



Curriculum vitae Europass

Informații personale

Nume / Prenume **MOLDOVANU SIMONA**

Domeniul ocupațional

Educație
Cercetare

Experiența profesională

Perioada	2017-prezent
Funcția sau postul ocupat	Conferentiar dr. mat.
Activități și responsabilități principale	Programare Python, Matlab Curs licenta An I CTI- Matematici discrete, Curs licenta, An II CTI Prelucrarea Imaginilor Curs master, An I TIA- Analiza continutului imaginilor - Deep Learning
Numele și adresa angajatorului	Universitatea "Dunărea de Jos", Galați, Facultatea de Automatică, Calculatoare, Inginerie Electrică și Electronică, Str. Științei nr. 2, Galați - 800146, România.
Tipul activității sau sectorul de activitate	
Perioada	2014-2015
Funcția sau postul ocupat	Cercetător postdoctorand, Tema „Cercetarea modelelor texturale imagistice și extragerea caracteristicilor relevante din imaginile RMN provenite de la pacienți diagnosticați cu boli degenerative cerebrale”.
Activități și responsabilități principale	cercetare
Numele și adresa angajatorului	Facultatea de Științe și Mediu Str. Domneasca, nr. 111., Universitatea "Dunărea de Jos", Galați,
Perioada	2009-2012,
Funcția sau postul ocupat	Doctorand în domeniul științelor ingineresti,
Activități și responsabilități principale	Cercetarea și implementarea metodelor avansate de procesare a imaginilor complexe
Numele și adresa angajatorului	Facultatea de Științe și Mediu Str. Domneasca, nr. 111., Universitatea "Dunărea de Jos", Galați, Katholieke Universiteit Leuven University Lab. for Medical Imaging Research from Hospital Gasthuisberg, Herestraat 49, 3000 Leuven, Belgium
Perioada	2000- prezent
Funcția sau postul ocupat	Profesor grad I, matematica-informatica
Activități și responsabilități principale	Activități didactice instructiv educative
Numele și adresa angajatorului	Liceul Tehnic de Alimentație și Turism D. Motoc,

Educație și formare

Perioada	2014-2015
Calificarea / diploma obținută	Certificat de absolvire a studiilor postdoctorale
Disciplinele principale studiate / competențe profesionale dobândite	Conceperea, modelarea și testarea sistemelor texturale imagistice

Numele și tipul instituției de învățământ / furnizorului de formare	Facultatea de Științe și Mediu Str. Domneasca, nr. 111., Universitatea "Dunărea de Jos", Galați			
Perioada	2009-2012			
Calificarea / diploma obținută	Doctor în științe inginerești			
Disciplinele principale studiate / competențe profesionale dobândite	Tehnici moderne de prelucrare, transformare și îmbunătățire a imaginilor. Metode avansate de segmentare și analiză fractală. Extragerea trăsăturilor din imaginile ecografice și clasificarea acestora folosind algoritmi de grupare./ Programare Matlab, Python.			
Numele și tipul instituției de învățământ / furnizorului de formare	Facultatea de Științe și Mediu, Str. Domneasca, nr. 111., Universitatea "Dunărea de Jos", Galați			
Perioada	2010-2012			
Calificarea / diploma obținută	Profesor gradul I			
Disciplinele principale studiate / competențe profesionale dobândite	Programare C++			
Numele și tipul instituției de învățământ / furnizorului de formare	Facultatea de Matematică-Informatică, Universitatea București, Str. Academiei nr.14, sector 1, C.P. 010014, București, Romania			
Calificarea / diploma obținută	Diploma de Disertare, Informatică Aplicată			
Disciplinele principale studiate / competențe profesionale dobândite	Informatică aplicată, Programare C++, Java, Baze de date, TIC.			
Numele și tipul instituției de învățământ / furnizorului de formare	Facultatea de Inginerie și Știința Calculatoarelor, Universitatea „Dunărea de Jos” Galați, Universitatea “Dunărea de Jos”- Galați Str. Domnească nr 47, Galați			
Perioada	2000-2002			
Calificarea / diploma obținută	Diploma de studii postuniversitare de specialitate în informatică			
Disciplinele principale studiate / competențe profesionale dobândite	Informatică aplicată, Programare Java, C++, Sisteme de gestiune a bazelor de date, TIC, Multimedia și Hypermedia, Inginerie Software,			
Numele și tipul instituției de învățământ / furnizorului de formare	Facultatea de Nave și Inginerie Electrică, Universitatea „Dunărea de Jos” Galați, Universitatea “Dunărea de Jos”- Galați Str. Domnească nr 47, Galați			
Perioada	1995-1999			
Calificarea / diploma obținută	Diploma de licență			
Disciplinele principale studiate / competențe profesionale dobândite	Matematica, Fizică			
Numele și tipul instituției de învățământ / furnizorului de formare	Facultatea de Științe și Mediu Str. Domneasca, nr. 111., Universitatea "Dunărea de Jos", Galați			

Limba străină cunoscută

Engleză	Înțelegere		Vorbire		Scriere
	Ascultare	Citire	Participare la conversație	Discurs oral	Exprimare scrisă
	B2 Utilizator avansat	B2 Utilizator avansat	B2 Utilizator avansat	B2 Utilizator avansat	B2 Utilizator avansat

Competențe și abilități sociale	Abilități de comunicare publică și experiență de reprezentare; abilitatea lucrului în echipă; dinamism, gândire flexibilă; atitudine proactivă.
Competențe și aptitudini organizatorice	Membru în consiliul de organizare a conferinței naționale Scientific Conference of Doctoral Schools, "Dunărea de Jos" University of Galați (CSSD-UDJG 2015), 4-5 June 2015
Competențe și aptitudini de utilizare a calculatorului	Programare Java, C++, Matlab, Python Utilizare programe de calcul simbolic și numeric – MATLAB, MS OFFICE, Pachetul Macromedia.
Alte competențe și aptitudini	Capacități de cercetare, formare continuă și publicare Formator – specialitatea TIC
Permis de conducere	Categoria B
Informații adiționale	h-Index 12 : Web of Science , h-Index 14: the Scopus database h-Index: 17: Google Scholar
Proiecte Europene Erasmus+, Leonardo Da Vinci, Grundtvig	1. Project Grundtvig Quels Outils Educatifs Pour La Socialisation Des Jeunes Adultes Avec Les Parents?, Colegiul Tehnic de Alimentație și Turism D. Motoc, Str. Milcov, Nr. 15, Galați 2012 – 2014 2. LLP GRUNDDVIC GRU-12-P-LP-284-GL-FR Reintegration Of School Age Mothers Into The Education System, Colegiul Tehnic de Alimentație și Turism D. Motoc, Str. Milcov, Nr. 15, 2011-2013 3. Project Title: Retracing Myths-Between Magic And Reality Trough Europe's Traditions And Cultures, COM-10-PM-95-GL-RO, Project Leader: Colegiul Tehnic de Alimentație și Turism D. Motoc, Str. Milcov, Nr. 15, Galați, 2010-2012
Proiecte de cercetare	1. 2009-2012. Proiectul POSDRU – Eficientizarea activitatii studentilor din cadrul ciclului de studii doctorale- EFICIENT Cod proiect POSDRU/88/1.5/S/61445 2. 014-2015, PERFORM - Performanța sustenabilă în cercetarea doctorală și post doctorală. POSDRU/159/1.5/S/138963, 3. 2016-2019 Proiect internațional MESMERISE - Multi-Energy High Resolution Modular Scan System for Internal and External Concealed Commodities, ID: 700399, Funded under: H2020-EU.3.7. - Secure societies - Protecting freedom and security of Europe and its citizens. 4. Director grant CNFIS-FDI-2021-0443 „Măsuri active de creștere și eficientizare a capacității de cercetare, dezvoltare, inovare și transfer tehnologic în Universitatea „Dunărea de Jos” din Galați - CEREX-UDJG_2021”, Granturi pentru susținerea unităților de cercetare din universitate Contract nr. 17525/13.07.2021, 5. Susținerea și dezvoltarea activităților CDI-TT în Universitatea „Dunărea de Jos” din Galați, Aplicație de sine stătătoare pentru îmbunătățirea clarității detaliilor din imaginile medicale, contract de finanțare cu nr. RF 3627/30.09.2021, Director grant S.I.dr. ing. Anisia Culea- Florescu 6. 2023-2025 Mechanical Impedance and Multiphysics Concealed and Hidden Objects Interrogation (MELCHIOR), Grant agreement ID: 101073899, Horizon Europe, European Commission https://cordis.europa.eu/project/id/101073899
Membru al organismelor profesionale	1. Guest editor al numărului special "Entropy Based Image Registration" al revistei MDPI Entropy, ISSN 1099-4300 2. Membru în colectivele de redacție pentru ANNALS OF "DUNAREA DE JOS" UNIVERSITY OF GALATI MATHEMATICS, PHYSICS, THEORETICAL MECHANICS FASCICLE II, YEAR X (XLI) 2018, No. 1 , 2019, 2020, 2021.
Anexe	Anexa 1 Cărți Anexa 2 Capitole cărți Anexa 3. Articole ISI Anexa 4 Articole ISI Proceedings Anexa 5 Articole științifice publicate în jurnale de categoria B+/ și/sau indexate BDI Anexa 6 Participări la conferințe naționale și internaționale, cele marcate cu * au fost publicate Anexa 7 Premii

- Anexa1 Cărți** 1. L. Moraru, **S. Moldovanu**, D. Bibicu, Metode avansate de procesare și analiză a imaginilor complexe, Galați University Press 2013, ISBN 978-606-8348-67-4, pp.1-196
 2. **S. Moldovanu**, Prelucrarea Imaginilor, Indrumar de laborator, Galați University Press, 2019, ISBN:978-606-696-166-0, pp. 159
 3. **S. Moldovanu**, Prelucrarea imaginilor și morfologie matematica, Algoritmi și aplicații, 2020, Galați University Press, ISBN 978-606-696-197-4, pp. 170

