

## FIȘA DE EVALUARE GENERALĂ A STANDARDELOR UNIVERSITĂȚII

CRITERII	DESCRIPTORI	PUNCTAJE ACORDATE
<b>I. ACTIVITATE DE CERCETARE (70%)</b>	<b>1. Articole științifice publicate in extenso în reviste cotate Web of Science cu factor de impact</b>	
	Madalina Ionita, Cornelius Croitoru, Mihaela Breaban. Incorporating inference into evolutionary algorithms for max-csp, Hybrid Metaheuristics, Springer, pp 139-149, 2006	$(60 \cdot 0.402 + 25) / 3 = 14.37$
	<b>4.1. Articole științifice publicate in extenso în volumele conferințelor - indexate ISI</b>	
	M. Ionita, H. Luchian: Two Problem Independent Methods for Generating Initial Solutions. In Proc. of the 2005 IEEE Congress on Evolutionary Computation, vol. 2, pages 1442-1447, 2005	30/2=15
	M. Ionita, M. Breaban, C. Croitoru. A new scheme of using inference inside evolutionary computation techniques to solve CSPs, International Symposium on Symbolic and Numeric Algorithms for Scientific Computing SYNASC'06, IEEE, pp. 323-329, 2006	30/3=10
	M. Breaban, M. Ionita, C. Croitoru. A new PSO approach to constraint satisfaction, IEEE Congress on Evolutionary Computation CEC 2007, IEEE, pp 1948-1954, 2007	30/3=10
	Madalina Raschip, Cornelius Croitoru. A new primal-dual genetic algorithm: case study for the winner determination problem, Evolutionary Computation in Combinatorial Optimization, Springer, pp 252-263, 2010	30/2=15
	M. Raschip, H. Luchian. Using messy genetic algorithms for solving the winner determination problem. Genetic and Evolutionary Computation Conference, GECCO'10, Evolutionary computation techniques for constraint handling workshop, pages 1825-1832, 2010	30/2=15
	Madalina Raschip, Cornelius Croitoru. A genetic algorithm hybridized with the discrete lagrangian method for trap escaping, Learning and Intelligent Optimization, Springer, pp 351-363, 2011	30/2=15

	<p>R. Necula, M. Breaban, M. Raschip. Performance Evaluation of Ant Colony Systems for the Single-Depot Multiple Traveling Salesman Problem. Hybrid Artificial Intelligent Systems, HAIS 2015, volume 9121 in LNCS, pages 257-268, 2015</p> <p>R. Necula, M. Breaban, M. Raschip: Tackling the Bi-criteria Facet of Multiple Traveling Salesman Problem with Ant Colony Systems. 27th IEEE International Conference on Tools with Artificial Intelligence, ICTAI 2015, 873-880, 2015</p> <p>Madalina Raschip, Cornelius Croitoru, Kilian Stoffel. Guiding Evolutionary Search with Association Rules for Solving Weighted CSPs. GECCO 2015: 481-488</p> <p>Madalina Raschip, Cornelius Croitoru, Kilian Stoffel. Using association rules to guide evolutionary search in solving constraint satisfaction. CEC 2015: 744-750</p> <p>R. Necula, M. Breaban, M. Raschip. Tackling Dynamic Vehicle Routing Problem with Time Windows by means of Ant Colony System, IEEE Congress on Evolutionary Computation (CEC), 2480-2487, 2017</p> <p>Raluca Necula, Madalina Raschip, Mihaela Breaban. Balancing the Subtours for Multiple TSP Approached with ACS: Clustering-based Approaches vs. MinMax Formulation. EVOLVE-A Bridge between Probability, Set Oriented Numerics, and Evolutionary Computation VI, Springer, 210-223, 2018</p>	<p>30/3=10</p> <p>30/3=10</p> <p>30/3=10</p> <p>30/3=10</p> <p>30/3=10</p> <p>30/3=10</p>
	<p><b>5. Cărți științifice publicate (doar prima ediție) – edituri academice internaționale</b></p> <p>M. Ionita, M. Breaban, C. Croitoru. Evolutionary Computation in Constraint Satisfaction, book chapter in New Achievements in Evolutionary Computation, editor Peter Korosec, INTECH Vienna, ISBN 978-953-307-053-7, 2010</p> <p>D.Cristea, M. Ionita, I. Pistol. Inteligența Artificială, Editura Universității "Al. I. Cuza" Iași, 2007</p>	<p>22/3=7.33</p> <p>0.5*192/3=32</p>
	<p><b>9. Contracte de cercetare științifică în instituții academice</b></p>	

