

Nume: Conf.univ.dr. SERBAN (Gherghina) CRISTINA

Lista de lucrari

**în domeniul disciplinelor din postul didactic din
ULTIMII 10 ANI**

A) Teza de doctorat: Asupra unor clase de algoritmi iterativi pentru sisteme de inegalitati liniare, sustinuta 26.09.2014, conducator stiintific prof.univ.dr. Popa Constantin, Universitatea "Ovidius" din Constanta

B)

Carte

B1 Ozten Chelai, **Cristina Serban**, *Bazele programarii in limbaj de asamblare a microprocesoarelor Intel x86. Lucrari de laborator*, Ovidius University Press, 2016, 85 pg., ISBN 978-973-614-943-6

<https://editura.univ-ovidius.ro/chelai-ozten-serban-cristina-bazele-programarii-in-limbaj-de-asamblare-a-microprocesoarelor-intel-x86-lucrari-de-laborator-cd/>

Capitole

B2. Carmen Maftai, Gabriel Dobrica, Alina Barbulescu, Cristina Serban, Analysis Methods for Hydrological Drought, In: Modeling and Monitoring Extreme Hydrometeorological Events, IGI Global, ISBN13: 9781668487716, nr.pag. 24, pag. 90-113, DOI: 10.4018/978-1-6684-8771-6.ch005, ian. 2024

B3. Doina Carp, Constantin Popa, **Cristina Serban**, Methods for Improving the Quality of Image Reconstruction in Computerized Tomography, In: Flaut C., Hořková-Mayerová Š., Flaut D. (eds) Models and Theories in Social Systems. Studies in Systems, Decision and Control, vol 179, pp 95-120, Springer, Cham, ISBN: 978-3-030-00083-7, 2019

https://doi.org/10.1007/978-3-030-00084-4_5

B4. Doina Carp, Constantin Popa, **Cristina Serban**, Genetic Versus Han-Type Algorithms for Maritime Transportation Problems, In: Finkl C., Makowski C. (eds) Diversity in Coastal

Marine Sciences. Coastal Research Library, vol 23, pp 631-644, Springer, Cham. ISBN 978-3-319-57576-6, WOS:000437098200039, 2018

https://doi.org/10.1007/978-3-319-57577-3_38

B5. **Serban Cristina** and Carmen Maftai, "Using Grid Computing and Satellite Remote Sensing in Evapotranspiration Estimation" Biometrics: Concepts, Methodologies, Tools, and Applications, IGI Global, pages 994-1016, 23pg. ISBN13: 9781522509837, 2016

<https://doi.org/10.4018/978-1-5225-0983-7.ch039>

B6. **Serban, Cristina**, Carmen Maftai, "Using Grid Computing and Satellite Remote Sensing in Evapotranspiration Estimation, Extreme Weather and Impacts of Climate Change on Water Resources in the Dobrogea Region", edited by Carmen Maftai, IGI Global, pp. 145-173, ISBN13: 9781466684386, 2015

<https://doi.org/10.4018/978-1-4666-8438-6.ch006>

C) Lucrări indexate ISI/BDI publicate în ultimii 10 ani

1. Articole in reviste cotate ISI cu factor de impact

- 1) **Serban, C.**, Maftai, C. "Remote Sensing Evaluation of Drought Effects on Crop Yields Across Dobrogea, Romania, Using Vegetation Health Index (VHI). Agriculture, 15(7), ISSN 2077-0472, 668, WOS:001463675200001, martie 2025
- 2) **Serban C.**, Maftai C. "Spatiotemporal Drought Analysis Using the Composite Drought Index (CDI) over Dobrogea, Romania. Water, Vol. 17(4), 481, ISSN 2073-4441, <https://doi.org/10.3390/w17040481>, WOS:001429495800001, feb. 2025
- 3) **C. Serban**, C.S. Dumitriu, A. Barbulescu, "Solving Single Nesting Problem Using a Genetic Algorithm, Analele Stiintifice ale Universitatii Ovidius Constanta-Seria Matematica, Vol. 30(2), pp. 259–272, ISSN 1224-1784, WOS:000819961500014, DOI: 10.2478/auom-2022-0029, IF 0.886 AIS 0.213, 2022
https://www.anstuocmath.ro/mathematics/anale2022v2/14_Serban_Dumitriu_Barbulescu.pdf
- 4) **Şerban, C.**; Maftai, C.; Dobrică, G. "Surface Water Change Detection via Water Indices and Predictive Modeling Using Remote Sensing Imagery: A Case Study of Nuntasi-Tuzla Lake, Romania. Water, Vol. 14, 556, ISSN 2073-4441, WOS:000762101400001, IF 3.530 AIS 0.523, feb. 2022
<https://doi.org/10.3390/w14040556>