- Anexa 2 Capitole cărți** 1. L. Moraru, **S. Moldovanu**, A. Biswas, Intensity – based classification and related methods in brain MR images, chapter in book : Classification and Clustering in Biomedical Signal Processing, Editor Nilanjan Dey , Publisher IGI Global, pp. 78-105, ISSN: 2327-9354, 2016, DOI: 10.4018/978-1-5225-0140-4.ch004, 30 pg
 2. L. Moraru, **S. Moldovanu**, S. Khan, A. Biswas, Digital Image Processing Using Wavelets: Basic Principles and Application, chapter in book Ș Machine Learning in Data Mining, Applied Machine Learning for Smart Data Analysis, CRC Press Taylor & Francis Group, 2019, pp71-96

Anexa 3. Articole ISI

1. **S. Moldovanu**, L. Moraru, D. Bibicu, Characterization of myocardium muscle biostructure using first order features, Digest Journal of Nanomaterials and Biostructures, Vol. 6, No 3, July - September 2011, pp. 1357-1365, ISSN: 1842-3582, http://www.chalcogen.inim.ro/1357_Moldovanu.pdf. Impact factor: IF= 0,899,
2. **S. Moldovanu**, L. Moraru, E. Zerrad, A. Biswas, Speckle Noise Reduction Method in Cardiac Cycles, International Journal of Physical Sciences. Vol 7(5), pp 797-804, 30 January 2012, Doi: 10.5897/IJPS11.1701, ISSN 1992-1950 <http://www.academicjournals.org/IJPS/>
3. L. Moraru **S. Moldovanu**, Comparative study on the performance of textural image features for active contour segmentation. Sci China Life Sci, July 2012, Volume 55, Issue 7, pp 637-644, 55(7), ISSN 1869-1889, doi: 10.1007/s11427-012-4344-5 <http://link.springer.com/article/10.1007%2Fs11427-012-4344-5>, Impact factor: 10,372
4. L. Moraru, **S. Moldovanu**, A. Biswas, Optimization of breast lesion segmentation in texture feature space approach, Medical Engineering & Physics Volume 36, Issue 1, January 2014, Pages 129–135, ISSN. 1350-4533, DOI: <http://dx.doi.org/10.1016/j.medengphy.2013.05.013> <http://www.sciencedirect.com/science/article/pii/S1350453313001306>. Impact factor: 2.356
5. **S. Moldovanu**, L. Moraru, A. Biswas, Robust Skull-Stripping Segmentation Based on Irrational Mask for Magnetic Resonance Brain Images, DOI 10.1007/s10278-015-9776-6, <http://link.springer.com/article/10.1007%2Fs10278-015-9776-6>, 2015, J Digit Imaging. 2015 Dec;28(6):738-47. doi: 10.1007/s10278-015-9776-6. Impact factor: 4,903, ISSN: 0897-1889,
6. **S. Moldovanu**, L. Moraru, A. Biswas, Edge-Based Structural Similarity Analysis in Brain MR Images, Journal of Medical Imaging and Health Informatics (JMIHI), 6(2) 539-546, 2016, <http://www.aspbs.com/jmihi.html>, ISSN: 2156-7018, DOI: <http://dx.doi.org/10.1166/jmihi.2016.1691>, Impact factor: 0.659
7. L. Moraru, C. Obreja, **S. Moldovanu**, A. Ene, A. Biswas, Blood pressure and flow values in small vessels angioarchitectures: application for diabetic retinopathy, Romanian Journal of Physics 61(7-8) · April 2016 http://www.nipne.ro/rjp/accepted_papers.html, Vol. 61, No. 7–8, P. 1287–1298, Impact factor: 1.662 , ISSN 1221-146X, doi: 10.1002/mas.20330, 2011.
8. L. Moraru, **S. Moldovanu**, M. Punga, S. Johnson, A. Biswas, Exploiting distance metrics-based similarity for spatial feature analysis: Application to brain magnetic resonance imaging, Maejo Int. J. Sci. Technol. 2016, 10(02), 220-232, Impact factor: 0.809, ISSN 1905-7873
9. L. Moraru, **Moldovanu S**, A.L. Culea-Florescu, D. Bibicu, A.S. Ashour, N. Dey, Texture analysis of parasitological liver fibrosis images. Microsc Res Tech. 80(8):862-869., 2017 Mar 29. doi: 10.1002/jemt.22875. , Impact Factor: 2.893, ISSN:1097-0029
10. L. Moraru, **S. Moldovanu**, L.T. Dimitrievici, F. Shi, A.S. Ashour, N. Dey, Quantitative diffusion tensor magnetic resonance imaging signal characteristics in the human brain: a hemispheres analysis, 2017, Journal IEEE Sensors Impact factor: 4.325, IEEE SENSORS JOURNAL, VOL. 17, NO. 15, AUGUST 1, 2017, pp.4886-4893, DOI 10.1109/JSEN.2017.2714701, ISSN 1530-437X
11. L. Moraru, **S. Moldovanu**, L. T. Dimitrievici, A. S. Ashour, N. Dey, Texture anisotropy technique in brain degenerative diseases, 2018, Neural Comput & Applic, Volume 30, Issue 5, pp 1667–1677, DOI: 10.1007/s00521-016-2777-7, [http://link.springer.com/article/10.1007/s00521-016-2777-7](http://link.springer.com/article/10.1007/s00521-016-2777-7?wt_mc=Internal.Event.1.SEM.ArticleAuthorOnlineFirst), Impact factor: 5.102, ISSN 0941-0643
12. L. Moraru, **S. Moldovanu**, A.-L. Culea-Florescu, D. Bibicu, N. Dey, A. S. Ashour, S. Sherratt, Texture Spectrum Coupled with Entropy and Homogeneity Image Features for Myocardium Muscle Characterization, Current Bioinformatics, Volume 14, Number 4, 2019, pp. 295-304(10), 2018, IF=4,85 DOI : ISSN 1574-8936, DOI <https://doi.org/10.2174/1574893614666181220095343> <https://benthamscience.com/journals/current-bioinformatics/upcoming-articles/>,
13. Luminita Moraru, Simona **Moldovanu**, Lucian Traian Dimitrievici, Nilanjan Dey, Amira S. Ashour, Fuqian Shi, Simon James Fong, Salam Khan, Anjan Biswas, Gaussian mixture model for texture characterization with application to brain DTI images, Journal of Advanced Research 16 (2019) 15–23, Impact factor 12.822. <https://doi.org/10.1016/j.jare.2019.01.001>,

14. Felicia Anisoara Damian, **Simona Moldovanu** ,Nilanjan Dey ,Amira S. Ashour and Luminita Moraru Feature Selection of Non-Dermoscopic Skin Lesion Images for Nevus and Melanoma Classification, *Computation* 2020, 8(2), 41.
- 15.Lenuta Pana , **Simona Moldovanu** , Nilanjan Dey , Amira S. Ashour and Luminita Moraru, Brain Tissue Evaluation Based on Skeleton Shape and Similarity Analysis between Hemispheres, *Computation* 2020, 8(2), 31
- 16.**Simona Moldovanu**, Lenuta Pană Toporaş, Anjan Biswas, Luminita Moraru, Combining Sparse and Dense Features to Improve Multi-Modal Registration for Brain DTI Images, *Entropy* 2020, 22(11), 1299; <https://doi.org/10.3390/e22111299>, pp2-16, IF=2,738
17. **Simona Moldovanu**, Cristian-Dragos Obreja, Keka C. Biswas, Luminita Moraru, Towards Accurate Diagnosis of Skin Lesions Using Feedforward Back Propagation Neural Networks , <https://www.mdpi.com/2075-4418/11/6/936>, *Diagnostics* .2021, 11(6), 936; <https://doi.org/10.3390/diagnostics11060936>, IF=3,992.
18. S. **Moldovanu**, F. Anisoara Damian Michis, K. C. Biswas, A. Culea-Florescu L. Moraru, Skin Lesion Classification Based on Surface Fractal Dimensions and Statistical Color Cluster Features Using an Ensemble of Machine Learning Techniques, *Cancers* 2021, 13, 5256. <https://doi.org/10.3390/cancers1321525>, IF=6,57, pp2-17
19. Anjan Biswas, Nyah Coleman ,Abdul H. Kara, Salam Khan, Luminita Moraru, Simona **Moldovanu**, Catalina Iticescu, Yakup Yildirim, Shallow Water Waves and Conservation Laws with Dispersion Triplet *Appl. Sci.* 2022, 12, 3647. <https://doi.org/10.3390/app12073647>, IF=2.838
20. Mihaela Miron, Simona **Moldovanu**, Bogdan Ioan Stăfănescu, Mihai Culea, Sorin Marius Pavel, Anisia Luiza Culea-Florescu, A New Approach in Detectability of Microcalcifications in the Placenta during Pregnancy Using Textural Features and K-nearest Neighbors Algorithm, *J. Imaging* 2022, 8(3), 81; <https://doi.org/10.3390/jimaging8030081>
21. A. A. Al-Qarni, H. O. Bakodah , A. A. Alshaery , A. Biswas ,Y. Yildirim, L. Moraru, S. **Moldovanu**, Numerical Simulation of Cubic-Quartic Optical Solitons with Perturbed Fokas–Lenells Equation Using Improved Adomian Decomposition Algorithm, *Mathematics* 2022, 10, 138. <https://doi.org/10.3390/math10010138> IF=2,592
22. S. Kumar, A. Biswas, Y. Yildirim, L. Moraru, S. **Moldovanu**, H. M. Alshehri, D.A. Maturi, D. H. Al-Bogami, Cubic–Quartic Optical Soliton Perturbation with Differential Group Delay for the Lakshmanan–Porsezian–Daniel Model by Lie Symmetry, *Symmetry* 2022, 14, 224. <https://doi.org/10.3390/sym14020224>, IF=2,94
- 23.A. M. Dincă Lăzărescu, S. **Moldovanu**, L. Moraru , A Fingerprint Matching Algorithm Using the Combination of Edge Features and Convolution Neural Networks , *Inventions* 2022, 7, 39. <https://doi.org/10.3390/inventions7020039>
24. I. Anghelache Nastase, S. **Moldovanu**, L. Moraru, Image Moment-Based Features for Mass Detection in Breast US Images via Machine Learning and Neural Network Classification Models, *Inventions* 2022, 7(2), 42; <https://doi.org/10.3390/inventions7020042>
- 25.Sandeep Malik,Sachin Kumar,Anjan Biswas,Yakup Yildirim,Luminita Moraru,Simona **Moldovanu**,Catalina Iticescu andHashim M. Alshehr Cubic-Quartic Optical Solitons in Fiber Bragg Gratings with Dispersive Reflectivity Having Parabolic Law of Nonlinear Refractive Index by Lie Symmetry, *Symmetry* 2022, 14(11), 2370; <https://doi.org/10.3390/sym14112370> - 10 Nov 2022, IF=2.94
26. Ming-Yue Wang,Anjan Biswas,Yakup Yildirim,Hashim M. Alshehri,Luminita Moraru and Simona **Moldovanu**, Optical Solitons in Fiber Bragg Gratings with Dispersive Reflectivity Having Five Nonlinear Forms of Refractive Index, *Axioms* 2022, 11(11), 640; <https://doi.org/10.3390/axioms11110640> - 13 Nov 2022, IF=1.824
27. Elsayed M. E. Zayed,Mohamed E. M. Alngar,Reham M. A. Shohib,Anjan Biswas,Yakup Yildirim,Salam Khan,Luminita Moraru,Simona **Moldovanu** andCatalina Iticescu, Highly Dispersive Optical Solitons in Fiber Bragg Gratings with Kerr Law of Nonlinear Refractive Index, *Mathematics* 2022, 10(16), 2968; <https://doi.org/10.3390/math10162968> - 17 Aug 2022, IF=2.592
28. Ahmed H. Arnous,Anjan Biswas,Yakup Yildirim,Luminita Moraru,Simona **Moldovanu** and Seithuti P. Moshokoa Quiescent Optical Solitons with Cubic–Quartic and Generalized Cubic–Quartic Nonlinearity, *Electronics* 2022, 11(22), 3653; <https://doi.org/10.3390/electronics11223653> - 08 Nov 2022, <https://www.mdpi.com/2079-9292/11/22/3653>, IF=2.6929.
- 29.Islam Samir,Ahmed H. Arnous,Yakup Yildirim,Anjan Biswas,Luminita Moraru and Simona **Moldovanu** Optical Solitons with Cubic-Quintic-Septic-Nonic Nonlinearities and Quadrupled Power-Law Nonlinearity: An Observation *Mathematics* 2022, 10(21), 4085; <https://doi.org/10.3390/math10214085> - 02 Nov 2022, IF=2.592
30. Sandeep Malik,Sachin Kumar,Anjan Biswas,Yakup Yildirim,Luminita Moraru,Simona **Moldovanu**,Catalina Iticescu andHashim M. Alshehr Cubic-Quartic Optical Solitons in Fiber Bragg Gratings with Dispersive Reflectivity Having Parabolic Law of Nonlinear Refractive Index by Lie Symmetry *Symmetry* 2022, 14(11), 2370; <https://doi.org/10.3390/sym14112370> - 10 Nov 2022, IF=2.94