	<p><b>Contracte naționale – Director</b> Proiect TD cod CNC SIS 459: Abordari hibride pentru rezolvarea problemelor de satisfacere a constrangerilor, contract nr. 86GR, 2006-2008</p> <p><b>Contracte internaționale – membru</b> AMASS: Associative Memory Arrays for Semantic Search, FP6, contract no. 018283, 2005-2007</p> <p>HAL-DMCSP - Hybrid algorithms for joint data mining and constraint satisfaction problems: a case study on wireless sensor networks, SCIE X project no. 13.323</p> <p><b>Contracte naționale – membru</b> Proiect CNC SIS-A, cod 592: Abordari care imita natura pentru problema colorarii grafurilor, contract nr. 33373, 2005-2007</p> <p>Proiect CEE X–M1-1801: GRAI: Academic Grid for Complex Applications, 2006-2008</p> <p>NatComp - Noi modele de calcul natural in studiul complexitatii si in rezolvarea problemelor complexe, PNII, Program 4 – Parteneriate in domenii prioritare - 2120, 2008-2010</p> <p>FOReGAS t: Sistem integrat de analiza si prognoza a consumului pentru distribuitorii IMM de gaze naturale, cod PN-III-P2-2.1-CI-2017-0654</p>	<p><math>90000 \cdot 0.0001 = 9</math></p> <p><math>48000 \cdot 0.0001 / 7 = 0.68</math></p> <p><math>76507 \cdot 0.0001 / 3 = 2.55</math></p> <p><math>4653 \cdot 0.0001 / 4 = 0.1</math></p> <p><math>395291 \cdot 0.0001 / 7 = 5.6</math></p> <p><math>198780 \cdot 0.0001 / 6 = 3.3</math></p> <p><math>50000 \cdot 0.0001 / 4 = 1.25</math></p>
	<p><b>12.1. Citări și recenzii ale lucrărilor științifice – reviste din străinătate</b></p> <p>1. M. Raschip, C. Croitoru, K. Stoffel. Using association rules to guide evolutionary search in solving constraint satisfaction, CEC 2015</p> <p><b>citata in</b> Y. Zhou, J-K. Hao, B. Duval. Opposition-Based Memetic Search for the Maximum Diversity Problem, IEEE Transactions on Evolutionary Computation, Vol. 21, issue 5, 731 - 745, 2017</p> <p>Y. Zhou, JK. Hao, B. Duval. When data mining</p>	<p><math>(10 + 20 \cdot 10.629) / 3 = 74.19</math></p>