- 5) **Cristina Serban**, Doina Carp, Using Genetic Algorithms to Solve Discounted Generalized Transportation Problem, Studies in Informatics and Control, Vol. 30(3), pp. 29-38, ISSN 1220-1766, WOS:000704288100003, tip C (zona gri), IF: 1.649, SRI : 0.213, sept. 2021
<https://doi.org/10.24846/v30i3y202103>
- 6) Bărbulescu, A.; **Serban, C.**; Indrean, M.-L. Computing the Beta Parameter in IDW Interpolation by Using a Genetic Algorithm, Water, Vol. 13, 863, ISSN 2073-4441, WOS:000651940600001, tip B (zona galbena), IF 3.103, SRI: 0.911, mart. 2021
<https://doi.org/10.3390/w13060863>
- 7) A. Bărbulescu, **C. Serban**, S. Caramihai, Assessing Soil Pollution using a Genetic Algorithm, Romanian Journal of Physics, Vol. 66, 806, ISBN 1221-146X, WOS:000654271900004, tip C (zona gri), IF : 1.888 SRI : 0.385, mai 2021
https://rjp.nipne.ro/2021_66_3-4/RomJPhys.66.806.pdf
- 8) **Cristina Serban**, Doina Carp, A Genetic Algorithm for Solving a Container Storage Problem Using a Residence Time Strategy, Studies in Informatics and Control, Vol. 26(1), pp. 59-66, ISSN 1220-1766, WOS:000400630300007, tip C (zona gri), IF 1.020, IF 0.776 (2016), SRI: 0.134, apr. 2017
<https://doi.org/10.24846/V26I1Y201707>
- 9) **Cristina Serban**, Doina Carp, Optimization of Container Stowage in a Yard Block Using a Genetic Algorithm, Studies in Informatics and Control, Vol. 25(1), pp.123-130, ISSN 1220-1766, WOS:000372945700013, tip C (zona gri), IF 0.776, mar.2016
<https://doi.org/10.24846/v25i1y201613>
- 10) Doina Carp, Constantin Popa, **Cristina Serban**, Modified Han algorithm for inconsistent linear inequalities, Carpathian Journal of Mathematics, Vol. 31(1), pp. 45-52, ISSN 1584-2851, WOS:000351804500005, tip A (zona rosie), IF 0.610, 2015
<https://www.carpathian.cunbm.utcluj.ro/article/modified-han-algorithm-for-inconsistent-linear-inequalities/>

2. Articole in reviste indexate BDI

- 11) C. Maftai, C. Serban, K. Kucuk, V. Demir and R. Muntean, "K-Means Method for Clustering Groundwater Chemical Parameters of Konya Closed Basin," 2024 4th

International Conference on Electrical, Computer, Communications and Mechatronics Engineering (ICECCME), Nov. 04 - 06, 2024, Male, Maldives, pp. 1-6, ISBN 979-8-3503-9118-3, Publisher: IEEE, DOI: 10.1109/ICECCME62383.2024.10796675, dec. 2024, IEEE Xplore, SCOPUS

- 12) Mancas, **C.**, **Serban**, C., & Mancas, D. C. On Software Application Database Constraint-driven Design and Development. Journal of Computer Science Research, 5(1), 31–45, ISSN 2630-5151, https://doi.org/10.30564/jcsr.v5i1.5476ISSN_2630-5151, martie 2023
- 13) **C. Șerban**, A Bărbulescu, C Ș Dumitriu, A new GA-IDW approach for interpolating the precipitation, IOP Conference Series: Earth and Environmental Science, Vol. 958, 012006, ISSN: 1755-1307, 2022
<https://iopscience.iop.org/article/10.1088/1755-1315/958/1/012006>
Scopus: <https://www.scopus.com/sourceid/19900195068>
- 14) Doina Carp, Constantin Popa, **Cristina Serban**, A general iterative solver for unbalanced inconsistent transportation problems, Archives of Transport, Vol. 37(1), pp. 7-13, ISSN 0866-9546, iun. 2016
<http://dx.doi.org/10.5604/08669546.1203199>
Scopus: <https://www.scopus.com/authid/detail.uri?authorId=24491154500>

D) Lucrări publicate în ultimii 10 anii în reviste și volume de conferințe cu referenți (neindexate)

- 1) **C. Șerban**, A Bărbulescu, C Ș Dumitriu, Maximum precipitation interpolation using an evolutionary optimized IDW algorithm, 7th International Conference on Water Resource and Environment - WRE 2021, www.wreconf.org, Xi'an, China, 1-4, November 2021
- 2) **Cristina Serban**, Alexandra Gherghina, Technological tools in mathematic. A math applet for integral calculus, Proceedings of International Conference on Creative Collaboration through Supportive Technologies (ICCCST 2015) , Constanta, Romania, pp. 183-186, ISBN 978-606-25-0190-7, July 24 2015

Data

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Semnătura,