31. P.L. Georgescu, S. Moldovanu, C. Iticescu, M. Calmuc, V. Calmuc, C. Topa, L. Moraru 1. Assessing and forecasting water quality in the Danube River by using neural network approaches, *Science of The Total Environment* (Science Direct), (WOS:000973837200001) IF=9.8, <https://www.sciencedirect.com/science/article/pii/S0048969723016169>
32. Lynda Oulhissane, Mostefa Merah, Simona Moldovanu, Luminita Moraru, Enhanced detonators detection in X-ray baggage inspection by image manipulation and deep convolutional neural networks *Scientific Reports*, (Nature) <https://www.nature.com/articles/s41598-023-41651-y> IF=4.99 (WOS:001059852100041),
33. **Simona Moldovanu**, Mihaela Miron, Cristinel-Gabriel Rusu, Keka C. Biswas, Luminita Moraru Refining skin lesions classification performance using geometric features of superpixels *Scientific Reports*, (Nature) (WOS:001059852100041), IF=4.99 <https://www.nature.com/articles/s41598-023-38706-5>
34. Elsayed M.E. Zayed, Reham M.A. Shohib, E.M. Alngar, Anjan Biswas, Yakup Yıldırım, Luminita Moraru, Catalina Iticescu, **Simona Moldovanu**, Dorin Bibicu, Abdulah A. Alghamdi Dispersive optical solitons with DWDM topology and multiplicative white noise, *Results in Physics* (Science Direct) (WOS:001041614600001), IF=5.3 <https://www.sciencedirect.com/science/article/pii/S2211379723005168>
35. Ahmed H. Arnous, Anjan Biswas, Abdul H. Kara, Yakup Yıldırım, Luminita Moraru, Catalina Iticescu, Simona Moldovanu, A. Alghamdi Optical solitons and conservation laws for the concatenation model with spatio-temporal dispersion (internet traffic regulation), *Journal of the European Optical Society (Academic Accelerator)* IF=2.021 (WOS:001010355600002) <https://jeos.edpsciences.org/articles/jeos/abs/2023/02/jeos20230027/jeos20230027.html>
36. Ahmed H. Arnous, Anjan Biswas, Yakup Yıldırım, Luminita Moraru, Simona Moldovanu, A. Alghamdi Quiescent optical solitons with Kudryashov's law of nonlinear refractive index, *Results in Physics* (Science Direct) (WOS:000968902000001), IF=4.56, <https://www.sciencedirect.com/science/article/pii/S2211379723001870>
37. Ahmed H. Arnous, Anjan Biswas, Yakup Yıldırım, Luminita Moraru, Simona Moldovanu, Abdulah A. Alghamdi Quiescent optical solitons with complex Ginzburg–Landau equation having a dozen forms of self–phase modulation, *Heliyon* (Science Direct), (WOS:000990257000001) IF=4 [https://www.cell.com/heliyon/pdf/S2405-8440\(23\)02868-2.pdf](https://www.cell.com/heliyon/pdf/S2405-8440(23)02868-2.pdf)
38. Ahmed H. Arnous, Anjan Biswas, Abdul H. Kara, Yakup Yıldırım, Luminita Moraru, Simona Moldovanu, Puiu Lucian Georgescu, A. Alghamdi Dispersive optical solitons and conservation laws of Radhakrishnan–Kundu–Lakshmanan equation with dual–power law nonlinearity, *Heliyon* (Science Direct), IF=4, (WOS:000965231200001) [https://www.cell.com/heliyon/pdf/S2405-8440\(23\)01243-4.pdf](https://www.cell.com/heliyon/pdf/S2405-8440(23)01243-4.pdf)
39. Malik, S.; Kumar, S.; Biswas, A.; Yildirim, Y.; Moraru, L.; Moldovanu, S.; Iticescu, C.; Moshokoa, S.P.; Bibicu, D.; Alotaibi A, Gap Solitons in Fiber Bragg Gratings Having Polynomial Law of Nonlinear Refractive Index and Cubic–Quartic Dispersive Reflectivity by Lie Symmetry, *Symmetry* (MDPI) (WOS:000998003200001) <https://www.mdpi.com/2073-8994/15/5/963>
40. Sandeep, M.; Kumar, S.; Biswas, A.; Yildirim, Y.; Moraru, L.; Moldovanu, S.; Iticescu, C.; Alotaibi, A. Highly Dispersive Optical Solitons in the Absence of Self-Phase Modulation by Lie Symmetry, *Symmetry* (MDPI), IF=2.94, *Symmetry* (MDPI) (WOS:000978127000001), <https://www.mdpi.com/2073-8994/15/4/886>
41. Ahmed H. Arnous, Islam Samir, Anjan Biswas, Oswaldo González-Gaxiola, Luminita Moraru, Catalina Iticescu, Simona Moldovanu, A. Alghamdi. Optical Soliton Perturbation with Parabolic Law Nonlinearity, *Universe* (MDPI), IF=2.81, <https://www.mdpi.com/2218-1997/9/3/155>
42. Muslum Ozisik, Aydin Secer, Mustafa Bayram, Anjan Biswas, Oswaldo González-Gaxiola, Luminita Moraru, Simona Moldovanu, Catalina Iticescu, Dorin Bibicu, A. Alghamdi, Retrieval of Optical Solitons with Anti-Cubic Nonlinearity, *Mathematics* (MDPI), IF=2.3, (WOS:000947929200001), <https://www.mdpi.com/2227-7390/11/5/1215>
43. Elsayed M. E. Zayed, Mohamed E. M. Alngar, Reham M. A. Shohib, Anjan Biswas, Yakup Yıldırım, Luminita Moraru, Simona Moldovanu, Puiu Lucian Georgescu Dispersive Optical Solitons with Differential Group Delay Having Multiplicative White Noise by Itô Calculus, *Electronics* (MDPI), IF=2.9, (WOS:000935113400001) <https://www.mdpi.com/2079-9292/12/3/634>
44. Oswaldo González-Gaxiola, Anjan Biswas, Luminita Moraru, Simona Moldovanu, Highly Dispersive Optical Solitons in Absence of Self-Phase Modulation by Laplace-Adomian Decomposition *Photonics* (MDPI), IF=2.536 (WOS:000941633400001) <https://www.mdpi.com/2304-6732/10/2/114>
45. Ahmed M. Elsherbeny, Ahmed H. Arnous, Anjan Biswas, Oswaldo González-Gaxiola, Luminita Moraru, Simona Moldovanu, Catalina Iticescu, Hashim M. Alshehri Highly Dispersive Optical Solitons with Four Forms of Self-Phase Modulation, *Universe* (MDPI), IF=2.81 (WOS:000927756800001), <https://www.mdpi.com/2218-1997/9/1/51>
46. Ahmed M. Elsherbeny, Ahmed H. Arnous, Anjan Biswas, Yakup Yıldırım, Luminita Moraru, Simona Moldovanu, Catalina Iticescu, Hashim M. Alshehri Dark and Singular Highly Dispersive Optical Solitons with Kudryashov's Sextic Power-Law of Nonlinear Refractive Index in the Absence of Inter-Modal Dispersion, *Electronics* (MDPI), IF=2.9, (WOS:000914564400001) <https://www.mdpi.com/2079-9292/12/2/352> <https://www.mdpi.com/2218-1997/9/1/19>