	<p>meets optimization: A case study on the quadratic assignment problem, arXiv, 2017</p> <p>(10+20*0)/3=3.33</p>
	<p>2. M. Raschip, C. Croitoru, K. Stoffel. Guiding Evolutionary Search with Association Rules for Solving Weighted CSPs, GECCO 2015</p> <p><b>citata in</b></p> <p>Y. Zhou, JK. Hao, B. Duval. When data mining meets optimization: A case study on the quadratic assignment problem, arXiv, 2017</p> <p>(10+20*0)/3=3.33</p>
	<p>3. M. Breaban, M. Ionita, C. Croitoru. A new PSO approach to constraint satisfaction, IEEE Congress on Evolutionary Computation CEC 2007, IEEE, 1948-1954, 2007</p> <p><b>citata in</b></p> <p>M. Setayesh, M. Zhang, M. Johnston. Detection of continuous, smooth and thin edges in noisy images using constrained particle swarm optimisation, Proceedings of the 13th annual conference on Genetic and evolutionary computation GECCO'11, pp.45-52, ACM, 2011</p> <p>(10+20*0)/3=3.33</p>
	<p>M. Setayesh, M. Zhang, M. Johnston. A novel particle swarm optimisation approach to detecting continuous, thin and smooth edges in noisy images, Information Sciences, vol. 246, pp. 28-51, Elsevier, 2013</p> <p>(10+20*4.832)/3=35.55</p>
	<p>K Ye, C Zhang, J Ning, X Liu. Ant-colony algorithm with a strengthened negative-feedback mechanism for constraint-satisfaction problems, Information Sciences, Elsevier, 2017</p> <p>(10+20*4.832)/3=35.55</p>
	<p>N. Dali, S. Bouamama. Different parallelism levels using GPU for solving Max-CSPs with PSO, IEEE Congress on Evolutionary Computation (CEC), 2017</p> <p>(10+20*0)/3=3.33</p>
	<p>Swarm robots formation control based on double PSO swarms with an adaptive fitness control parameter, Qinghua Daxue Xuebao/Journal of Tsinghua University, 2008</p> <p>(10+20*1.063)/3=10.42</p>
	<p>C. Wang, M. H. Nehrir, L. Y. Wang, F. Lin, C. M. Colson. Hybrid Constraint-Handling Mechanism for Particle Swarm Optimization with Applications in Power Systems, International Conference on Genetic and Evolutionary Methods, WORLDCOMP, 2011</p> <p>(10+20*0)/3=3.33</p>

	<p>Q. Zhang, C. Zhang. An improved ant colony optimization algorithm with strengthened pheromone updating mechanism for constraint satisfaction problem, Neural Computing and Applications, 1-12, 2017</p>	$(10+20*2.505)/3=20.03$
	<p>Carlos A. Coello Coello, Col San Pedro Zacatenco. List of references on constraint-handling techniques used with evolutionary algorithms, Power 80 (10), 1286-1292, 2010</p>	$(10+20*0)/3=3.33$
	<p>M. Setayesh. Particle Swarm Optimisation for Edge Detection in Noisy Images, Victoria University of Wellington, 2013</p>	$(10+20*0)/3=3.33$
	<p>C. Wanga, C. J. Millerb, M. H. Nehrirc, J. W. Sheppard, S. P. McElmurry. A load profile management integrated power dispatch using a Newton-like particle swarm optimization method, Sustainable Computing: Informatics and Systems, Elsevier, 2014</p>	$(10+20*1.8)=15.33$
	<p>4. M. Ionita, C. Croitoru, M. Breaban. Incorporating inference into evolutionary algorithms for max-csp, HM 2016</p>	
	<p><b>citata in</b></p> <p>K Ye, C Zhang, J Ning, X Liu. Ant-colony algorithm with a strengthened negative-feedback mechanism for constraint-satisfaction problems, Information Sciences, Elsevier, 2017</p>	$(10+20*4.832)/3=35.55$
	<p>H Luchian, ME Breaban, A Bautu. On meta-heuristics in optimization and data analysis. Application to geosciences, Artificial Intelligent Approaches in Petroleum Geosciences, 53-100, 2015</p>	$(10+20*0)/3=3.33$
	<p>5. M. Ionita, M. Breaban, C. Croitoru. A new scheme of using inference inside evolutionary computation techniques to solve CSPs, SYNASC 2016</p>	
	<p><b>citata in</b></p> <p>K Ye, C Zhang, J Ning, X Liu. Ant-colony algorithm with a strengthened negative-feedback mechanism for constraint-satisfaction problems, Information Sciences, Elsevier, 2017</p>	$(10+20*4.832)/3=35.55$
	<p>6. Evolutionary Computation in Constraint Satisfaction, INTECH 2010</p>	

