Proc. of IEEE Int. Conf. on Cloud Computing and Intelligence Systems, CCIS 2011, pp. 407-412, 2011. | 2 | | | |
| 6. | M. Lian-Ming, A novel ant colony system with double pheromones for the generalized TSP, in Proc. of the 7-th IEEE Int. Conf. on Natural Computing, ICNC 2011, Vol. 4, Art. No. 6022580, pp. 1923-1928, 2011. | 2 | | | |
| 5. | I. von Sivers, M. J. Seitz and G. Köster, How Do People Search: A Modelling Perspective, Parallel Processing and Applied Mathematics, Lecture Notes in Computer Science, Vol. 9574, pp. 487-496, 2016. | 2 | | | |
| 4. | N.D. Lagaros and M.G. Karlaftis, A critical assessment of metaheuristics for scheduling emergency infrastructure inspections, Swarm and Evolutionary Computation, Vol. 1, Issue 3, pp. 147-163, 2011. | 2 | | | |
| 3. | O. Matei, C. Matei, I. Vlad and C. Costea, A system for monitoring of the human body parameters, Carpathian Journal of Electrical Engineering, Vol. 9, Issue 1, pp. 45-55, 2015. | 1 | | | |
| 2. | M. Khachay and K. Neznakhina, Approximation algorithms for generalized TSP in grid clusters, in Proceedings of CEUR Workshop 1623, pp. 39-48, 2017. | 1 | | | |
| 1. | C.M. Pinteá, O. Matei, R.A. Ramadan, M. Pavone, M. Niazi and A.T. Azar, A Fuzzy Approach of Sensitivity for Multiple Colonies on Ant Colony Optimization, Advances in Intelligent Systems and Computing, Vol. 634, pp. 87-95, 2018. | 2 | | | |
| P.C. Pop, C. Sabo, C. Pop Sitar and M. Craciun, A Simulated Annealing Based Approach for Solving the Generalized Minimum Spanning Tree Problem, Creative Mathematics and Informatics, Vol. 16, pp. 42-53, 2007. | | 10 | 4 | 5 | |
| 1. | P.C. Pop, A survey of different integer programming formulations of the generalized minimum spanning tree problem, Carpathian Journal of Mathematics, Vol. 25, No. 1, pp. 104-118, 2009. | 8 | | | |
| 2. | P.C. Pop and C. Pop Sitar, A new efficient transformation of the generalized vehicle routing problem into the classical vehicle routing problem, Yugoslav Journal of Operations Research, Vol. 21, No. 2, pp. 187-198, 2011. | 2 | | | |

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|---|--------------|
| TOTAL citări în forumuri de tip A și B | 86 |
| TOTAL citări – punctaj conf. Comisie Informatică | 118.5 |

2.b. autor / coautor / alte lucrări (proiecte, studii, etc.)

| Nr. crt | Denumire | Document Doveditor |
|---------|--|---|
| 1 | Manual utilizare eBibliophil | Carte publicată: Editura BiblioPhil, 2013, ISBN 978-606-93034-7-6 |
| | Propuneri de brevete si inventii active (OSIM, ORDA, etc.) | |
| 2 | C.N. Sabo, P.C. Pop and N. Tomai, SYSTEM AND PROCESS FOR DYNAMIC GENERATION OF COMPUTER APPLICATION INTERFACES | patent number RO128876-A0, 2012. |
| 3 | C.N. Sabo, N. Tomai and P.C. Pop, SYSTEM AND PROCESS FOR THE AUTOMATIC ANALYSIS OF THE COMMUNICATION LANGUAGE BETWEEN TWO INFORMATIC SYSTEMS | patent number RO128954-A0, 2013 |

2.c. Performanța academică

| Nr. Crt. | Participări în colective de cercetare |
|----------|---|
| | PROIECTE/GRANTURI INTERNATIONALE |
| 1 | Hybrid bi-level optimization approaches for generalized network design problems, bilateral project between Romania and Austria, UEFISCDI, 2014-2015, 22000 RON – membru |
| | PROIECTE/GRANTURI NATIONALE |
| 2 | Cercetarea, dezvoltarea si implementarea gestionarii informatice a documentelor, ANCS, axa POS CCE, 3444000 RON, 2010-2013 – director. |
| 3 | Noi metode hibride metaeuristice pentru rezolvarea problemelor de proiectare a retelelor, PN-II-RU-TE-2011-3-0113, 750000 RON, 2011-2014 – membru |
| 4 | Metode algoritmice de rezolvare a problemelor de optimizare combinatorica, programul Centre de cercetare de excelenta CEEX, ET34/2006, 140000 RON, 2006-2008 – membru |
| | Total: 4 proiecte de cercetare |
| | 3. Activitate în folosul comunității academice |
| | Activitate la nivel de departament / facultate / universitate: |
| | 1. Cordonatorul comitetului de organizare a conferinței XGEN NEXT 100, 22-25 mai 2018. |

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| | <ol style="list-style-type: none"> 2. Membru in comitetul de organizare al conferinței: A XX-a Conferință Anuală a Societății de Științe Matematice din Romania, Baia Mare, 19-22 mai 2016. 3. Membru in comitetul de organizare al conferinței: International Conference on Applied Mathematics, ICAM 9, Baia Mare, 25-28 Septembrie 2013. 4. Membru in comitetul de organizare al conferinței: International Conference on Applied Mathematics, ICAM 8, Baia Mare, 27-30 Octombrie 2011. 5. Membru in comitetul de organizare al conferinței: International Conference on Applied Mathematics, ICAM 7, Baia Mare, 1-4 Septembrie 2010. 6. Membru in comitetul de organizare al conferinței: International Conference on Applied Mathematics, ICAM 6, Baia Mare, 18-21 Septembrie 2008. |
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3. b. membru în structuri ale unor organizații naționale și internaționale

| Nr. crt. | Organizația | Document doveditor |
|----------|--|---|
| 1 | Societatea de Științe Matematice din România | Monografia SSMR 2018, Editura Risoprint, ISSN 2285-5467 |

Candidat

Arizat

SABO COSMIH