47. Ming-Yue Wang, Anjan Biswas, Yakup Yıldırım, Luminita Moraru, Simona Moldovanu Abdulah A. Alghamdi, Optical Solitons in Magneto-Optic Waveguides Having Kudryashov's Law of Nonlinear Refractive Index by Trial Equation Approach, Electronics (MDPI), IF=2.9 (WOS:000914476400001), <https://www.mdpi.com/2079-9292/12/2/331>
48. O.González-Gaxiola, Anjan Biswas, Luminita Moraru Simona Moldovanu, Dispersive Optical Solitons with Schrödinger–Hirota Equation by Laplace-Adomian Decomposition Approach, Universe (MDPI), IF=2.81 (WOS:000928455600001)
49. Elsayed M. E. Zayed, Mohamed E. M. Alngar, Reham M. A. Shohib, Anjan Biswas, Yakup Yıldırım, Luminita Moraru, Simona Moldovanu, Catalina Iticescu Highly Dispersive Optical Solitons in Fiber Bragg Gratings with Quadratic-Cubic Nonlinearity, Electronics (MDPI), IF=2.9 (WOS:000911128800001)
50. Ming-Yue Wang, Anjan Biswas, Yakup Yıldırım, Luminita Moraru, Simona Moldovanu Hashim M. Alshehri, Optical Solitons for a Concatenation Model by Trial Equation Approach, Electronics (MDPI), IF=2.9 (WOS:000909311500001), <https://www.mdpi.com/2079-9292/12/1/19>

1. S. **Moldovanu**, L. Moraru, Mass Detection and Classification in Breast Ultrasound Images Using k-means clustering algorithm, pp197-200, 2010, DOI: 10.1109/ISSEE.2010.5628516
http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=5628516
2. L. Moraru, S. **Moldovanu**, M. C. Nicolae De-Noising Ultrasound Images of Colon Tumors Using Daubechies Wavelet Transform, AIP Conf. Proc. 1387, pp. 294-299 2011, doi:10.1063/1.3663182, <http://scitation.aip.org/proceedings/confproceed/1387.jsp>
- S. **Moldovanu**, D. Bibicu, L. Moraru, M. C. Nicolae, Classification Features of US Images Liver Extracted with Co-occurrence Matrix Using the Nearest Neighbor Algorithm, AIP Conf. Proc. 1400, pp. 565-570, 2011, DOI: 10.1063/1.3663182
<http://proceedings.aip.org/resource/2/apcpcs/1400/1%26page=5?isAuthorized=no>
4. S. **Moldovanu**, L. Moraru, D. Bibicu, Comparative study of myocardium tissue based on gradient features, E-Health and Bioengineering Conference (EHB), 2011, Iasi, Romania 24-26 Nov. 2011, pp 1-4, http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=6150369
5. L. Moraru, D. Bibicu, S. **Moldovanu**; M. C. Nicolae, Automatic system for breast cysts disease investigation based on the textural parameters analysis, E-Health and Bioengineering Conference (EHB), 2011, Iasi, Romania 24-26 Nov. 2011, pp.1-4, http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=6150367
6. S. **Moldovanu**, D. Bibicu, L. Moraru, Liver Ultrasound Classification by Using Fractal Dimension of Edge, Proceedings of the Physics Conference TIM – 11, AIP Conf. Proc. 1472, 238-244 (2012); doi: 10.1063/1.4748094
7. D. Bibicu, L. Moraru, S. **Moldovanu**, , Automatic Investigation Of The Thyroid Nodules From US Images, Proceedings of the Physics Conference TIM – 11, AIP Conf. Proc. 1472, 221-229 (2012); doi: 10.1063/1.4748092
8. L. Moraru, D. Bibicu, S. **Moldovanu**, M. Stratulat. Hemorrhage detection in MRI brain images using images features, AIP Conference Proceedings 1564, 171 (2013); <https://doi.org/10.1063/1.4832814>,
9. S. **Moldovanu**, Mirela (Vişan) Pungă, Luminița Moraru, Evaluation of outliers in acquired brain MR images, Journal of Physics: Conference Series Vol. 574, pp.1-4 (2015) , <http://adsabs.harvard.edu/abs/2015JPhCS.574a2121M>
10. M. Punga, S. **Moldovanu**, L. Moraru, Structural Similarity Analysis for Brain MR Image Quality Assessment, AIP Conference Proceedings, Vol. 1634, pp.137-143, (2014); doi: 10.1063/1.4903028
<http://dx.doi.org/10.1063/1.4903028>
<http://iopscience.iop.org/1742-6596/574/1/012121>.
11. M. Pungă, S. **Moldovanu**, L. Moraru, MR image intensity inhomogeneity correction, Journal of Physics: Conference Series Vol. 574, pp.1-4 (2015), doi:10.1088/1742-6596/574/1/012125, ISSN: 1742-6588
http://iopscience.iop.org/1742-6596/574/1/012125/pdf/1742-6596_574_1_012125.pdf.
12. Luminita Moraru, Lucian Dimitrievici, **Simona Moldovanu**, Entropic characterization of random cerebral structures in MR images, System Theory, Control and Computing (ICSTCC), 2016 20th International Conference on, Date of Conference: 13-15 Oct. 2016, Sinaia, DOI: 10.1109/ICSTCC.2016.7790720 ISBN 978-1-5090-2721-7, IEEE
13. Luminita Moraru, Lucian Traian Dimitrievici, Antoaneta Ene, **Simona Moldovanu**, MAGNETIC FIELD GRADIENTS AND THEIR EFFECTS ON THE DIFFUSION TENSOR DERIVATE MEASURES, vol 2 Pages: 207-211, DOI: 10.21175/RadProc.2017.42, RAD Conference Proceedings, ISSN 2466-4626 RAD Conference Proceedings, vol. 2, pp. 207–211, 2017
14. Mihaela Andrei ; Simona **Moldovanu** ; Nicusor Nistor, Nonlinear Transformations Applied to Image Processing on the RGB LED Display, 2018 IEEE 24th International Symposium for Design and Technology in Electronic Packaging (SIITME), pp. 319 – 322,
15. Simona **Moldovanu**, Cristian Obreja, and Luminita Moraru , Threshold selection for classification of MR brain images by clustering method, AIP Conference Proceedings 1694, 040005 (2015); <https://doi.org/10.1063/1.4937257>, TIM14 Physics Conference - Physics without frontiers AIP Conf. Proc. 1694, 040005-1–040005-7; doi: 10.1063/1.4937257 <https://aip.scitation.org/doi/pdf/10.1063/1.4937257>
16. S. **Moldovanu**...L. Moraru, D. Bibicu, Mathematical Models used in Segmentation and Fractal Models of 2D Ultrasound Images, Viena, 9th International Conference on Mathematical Problems in Engineering, Aerospa, , AIP Conf. Proc. 1493, 678-683 (2012); doi: 10.1063/1.4765560
17. Dorin Bibicu, **Moldovanu** Simona, Luminita Moraru, Numerical evaluation of low frequency sound propagation in two layered media, 8th International Conference on Mathematical Modeling in Physical Science, Bratislava, Slovakia, August 26-29, 2019, IOP, vol. 1391, pp. 1-8, doi: 10.1088/1742-6596/1391/1/012032
18. Pana Lenuta, **Moldovanu** Simona, Moraru Luminita, BRAIN TISSUE EVALUATION BASED ON SKBLETON SHAPE AND SIMILARITY ANALYSIS BETWEEN HEMISPHERES, 8h International Conference on "Experiments/Process/System Modeling/Simution, 3-6 July, 2019 , Athena/Grecia, IC-EpsMsO series, vol, 2, pp. 60-67.

19. Felicia Anisoara Damian, Simona **Moldovanu**, Luminita Moraru , SKIN LESIONS ANALYSIS BASED ON SIGNIFICANT FEATURES SELECTION ALGORITHM .8h International Conference on "Experiments/Process/System Modeling/Simulation, 3-6 July, 2019 , Athena/Grecia, IC-EpsMsO series, vol, 2,pp. 380-387.
 20. Felicia Anisoara Damian, Simona **Moldovanu**, Luminita Moraru, Color histogram analysis for skin lesions discrimination, 19th International Multidisciplinary Scientific GeoConference SGEM 2019, Viena/Austria, 9-11 Decembrie, MICRO AND NANO TECHNOLOGIES ADVANCES IN BIOTECHNOLOGY, GREEN BUILDINGS TECHNOLOGIES AND MATERIALS GREEN DESIGN AND SUSTAINABLE ARCHITECTURE , Vol.19, pp. 75-82
 21. Pana Lenuta, **Moldovanu** Simona, Moraru Luminita, USING GREY-SCALE HIT-OR-MISS TRANSFORM FOR DETECTION OF ISOLATED FOREGROUND PIXELS IN CEREBRAL RMN DATASETS, 19th International Multidisciplinary Scientific GeoConference SGEM 2019, Viena/Austria, 9-11 Decembrie, MICRO AND NANO TECHNOLOGIES ADVANCES IN BIOTECHNOLOGY, GREEN BUILDINGS TECHNOLOGIES AND MATERIALS GREEN DESIGN AND SUSTAINABLE ARCHITECTURE Vol.19, pp. 229-236
 22. Simona **Moldovanu**, Diana Stefanescu, Felicia Damian, Watermarking skin lesion digital color images based on channels, 2020 24th International Conference on System Theory, Control and Computing (ICSTCC), **DOI: 10.1109/ICSTCC50638.2020.9259631** ,2020 IEEE, pp. 933-936
 23. S Moldovanu, F A (Damian) Michis and L Moraru, An invisible DWT watermarking algorithm using noise removal with application to dermoscopic images, Journal of Physics: Conference Series 1730 (2021) 012010 IOP Publishing doi:10.1088/1742-6596/1730/1/012010, IC-MSQUARE 2020,
 24. S. **Moldovanu**, F.A. Damian, L. Moraru, A kNN approach for melanoma diagnosis based on color cluster features, Proceeding of the 3rd International Conference on Advances in Signal Processing and Artificial Intelligence (ASPAI' 2020), 17-19 November 2021, Porto, Portugal
 25. S. **Moldovanu**, L. Pana, L. Moraru, 3D volume reconstruction of brain images for common diseases of aging, Proceeding of the 3rd International Conference on Advances in Signal Processing and Artificial Intelligence (ASPAI' 2020), 17-19 November 2021, Porto, Portugal
 26. F.A. Damian, S. **Moldovanu**, , L. Moraru , SKIN LESIONS ASYMMETRY ESTIMATION USING ARTIFICIAL NEURAL NETWORKS, 2021 25th International Conference on System Theory, Control and Computing (ICSTCC), 20-23 Oct. 2021, IEEE, **DOI: 10.1109/ICSTCC52150.2021.9607133**
 27. Pana, S. **Moldovanu**, , L. Moraru , Statistical Filters for Processing and Reconstruction of 3D Brain MRI, 2021 25th International Conference on System Theory, Control and Computing (ICSTCC), 20-23 Oct. 2021, IEEE, **DOI: 10.1109/ICSTCC52150.2021.9607186**
 28. Andreea-Monica Dinca Lazarescu, Simona **Moldovanu**; Luminita Moraru, Discret Wavelet Fingerprint Features for ANNs Classification Method, .17-18 November 2022, E-Health and Bioengineering Conference (EHB) . Conference Location: Iasi, Romania, IEEE, <https://ieeexplore.ieee.org/document/9991412>
 29. Iulia-Nela Anghelache Nastase; Simona **Moldovanu**; Luminita Moraru, Improved Classification of Benign and Malignant Breast Lesions Based on Contrast Manipulation and Gradient Map, 17-18 November 2022, E-Health and Bioengineering Conference (EHB) . Conference Location: Iasi, Romania, IEEE, <https://ieeexplore.ieee.org/document/9991583>
 30. Felicia-Anisoara Damian; Simona **Moldovanu**; Luminita Moraru, Melanoma Detection using a Random Forest Algorithm, Publication Year: 2022, Page(s):1 – 4, : 17-18 November 2022, E-Health and Bioengineering Conference (EHB) .Conference Location: Iasi, Romania, IEEE, <https://ieeexplore.ieee.org/document/9991668>
 31. Lenuta Pana; Simona **Moldovanu**; Luminita Moraru
3D Brain Tumor Volume Reconstruction and Quantification using MRI Multi-modalities Brain Images: 17-18 November 2022, E-Health and Bioengineering Conference (EHB) .Conference Location: Iasi, Romania, IEEE, <https://ieeexplore.ieee.org/document/9991708>
-