	<p><b>citata in</b> Decision Support System for Examination Timetabling, 2nd International Conference and Exhibition (OWSD-FUTA), 2015, 439-444</p> <p>Evolutionary Algorithms in Crystal Structure Analysis, Intech 2011</p> <p>7. R. Necula, M. Breaban, M. Raschip. Tackling the Bi-criteria Facet of Multiple Traveling Salesman Problem with Ant Colony Systems, ICTAI 2015</p> <p><b>citata in</b> H. Zhou, M. Song, W. Pedrycz. A Comparative Study of Improved GA and PSO in Solving Multiple Traveling Salesmen Problem, Applied Soft Computing, Elsevier, 2017</p> <p>8. R. Necula, M. Breaban, M. Raschip. Performance evaluation of ant colony systems for the single-depot multiple traveling salesman, HAIS 2015</p> <p><b>citata in</b> Y. Wang, Y. Chen, Y. Yu. Improved Grouping Genetic Algorithm for Solving Multiple Traveling Salesman Problem, Journal of Electronics &amp; Information Technology 39(1), 2017</p>	<p>(10+20*0)/3=3.33</p> <p>(10+20*0)/3=3.33</p> <p></p> <p>(10+20*3.541)/3=26.94</p> <p></p> <p>(10+20*0)/3=3.33</p>
	<p><b>14. Profesor-cercetător invitat la universități-institute de cercetare – străinătate</b></p> <p>Ben-Gurion University of the Negev, Erasmus+ staff mobility, 2016</p> <p>University of Massachusetts, Boston, Erasmus+ staff mobility, 2017</p>	<p>25</p> <p>25</p>
	<p><b>19. Participări la manifestări științifice Conferințe internaționale</b></p> <p>Genetic and Evolutionary Computation Conference (GECCO)- Portland 2010, Madrid 2015</p> <p>IEEE Congress on Evolutionary Computation (CEC) Edinburgh 2005, Singapore 2007, Sendai 2015</p> <p>EVOLVE - A Bridge between Probability, Set Oriented Numerics, and Evolutionary Computation, Iasi, Romania, 2015 – membru comitet organizare</p> <p>Learning and Intelligent Optimization (LION),</p>	<p>20</p> <p>30</p> <p>15</p> <p>10</p>

	Rome, Italy, 2011	
	EvoStar: European Conference on Evolutionary Computation in Combinatorial Optimisation (EvoCOP), Istanbul, Turkey, 2010	10
	ESSEC Romanian Seminar on Operational Research, Bucuresti, Romania, 2009	10
	European Conference on Artificial Intelligence (ECAI), Patras, Greece, 2008	10
	International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), Timisoara, Romania, 2006	10
	International Workshop on Hybrid Metaheuristics (HM), Gran Canaria, Spain, 2006	10
	Doctoral Intensive Summer School on Evolutionary Computing in Optimisation and Data Mining, Iasi – membru comitet organizare 2012, 2016, 2017	45
	Biostatistical Analysis in Epidemiological Research, RNG-ISCB 2015	15
<b>II. Activitatea didactică (30 %)</b>	<b>3. Materiale suport curs, seminar, lucrări practice și programe analitice detaliate</b>	
	- Realizare materiale laborator la Inteligența Artificială	10
	- Realizare materiale curs și laborator la Algoritmi și programare	20
	- Realizare materiale curs și laborator la Structuri de date	20
	- Realizare materiale curs și laborator la Analiza experimentală a algoritmilor	20

Total activitate de cercetare = 14,37 + 140 + 39.33 + 22.48 + 325.74 + 50 + 185 = 776,92

Total activitate didactică = 70

Total general = 776,92 x 0.7 + 70 x 0.3 = 564,84

Data,  
5.01.2018

Nume,  
Lect.Dr. Madalina RASCHIP