32. Andreea-Monica Dincă Lăzărescu, Simona **Moldovanu**, Luminita Moraru, Comparison Between the Wavelet Transforms Used For Parameters Extraction in Digital Fingerprints , International Symposium & International Student Workshop on Interdisciplinary Mathematics in the CiTi areas, 27-28.06.2022 , <https://www.isimconference.eu/>
33. Iulia-Nela Anghelache Nastase, Simona **Moldovanu**, Luminita Moraru, Mathematical Spatial Domain-Based Approach for Quality Assessment of Multi-Exposed Breast Images, International Symposium & International Student Workshop on Interdisciplinary Mathematics in the CiTi areas, 27-28.06.2022 , <https://www.isimconference.eu/>
34. Mihaela Miron; Simona **Moldovanu**; Anisia Luiza Culea-Florescu, A Multi-Layer Feed Forward Neural Network for Breast Cancer Diagnosis from Ultrasound Images, 26th International Conference on System Theory, Control and Computing (ICSTCC), 19-21 October 2022, <https://ieeexplore.ieee.org/document/9931772>
35. Mihaela Miron; Anisia Culea-Florescu; Simona Moldovanu Diabetic Retinopathy Image Classification Using Machine Learning and Local Binary Patterns Features, Publisher: IEEE, International Symposium on Electrical and Electronics Engineering (ISEEE), 26-28 October 2023, Galati, Romania <https://ieeexplore.ieee.org/abstract/document/10310398>
36. Simona Moldovanu, Sorin Pavel and Dorel Aiordachioaie, First Order Features Extraction from Thermal Images for Human State Recognition, Publisher: IEEE, International Symposium on Electrical and Electronics Engineering (ISEEE), 26-28 October 2023, Galati, Romania https://www.researchgate.net/publication/375626622_First_Order_Features_Extraction_from_Thermal_Images_for_Human_State_Recognition
37. Sorin Pavel; Simona Moldovanu; Dorel Aiordachioaie Emotion Recognition in Human Thermal Images with Artificial Intelligence Technology, Publisher: IEEE, 2023 IEEE 28th International Conference on Emerging Technologies and Factory Automation (ETFA) 12-15 September 2023, Conference Location: Sinaia, Romania <https://ieeexplore.ieee.org/document/10275377>
38. Simona Moldovanu; Mihaela Miron; Anisia Culea-Florescu Exploiting hybrid features extracted from color spaces of dermoscopic images, Publisher: IEEE, 2023 IEEE 28th International Conference on Emerging Technologies and Factory Automation (ETFA) 12-15 September 2023, Conference Location: Sinaia, Romania <https://ieeexplore.ieee.org/document/10275594>
39. Miron Mihaela; Anisia Luiza Culea-Florescu; Simona Moldovanu, A Convolutional Neural Network for skin lesion classification in Dermoscopic Images using discrete wavelet transform, Publisher: IEEE, 2023 European Control Conference (ECC), 13-16 June 2023, Bucharest, Romania. <https://ieeexplore.ieee.org/document/10178364>

Anexa 5. Articole BDI

1. **S. Moldovanu**, L. Moraru, Analysis of Small Tumours in Ultrasound Breast Echography, Annals of the University of Craiova-Mathematics and Computer Science Series , pag 138-161, vol 37, No 3, (2010) ISSN:1223-6934 <http://inf.ucv.ro/~ami/index.php/ami/issue/view/60/showToc>
2. **S. Moldovanu**, L. Moraru, De-noising Kidney ultrasound analysis using Haar, Journal of Science and Arts, Year 10, No. 2 (13), pp. 365-370, (2010) ISSN:1844-9581 <http://www.josa.ro/ro/index.html?http%3A/www.josa.ro/ro/josa.html>
3. **S. Moldovanu**, L. Moraru, M.C. Nicolae, Comparative Analysis of Ultrasound Image using Gray Level, Annals of Dunarea de Jos University, Fascicle II, Anul II, (XXXIII), nr 2, 145-151, 2010, ISSN:1844-9581, http://www.phys.ugal.ro/Annals_Fascicle_2/Year2010/index2.htm#L11
4. L. Moraru, **S. Moldovanu**, M.C. Nicolae, Segmentation of the Colon Tumors Based on Watershed in Ultrasound Image, Annals of Dunarea de Jos University, Fascicle II, Anul II (XXXIII), nr 2, pp. 152-156, 2010, ISSN:1844-9581, http://www.phys.ugal.ro/Annals_Fascicle_2/Year2010/index2.htm#L11
5. D. Bibicu, **S. Moldovanu**, L. Moraru, Automatic System for Analysis of metabolic Disease, B+, JOSA, (2011), No. 3(16), pp. 347-352, ISSN:1844-9581 http://www.icstm.ro/DOCS/josa/josa_2011_3/c.04_Dorin_Bibicu.pdf,
6. D. Bibicu, **S. Moldovanu**, L. Moraru, Denoising the Echographic Images using Fourier Transform, Annals of Dunarea de Jos University, Fascicle II, Anul III (XXXIV), nr 2, pp. 66-72, 2011, ISSN:1844-9581, http://www.phys.ugal.ro/Annals_Fascicle_2/Year2011/Summary%20Annals%20Fasc_II_2011_No_1.htm
7. **S. Moldovanu**, L. Moraru, Biomedical Image processing in Matlab Application, Annals of Dunarea de Jos University, Fascicle II, Anul I (XXXII), nr 2, pp. 127-133, 2009, Galati, Romania, ISSN 1844 – 9581, http://www.phys.ugal.ro/Annals_Fascicle_2/Year2009/summary%20Annals%20Fasc%202_2009.htm#L2
8. D. Bibicu, **S. Moldovanu**, L. Moraru, De-noising of Ultrasound Images from Cardiac Cycle Using Complex Wavelet Transform with Dual Tree, Journal of Engineering Studies and Research – Volume 18 (2012) No.1, pp.24-30, ISSN:2068-7559 <http://pubs.ub.ro/?pg=revues&rev=jesr&num=201201&vol=18&aid=3590>
9. **S. Moldovanu**, L. Moraru, D. Bibicu, Monitoring Breast Tumors Using Thresholding and Interpolation Methods in Ultrasound Images, Annals of Dunarea de Jos University, Fascicle II, Anul III (XXXIV), nr 2, 2011, Galati, Romania, pp.167-174, ISSN:2067-2071 http://www.phys.ugal.ro/Annals_Fascicle_2/Year2011/Summary%20AnnalsFasc_II_2011_No_2.htm

10. **S. Moldovanu**, L. Morau, D. Bibicu, Bio-Structural Analysis of Breast Using Fractal Analysis in Ultrasound Images, Annals of Dunarea de Jos University Fascicle II, Anul III (XXXIV), nr 1, 2011, pp.66-72, ISSN 2067-2071 http://www.phys.ugal.ro/Annals_Fascicle_2/Year2011/Summary%20Annals%20Fasc_II_2011_No_1.htm
11. **S. Moldovanu**, L. Moraru, D. Bibicu Computerized Decision Support in Liver Steatosis Investigation, International Journal of Biology and Biomedical Engineering, Issue 1, Vol. 6, pp. 69-76, 2012, ISSN:1752-6426, <http://www.naun.org/journals/bio>
12. **S. Moldovanu**, Mirela Pungă (Vișan), Luminița Moraru, Breast Images Despeckling Using Entropy Filter and Tissue Phantoms Simulation, Advanced Science, Engineering and Medicine, Adv. Sci. Eng. Med. Vol. 5, pp. 1–6, 1144-1149 (2013) (www.aspbs.com/ase) 2013, <http://dx.doi.org/10.1166/ase.2013.1416>.
13. **S. Moldovanu**, L. Moraru, D. Bibicu, Left Ventricle Segmentation Using Active Contour Model, The Annals of Dunarea de Jos University, Technologies in Machine Building, Editura Galați University Press. pp. 59-63, 2012, (XXXV) ISSN:1221-4566, http://www.cmrs.ugal.ro/TMB/2012/V1/L09_Moldovanu.pdf
14. Luminita Moraru, Simona Moldovanu, Mirela Punga Visan, Optimization In Breast Lesions Detection Via Integrated Statistical Approach, JOURNAL OF SCIENTIFIC RESEARCH AND REPORTS 7(JSRR) , Journal of Scientific Research & Reports 2(1): 460-473, 2013
15. **S. Moldovanu**, L. Moraru, A New Algorithm for the Sagittal Axis Identification in Neuroimages, Annals Of "Dunarea De Jos" University Of Galati, Mathematics, Physics, Theoretical Mechanics Fascicle li, Year V (Xxxvi) 2014, Pp. 10-16.
16. **S. Moldovanu**, M. Pungă, L. Moraru, Detection of dementia diseases using histogram in spatial domain, Annals Of "Dunarea De Jos" University Of Galati Mathematics, Physics, Theoretical Mechanics Fascicle li, Year V (Xxxvi) 2014, Pp.10-16.
17. L. Moraru, **S. Moldovanu**, C. D. Obreja, A Survey Over Image Quality Analysis Techniques for Brain MR Images, Int Journal of Radiology 2015 June 2(1): 29-37, review, doi:10.17554/j.issn.2313-3406.2015.02.5
18. **S. Moldovanu**, L. Moraru, D. Ștefănescu, Evaluation of the Entropy Based Contrast Enhancement Methods for MRI Images The Annals Of "Dunărea De Jos" University Of Galati Fascicle lii, 2016, Vol. 39, No. 2, Issn 2344-4738, Issn-L 1221-454x Electrotechnics, Electronics, Automatic Control, Informatics <http://www.ann.ugal.ro/eeai/index.html>
19. Dorin Bibicu, Luminita Moraru, Simona Moldovanu Thyroid Nodules Investigation Based On An Artificial Neural Network, ANNALS OF "DUNAREA DE JOS" UNIVERSITY OF GALATI MATHEMATICS, PHYSICS, theoretical mechanics, FASCICLE II, YEAR VIII (XXXIX) 2017, No. 1, pp.51-62.
20. **Simona Moldovanu**, Luminița Moraru, Diana Ștefănescu, Edge-preserving Filters in Boundary Options Context, ANNALS OF "DUNAREA DE JOS" UNIVERSITY OF GALATI, MATHEMATICS, PHYSICS, theoretical mechanics, FASCICLE II, YEAR VIII (XXXIX) 2017, No. 1, pp.51-55
21. **Dorin Bibicu**, **Luminita Moraru**, Simona Moldovanu, Local or External Databases in Android Programming. A Practical Comparative Study, Fascicle I. Economics and Applied Informatics Years XXIV – no1/2018, http://www.eia.feaa.ugal.ro/images/eia/2018_1/Bibicu_Moraru_Moldovanu.pdf, pp.29-32
22. **Simona Moldovanu**, Felicia-Anisoara Damian, Luminita Moraru, A new algorithm for melanomas contour detection based on morphological operators, ANNALS OF THE UNIVERSITY OF CRAIOVA Series: Automation, Computers, Electronics and Mechatronics, Vol. 14 (41), No. 2, 2018
23. **Simona Moldovanu**, Luminita Moraru, Dorin Bibicu, Face detection with Euler number algorithm based on morphological operators, ANNALS OF "DUNAREA DE JOS" UNIVERSITY OF GALATI MATHEMATICS, PHYSICS, theoretical mechanics , FASCICLE II, YEAR X (XLI) 2018, No. 1, pp. 57-64
24. Maria (Ștan) Necula, Dorin Bibicu, **Simona Moldovanu**, Luminita Moraru, Performance analysis of an array of sensors based on the direction of arrival algorithm, ANNALS OF "DUNAREA DE JOS" UNIVERSITY OF GALATI MATHEMATICS, PHYSICS, theoretical mechanics , FASCICLE II, YEAR X (XLI) 2018, No. 1, pp.65-69
25. **Simona Moldovanu**, Luminita Moraru, Dorin Bibicu, Automatic System for Investigation the Correlation of Leaver Features, Proceeding of the 1st WSEAS International Conference on Environment, Economics, Energy, Devices, Systems, Communications, Computers, Mathematics, 2011, pp. 74-78
26. **S. Moldovanu**, D. Bibicu, L. Moraru, Comparative Study of Density Distribution of Microbules between Frames end-systole and end-diastole inside cavity left ventricle, Journal of Engineering Studies and Research – Volume 18 (2012) No. 3, pp. 87-91
27. **S. Moldovanu**, L. Moraru, V. Ștefănescu, M. E. Georgescu, The Hough Transform and ahe FSIM Similarity Index for the Sagittal Axis Identifica, ANNALS OF "DUNAREA DE JOS" UNIVERSITY OF GALATI, MATHEMATICS, PHYSICS, theoretical mechanics, FASCICLE II, YEAR VI (XXXVII) 2014, Special Issue, pp. 51-59
28. Luminița Moraru, Cristian-Dragoș Obreja, Georgescu E. Monica, **Simona Moldovanu**, Characterization of Vascular Tree: Responses of Blood Pressure and Flow to Branching Patterns with Various Geometries, ANNALS OF "DUNAREA DE JOS" UNIVERSITY OF GALATI, MATHEMATICS, PHYSICS, theoretical mechanics, FASCICLE II, YEAR VI (XXXVII) 2014, Special Issue, pp. 30-37
29. Luminița Moraru, Felicia Anişoara Damian, **Simona Moldovanu**, Analysis of common melanomas and nevi

- using geometrical features, ANNALS OF "DUNAREA DE JOS" UNIVERSITY OF GALATI, MATHEMATICS, PHYSICS, theoretical mechanics, FASCICLE II, YEAR XI (XLII) 2019, No. 1/pp.27-33
30. Luminița Moraru, Simona **Moldovanu**, Pana Lenuta, Edges identification based on the derivative filters and fractal dimension, ANNALS OF "DUNAREA DE JOS" UNIVERSITY OF GALATI, MATHEMATICS, PHYSICS, theoretical mechanics, FASCICLE II, YEAR XI (XLII) 2019, No. 1/pp.34-42
31. Lenuța Pană, Simona **Moldovanu**, Luminița Moraru, Differentiation of brain metastases in MRI image using the first- and second-order statistical, ANNALS OF "DUNAREA DE JOS" UNIVERSITY OF GALATI MATHEMATICS, PHYSICS, theoretical mechanics, FASCICLE II, YEAR XII (XLIII) 2020, No. 1
DOI: <https://doi.org/10.35219/ann-ugal-math-phys-mec.2020>, pp. 13-19
32. Felicia Anişoara Damian, Simona **Moldovanu**, Luminița Moraru Comparison of distance metric measures in differentiation of non-dermoscopic skin lesions
ANNALS OF "DUNAREA DE JOS" UNIVERSITY OF GALATI, MATHEMATICS, PHYSICS, theoretical mechanics, FASCICLE II, YEAR XII (XLIII) 2020, No. 1 DOI: <https://doi.org/10.35219/ann-ugal-math-phys-mec.2020>, pp 20-27
33. Felicia Anisoara Damian, Simona **Moldovanu**, Luminita Moraru Color space influence on ANN skin lesion classification using statistics texture features, ANNALS OF "DUNAREA DE JOS" UNIVERSITY OF GALATI, MATHEMATICS, PHYSICS, theoretical mechanics, FASCICLE II, YEAR XIII (XLIV) 2021, No. 1, pp. 53-62
34. Luminita Moraru, Simona **Moldovanu**, Andreea-Monica (Lăzărescu) Dincă, Feed-Forward Back Propagation Network for prediction of diabetic retinopathy disorder, ANNALS OF "DUNAREA DE JOS" UNIVERSITY OF GALATI, MATHEMATICS, PHYSICS, theoretical mechanics
FASCICLE II, YEAR XIII (XLIV) 2021, No. 1, pp. 67-74
35. Lenuța Pană, Simona **Moldovanu**, Luminița Moraru, 3D volume reconstruction of brain tissues using nonlinear filters, k-means clustering and Bland-Altman analysis, ANNALS OF "DUNAREA DE JOS" UNIVERSITY OF GALATI, MATHEMATICS, PHYSICS, theoretical mechanics, FASCICLE II, YEAR XIII (XLIV) 2021, No. 1, pp. 67-74
36. S. **Moldovanu**, L. Moraru, A. Biswas, Texture Features that Characterize 2D-Echocardiography—A Review, Advanced Science Letters, Vol. 5, pp. 1–10, 2012, ISSN 1936-6612, doi:10.1166/asl.2012.3671, <http://www.aspbs.com/science/contents-science172012.htm>.
37. Simona **Moldovanu**, Iulia-Nela Anghelache Nastase, Mihaela Miron, Luminita Moraru Performance comparison of two non-parametric classifiers for classification using geometric features, ANNALS OF "DUNAREA DE JOS" UNIVERSITY OF GALATI MATHEMATICS, PHYSICS, theoretical mechanics
FASCICLE II, YEAR XIV (XLV) 2022, No. 2, DOI: <https://doi.org/10.35219/ann-ugal-math-phys-mec.2022.2.04>
38. G. Tabacaru, S. Moldovanu, and M. Barbu, "Algorithm for Analyzing the Microenvironment Surrounding Melanoma", Syst. Theor. Control Comput. J., vol. 3, no. 2, pp. 15–19, Dec. 2023, doi: 10.52846/stccj.2023.3.2.52. <https://stccj.ucv.ro/index.php/stccj/article/view/52>
39. F. Batog, S. Moldovanu, "The monitoring of burning buildings with convolutional neural network", Syst. Theor. Control Comput. J., vol. 3, no. 2, pp. 1–8, Dec. 2023, doi: 10.52846/stccj.2023.3.2.50. <https://stccj.ucv.ro/index.php/stccj/article/view/50>
40. Andreea-Monica Dincă Lăzărescu, Simona Moldovanu, Luminita Moraru Retina image assessment for microstructural difference detection, ANNALS OF "DUNAREA DE JOS" UNIVERSITY OF GALATI MATHEMATICS, PHYSICS, THEORETICAL MECHANICS, FASCICLE II, YEAR XV (XLVI) 2023, No. 1
DOI: <https://doi.org/10.35219/ann-ugal-math-phys-mec.2023>
<https://www.gup.ugal.ro/ugaljournals/index.php/math/article/view/6234>

Anexa 6 Participări la 1. S.Moldovanu , L. Moraru, De-noising kidney ultrasound analysis using Haar wavelets, The 2nd, National conferințe naționale și Conference and International participation on Applied Sciences in Enviromental and Material Studies, PAG 14, 28-internaționale, cele marcate cu 30 Aprilie 2010, Târgoviște, România, poster*

* au fost publicate 2. **S.Moldovanu** , L. Moraru, Tumors Investigation in Breast Ultrasound Image using Fractal Analysis, Conferinta Nationala de Fizică, 23-25 Sept. 2010, Iasi, România, poster.*

3. **S. Moldovanu**, D. Bibicu, L. Moraru, Classification Features of US Images Liver Extracted with Co-occurrence Matrix Using the Nearest Neighbor Algorithm, Conferinta Internationala - AMPAS, May 12-15 2011, Antalya , Turcia, poster*

4. L.Moraru, **S.Moldovanu**, M.C.Nicolae, De-noising ultrasound Images of Colon Tumours Using Daubechies Wavelets Transform ,Physics Conference TIM-10, 25-27 Nov.2010. Timișoara, România, poster.*

5. **S. Moldovanu**, D. Bibicu, L. Moraru, Comparative Study of Density Distribution of Microbules between Frames end-systole and end-diastole inside cavity left ventricle, Conferinta Internationala - OPROTEH 2011, 24-26 May 2011, Bacău, România, Oral presentation.*

6. D. Bibicu, **S. Moldovanu**, L. Moraru, De-noise the Utrasound Images from Cardiac Cycle with Complex Wavelet Transform with Dual Tree, Conferinta Internationala - OPROTEH 2011, 24-26 mai 2011, Bacău, România, Oral presentation.*

7. D. Bibicu, **S. Moldovanu**, L. Moraru, Automatic System for Analysis of Metabolic Disease, Conferinta Internationala - JSJR 2011, 24-30 iulie 2011, Târgoviște, România. *

8. **S. Moldovanu**, L. Moraru, D. Bibicu, Automatic System for Analysis of Metabolic Disise, Conferinta Internatională - WSEAS 2011, 27-29 octombrie 2011, Drobeta Turnu Severin, România, poster*

9. **S. Moldovanu**, D. Bibicu, L. Moraru, Textural methods for myocardial tissue characterization , Conferinta Internationala - Research Quality in Doctoral School Increased Industrial And International Visibility 2011, 13-14 iulie 2011, Galați, România, poster.

10. **S. Moldovanu**, D. Bibicu, L. Moraru, Liver Ultrasound Classification by Using Fractal Dimension of Edge, Physics Conference, TIM-2011, 24-27 Nov. 2011, Timișoara, România, poster*

11. D. Bibicu, L. Moraru, **S. Moldovanu**, Automatic Invetigation of the Thyroid Nodules from US Images, Physics Conference, TIM-2011, 24-27 Nov. 2011, Timișoara, România, poster*

12. **S. Moldovanu**, D. Bibicu, L. Moraru, Comparative study of myocardium tissue based on gradient features, E-Health and Bioengineering Conference (Ehb) 24-26 Nov. 2011, Iași, România, poster*

13. D. Bibicu, **S. Moldovanu**, L. Moraru, M. C. Nicolae, Automatic system for breast cysts disease investigation based on the textural parameters analysis, E-Health and Bioengineering Conference (EHB), 24-26 Nov. 2011. Iași, România, poster.

14. L. Moraru, **S.Moldovanu**, D. Bibicu, Mathematical Models used in Segmentation and Fractal Models of 2D Ultrasound Images, International Conference on Mathematical Problem in Engineering, Aerospace and Science, 10-14, July, 2012, Vienna University of Technology, Vienna, Austria, Oral presentation *

15. L. Moraru, **S. Moldovanu**, A. Ene, Enhancing performance of image segmentation through feature Extraction. The 8th General Conference of Balkan Physical Union, 5-7 July, 2012, Constanța, România, poster.

16. **S. Moldovanu**, L. Moraru, D. Bibicu, Engine Engine Number Stamping Characterized by Zernike Moment, International Conference Artcast, 18-19 May, 2012, Galați, Romania, poster.*

17. M. Visan Punga, **S. Moldovanu**, L. Moraru, Structural Similarity Analisys for Brain MR Image Assessment, TIM13, 23 November 2013, Timisoara, Romania, Oral presentation.*

18. **S.Moldovanu**, L. Moraru, A New Algorithm for the Sagittal Axis Identification in Neuroimages, Conferința Științifică a Școlilor Doctorale din UDJ Galați 2014, Galați, 15-16 Mai 2014

19. **S. Moldovanu**, M.Punga, L. Moraru, Detection of Dementia Diseases using Histogram in Spatial Domain, Conferința Științifică a Școlilor Doctorale din UDJ Galați 2014, Galați, 15-16 Mai 2014

20. **S. Moldovanu**, M.Visan , L.Moraru, Evaluation of outliers in acquired brain MR images, International Conference on Mathematical Modeling in Physical Sciences, Madrid, Spain, 28-31 August 2014.

21. M. Visan, **S. Moldovanu**, L.Moraru, MR Image Intensity Inhomogeneity Correction, International Conference on Mathematical Modeling in Physical Sciences, Madrid, Spain, 28-31 August 2014.

22. **S. Moldovanu**, C. Obreja, L. Moraru, Thresholding Selection for Classification of MR Brain Image by Clustering Method, TIM14 Physics Conference – Physics without frontiers, 20th – 22nd of November, Timisoara, Romania <http://www.timconference.com>

23. L.Moraru, C. Obreja, **S. Moldovanu**, Assessment of Vessel Diameters for MR Brain Angiography Processed Images, TIM14 Physics Conference – Physics without frontiers 20th – 22nd of November, Timisoara, Romania, <http://www.timconference.com/>

24. **S.Moldovanu**, L. Moraru, Skull stripping segmentation using irrational filter and binary image. UGAL INVENT

- 2014 Exhibition and Conferences is the first event promoted by the Dunarea de Jos University of Galati, Romania 8-10 October, 2014, <http://invent.ugal.ro/index.html>
25. **S. Moldovanu**, L.Moraru, V. Ștefănescu, M. E. Georgescu, Hough Transform and Similarity Index for the Sagittal Axis Identification, Scientific Conference of Doctoral Schools from UDJ Galati, CSSD-UDJG 2015, Third Edition, 4th-5th of June 2015, Galati, Romania, <http://www.cssd-udjg.ugal.ro/index.php/registration>
26. C.Obreja, **S. Moldovanu**, V. Ștefănescu, L. Moraru, Entropic characterization of random cerebral bio structures in MR images, Scientific Conference of Doctoral Schools from UDJ Galati, CSSD-UDJG 2015, Third Edition, 4th-5th of June 2015, Galati, Romania, <http://www.cssd-udjg.ugal.ro/index.php/registration>
27. Luminita Moraru, Lucian Dimitrievici, **Simona Moldovanu**, Entropic characterization of random cerebral structures in MR images, System Theory, Control and Computing (ICSTCC), 2016 20th International Conference on, Date of Conference: 13-15 Oct. 2016, Sinaia, DOI: 10.1109/ICSTCC.2016.7790720
28. Luminita Moraru, Lucian Traian Dimitrievici, Antoaneta Ene, **Simona Moldovanu** "MAGNETIC FIELD GRADIENTS AND THEIR EFFECTS ON THE DIFFUSION TENSOR DERIVATIVE MEASURES" has been accepted for publication in the Proceedings of RAD 2017 Conference.
29. **Simona Moldovanu**, Luminița Moraru, Diana Ștefănescu, Edge-preserving Filters in Boundary Options Context, SCIENTIFIC CONFERENCE OF DOCTORAL SCHOOLS SCDS-UDJG 2017 The Fifth Edition, GALAȚI, 8th -9th of June 2017,
30. Lucian Traian Dimitrievici, **Simona Moldovanu**, Luminița Moraru, First order statistics-based features selection for clustering using Gaussian Mixture Model , CSSD-UDJG 2018, 6th Edition, 7th and 8th of June 2018, <http://www.cssd-udjg.ugal.ro/>
31. Maria (Stan) Necula, Dorin Bibicu, **Simona Moldovanu**, Luminita Moraru, Performance analysis of an array of sensors based on the direction of arrival algorithm, , CSSD-UDJG 2018, 6th Edition, 7th and 8th of June 2018, <http://www.cssd-udjg.ugal.ro/>
32. **Simona Moldovanu**, Luminița Moraru, Bibicu Dorin, Face detection with Euler number algorithm based on morphological operators , CSSD-UDJG 2018, 6th Edition, 7th and 8th of June 2018, <http://www.cssd-udjg.ugal.ro/>
33. Mihaela Andrei ; **Simona Moldovanu** ; Nicusor Nistor, Nonlinear Transformations Applied to Image Processing on the RGB LED Display, 2018 IEEE 24th International Symposium for Design and Technology in Electronic Packaging (SIITME), pp. 319 – 322, Iasi 26-28 octombrie 2018
<https://ieeexplore.ieee.org/search/searchresult.jsp?queryText=siitme%202018&highlight=true&returnFacets=ALL&returnType=SEARCH&searchWithin=moldovanu>
34. Iulia-Nela Năstase (Anghelache), **Simona Moldovanu**, Luminița Moraru, Automated segmentation and morphological features extraction for mass detection in breast US images, 10th Edition of SCDS-UDJG, 9th and 10th of June 2022, http://www.cssd-udjg.ugal.ro/files/2022/1/Program_detaliat_al_conferintei_2022.pdf
35. Andreea-Monica Dincă (Lăzărescu), **Simona Moldovanu**, Luminita Morar, A fingerprint matching algorithm using the combination of edge features and Convolution Neural Networks , 10th Edition of SCDS-UDJG, 9th and 10th of June 2022, http://www.cssd-udjg.ugal.ro/files/2022/1/Program_detaliat_al_conferintei_2022.pdf
36. Mihaela Miron; **Simona Moldovanu**; Anisia Luiza Culea-Florescu, A Multi-Layer Feed Forward Neural Network for Breast Cancer Diagnosis from Ultrasound Images, 26th International Conference on System Theory, Control and Computing (ICSTCC), 19-21 October 2022, <https://ieeexplore.ieee.org/document/9931772>, Publisher: IEEE, Sinaia, Romania.
37. Andreea-Monica Dinca Lazarescu, **Simona Moldovanu**; Luminita Moraru, Discret Wavelet Fingerprint Features for ANNs Classification Method, DOI: 10.1109/EHB55594.2022.9991412, Published in: 2022 E-Health and Bioengineering Conference (EHB), 2022,Page(s):01 – 04, **Publisher:** IEEE, .17-18 November 2022, Conference Location: Iasi, Romania,
38. Iulia–Nela Anghelache Nastase; **Simona Moldovanu**; Luminita Moraru, Improved Classification of Benign and Malignant Breast Lesions Based on Contrast Manipulation and Gradient Map, DOI: 10.1109/EHB55594.2022.9991583, 2022,Page(s):01 - 04 Published in: 2022 E-Health and Bioengineering Conference (EHB), **Publisher:** IEEE Date of Conference: 17-18 November 2022, Conference Location: Iasi, Romania,
39. Felicia-Anisoara Damian; **Simona Moldovanu**; Luminita Moraru, Melanoma Detection using a Random Forest Algorithm, Publication Year: 2022,Page(s):1 – 4, DOI: 10.1109/EHB55594.2022.9991583, Published in: 2022 E-Health and Bioengineering Conference (EHB), **Publisher:** IEEE Date of Conference: 17-18 November 2022, Conference Location: Iasi, Romania,
40. Lenuta Pana; **Simona Moldovanu**; Luminita Moraru
3D Brain Tumor Volume Reconstruction and Quantification using MRI Multi-modalities Brain Images
Publication Year: 2022,Page(s):1 – 4, DOI: 10.1109/EHB55594.2022.9991708, Published in: 2022 E-Health and Bioengineering Conference (EHB), **Publisher:** IEEE Date of Conference: 17-18 November 2022, Conference Location: Iasi, Romania,
41. Mihaela Miron; Anisia Culea-Florescu; **Simona Moldovanu** Diabetic Retinopathy Image Classification Using Machine Learning and Local Binary Patterns Features, Publisher: IEEE, International Symposium on Electrical and Electronics Engineering (ISEEE), 26-28 October 2023, Galati, Romania, <https://www.iseee.ugal.ro/2023/>

42. Simona Moldovanu, Sorin Pavel and Dorel Aiordachioaie, First Order Features Extraction from Thermal Images for Human State Recognition, Publisher: IEEE, International Symposium on Electrical and Electronics Engineering (ISEEE), 26-28 October 2023, Galati, Romania, <https://www.iseee.ugal.ro/2023/>
34. Sorin Pavel; Simona Moldovanu; Dorel Aiordachioaie Emotion Recognition in Human Thermal Images with Artificial Intelligence Technology, 2023 IEEE 28th International Conference on Emerging Technologies and Factory Automation (ETFA) 12-15 September 2023, Conference Location: Sinaia, Romania, <https://2023.ieee-etfa.org/>
44. Simona Moldovanu; Mihaela Miron; Anisia Culea-Florescu Exploiting hybrid features extracted from color spaces of dermoscopic images, Publisher: IEEE, 2023 IEEE 28th International Conference on Emerging Technologies and Factory Automation (ETFA) 12-15 September 2023, Conference Location: Sinaia, Romania, <https://2023.ieee-etfa.org/>
45. Miron Mihaela; Anisia Luiza Culea-Florescu; Simona Moldovanu, A Convolutional Neural Network for skin lesion classification in Dermoscopic Images using discrete wavelet transform, Publisher: IEEE, 2023 European Control Conference (ECC), 13-16 June 2023, Bucharest, Romania. <https://ieeexplore.ieee.org/document/10178364>
46. Dorin Bibicu, Anisia Florescu Culea, Simona Moldovanu, Luminita Moraru, 2D multiple waves scattering for active detection of a dummy human body in a low frequency range and for various boundary conditions. <https://www.icmsquare.net/index.php/program/schedule>
47. N. Anghelache Nastase, S. Moldovanu, L. Moraru, „Deep learning-based segmentation of breast masses using convolutional neural networks” - 12th International Conference on Mathematical Modeling in Physical Sciences(12th IC-MSQUARE), 28-31 august 2023, Belgrad, Serbia <https://www.icmsquare.net/index.php/program/schedule>

- Anexa 7 Premii.**
1. Premiul I pentru publicații, acordat în cadrul Proiectului POSDRU/159/1.5/S/138963 „Performanță sustenabilă în cercetarea doctorală și post doctorală - PERFORM”, 2015, Domeniul Științific.
 2. Premiul II, Scientific Conference of Doctoral Schools from UDJ Galati, CSSD-UDJG 2015, Third Edition, 4th-5th of June 2015, Section 4, Advanced Investigation Methods in Environment and Biohealth. Cu lucrarea “Hough Transform and Similarity Index for the Sagittal Axis Identification
 3. Premiul III, UGAL INVENT 2014 Exhibition and Conferences. The first event promoted by the Dunarea de Jos University of Galati, Romania 8-10 October, 2014, cu lucrarea “Skull stripping segmentation using irrational filter and binary image”
 4. Premiul I Workshop PhD Expert& Bilateral Project PHC Brâncuși NanoSurf 02, 23 July 2010, Analyse and monitoring of the cancer using fractal analysis methods of the ultrasound image.
 5. Articol premiat: Combining Sparse and Dense Features to Improve Multi-Modal Registration for Brain DTI Images Subprogram 1.1 - Resurse Umane - Premiarea rezultatelor cercetării - Articole, Competitia 2, 021 Rezultate evaluare Lista 1_partial 1- Cereri premiere depuse pentru articole publicate in anul 2020_08.10.2021
 6. Articol premiat Towards Accurate Diagnosis of Skin Lesions Using Feedforward Back Propagation Neural Networks, PN-III-P1-1.1- PRECISI-2021- 56191, Diagnostics, Subprogram 1.1 - Resurse Umane - Premiarea rezultatelor cercetării - Articole, Competitia 2021 Rezultate evaluare Lista 1_partial 1- Cereri premier e depuse pentru articole publicate in anul 2021_actualizat 10.11.2021
 7. S. **Moldovanu**, Premiu de excelenta pentru rezultatele excelente in activitatea de cercetare in cadrul universtatii Dunarea de Jos Galati, CNFIS-FDI-2021-0443, Măsurile active de creștere și eficientizare a capacității de cercetare, dezvoltare, inovare și transfer tehnologic în Universitatea „Dunărea de Jos” din Galați CEREX-UDJG_2021
 8. Mentiune, Felicia Anisoara Damian, Simona **Moldovanu**, Luminita Moraru Color space influence on ANN skin lesion classification using statistics texture features, 9th Edition of CSSD-UDJG, 10th and 11th of June 2021, Galati, Romania
 9. Mentiune Luminita Moraru, Simona **Moldovanu**, Andreea-Monica (Lăzărescu) Dincă, Feed-Forward Back Propagation Network for prediction of diabetic retinopathy disorder., 9th Edition of CSSD-UDJG, 10th and 11th of June 2021, Galati, Romania
 10. Premiul I, Lenuța Pană, Simona **Moldovanu**, Luminița Moraru, 3D volume reconstruction of brain tissues using nonlinear filters, k-means clustering and Bland-Altman analysis, 9th Edition of CSSD-UDJG, 10th and 11th of June 2021, Galati, Romania.
 11. Best paper award, Statistical Filters for Processing and Reconstruction of 3D Brain MRI, 2021 25th International Conference on System Theory, Control and Computing (ICSTCC), 20-23 Oct. 2021, IEEE, S. **Moldovanu**, L. Pana, L. Moraru
 12. Premiere pentru articolul cu titlul "Texture anisotropy technique in brain degenerative diseases" a fost depusa folosind platforma electronica UDiManager disponibila la adresa <http://uefiscdi-direct.ro>. Cererea a primit numarul de inregistrare PN-III-P1-1.1-PRECISI-2018-26911, Autori: Moraru L., **Moldovanu S.**, Dimitrievici L. T.

13. Premiere pentru articolul cu titlul „Gaussian mixture model for texture characterization with application to brain DTI images”, Cererea a primit numarul de inregistrare PN-III-P1-1.1- PRECISI-2019- 32571, Autori Moraru
- 14.L., **Moldovanu** S., Dimitrievici L. T. Premiere articol CNFIS-FDI-2019-0063 Cercetarea de excelență din Universitatea „Dunărea de Jos” din Galați – pol al completivității și performanței – COMPETICER Științe ingineresti/Texture anisotropy technique in brain degenerative diseases/Moraru
15. Premiul II, Luminița, **Moldovanu** Simona, Dimitrievici Lucian Traian/NEURAL COMPUTING & APPLICATIONS, 2019, Conferința CSSD-UDJG 2019, Secțiunea 2 . Advanced investigation methods in environment and biohealth, cu articolul “Analysis of common melanomas and nevi using geometrical features”. Autori: Luminița Moraru, Felicia Anișoara Damian, S. **Moldovanu**
16. Premiul II la Conferința CSSD-UDJG 2019, Secțiunea 2 . Advanced investigation methods in environment and biohealth, cu articolul “Analysis of common melanomas and nevi using geometrical features”. Autori: Luminița Moraru, Felicia Anișoara Damian, S. **Moldovanu**
17. Mentiune la Conferința CSSD-UDJG 2019, Secțiunea 2 . Advanced investigation methods in environment and biohealth, cu articolul “Edges identification based on the derivative filters and fractal dimension”. Autori: Luminița Moraru, S. **Moldovanu**, L. Pană
18. Premiul II la Scientific Conference of Doctoral Schools SCDS-UDJG “Perspectives and challenges in doctoral research”, 8th Edition, “Dunarea de Jos” University of Galati, 18-19 of June 2020, cu articolul “Differentiation of Brain Metastases in MRI Image using the First and Second-Order Statistical Features”. Autori L. Pană, S. **Moldovanu**, L. Moraru
19. Mentiune la Scientific Conference of Doctoral Schools SCDS-UDJG “Perspectives and challenges in doctoral research”, 8th Edition, “Dunarea de Jos” University of Galati, 18-19 of June 2020, cu articolul “Comparison of distance metric measures in differentiation of nondermoscopic skin lesions”. Autori F. A. Damian, S. **Moldovanu**, L. Moraru
20. *J. Imaging* 2023 Outstanding Reviewer Award. The *J. Imaging* Editorial Board and Team would like to gratefully acknowledge our reviewers for checking the manuscripts submitted to *J. Imaging*.

Data

23.03.2024

Semnătura

