

IOSUD - UNIVERSITATEA „DUNĂREA DE JOS” DIN GALAȚI

Memoriul științific al studentului doctorand

MEMORIU ȘTIINȚIFIC

Drd. Năstase Iulia-Nela (Anghelache)

Studii de doctorat

Perioada: 1.10.2021-20.09.2025

Conducător științific: Prof.dr.ing Luminița Moraru

Domeniul de doctorat: INGINERIE INDUSTRIALĂ

Titlul tezei de doctorat: RETELE NEURONALE ȘI CONCEPTE DE ÎNVĂȚARE AUTOMATĂ PENTRU DEPISTAREA CANCERULUI DE SÂN

Activitate științifică

A. Lista de lucrări științifice (articole în reviste sau volume)

1. **Anghelache Nastase, Iulia-Nela**, Simona Moldovanu and Luminita Moraru, "Image moment-based features for mass detection in breast US images via machine learning and neural network classification models", MDPI, Inventions, Basel, Elveția, 7(2), 42, 2022;
2. **I.-N. A. Nastase**, S. Moldovanu, K. C. Biswas, and L. Moraru, "Role of inter- and extra-lesion tissue, transfer learning, and fine-tuning in the robust classification of breast lesions", Sci Rep, 14(1), p. 22754, 2024;
3. **Nastase Iulia-Nela Anghelache**, Simona Moldovanu, Luminita Moraru "Improved Classification of Benign and Malignant Breast Lesions Based on Contrast Manipulation and Gradient Map", 2022 E-Health and Bioengineering Conference (EHB), IEEE, Iasi, Romania, 2022;
4. **I. Nastase Anghelache**, S. Moldovanu, and L. Moraru, "Optimization of Breast Cancer Classification with Octave Bands Analysis", 2024 28th International Conference on System Theory, Control and Computing (ICSTCC), Sinaia, Romania, 2024;
5. **I.-N. Anghelache Nastase**, S. Moldovanu, L. Moraru, „Deep learning-based segmentation of breast masses using convolutional neural networks”, J. Phys.: Conf. Ser., 2701(1), pp. 012005, 2024;
6. S. Moldovanu, **I.-N. Anghelache Nastase**, M. Miron, and L. Moraru, "Performance comparison of two non-parametric classifiers for classification using geometric features", Annals of the "Dunarea de Jos" University of Galati. Fascicle II, Mathematics, Physics, Theoretical Mechanics, YEAR XIV(XLV) 2022, Volume 45, No. 2, Pages 59–62, 2022;
7. **I.-N. Anghelache Nastase**, S. Moldovanu, L. Moraru, "Local graph cut in the Image Segmenter app for breast ultrasound images segmentation", Annals of the "Dunarea de Jos" University of Galati. Fascicle II, Mathematics, Physics, Theoretical Mechanics, YEAR XV(XLVI) 2023, Volume 46, No. 2, Pages 115–120, 2023;

B. Cărți și manuale

C. Participări la conferințe/workshop-uri

1. Conferința, locația, data; Scientific Conference of Doctoral Schools from "Dunărea de Jos" University of Galati SCDS-UDJG, 10th Edition, 9th- 10th of June 2022- Section 2. Advanced investigation methods in environment and biohealth, Galați, 9-10.iunie.2022;
2. International Symposium & International Student Workshop on Interdisciplinary Mathematics in the CiTi areas ISIM & ISWIM 2022 -1stEdition, University Politehnica of Bucharest, 26-29 of June 2022, București, România, 26-29.iunie.2022;
3. The 10th IEEE International Conference on E-Health and Bioengineering - EHB 2022, Grigori



Popa University of Medicine and Pharmacy, 17-19 November 2022, Iași, Romania, 17-19.noiembrie.2022;

4. *Scientific Conference of Doctoral Schools from "Dunărea de Jos" University of Galati SCDS-UDJG, 11th Edition, 8th- 9th of June 2023- Section 2. Advanced investigation methods in environment and biohealth*, Galați, 8-9.iunie.2023;
5. *International Symposium & International Student Workshop on Interdisciplinary Mathematics in the CiTi areas ISIM & ISWIM 2023 -2nd Edition, University Politehnica of Bucharest, 27-30 of June 2023*, București, România, 27-30.iunie.2023;
6. *12th International Conference on Mathematical Modeling in Physical Sciences(12th IC-MSQUARE)*, Belgrad, Serbia, 28-31.august.2023;
7. *Scientific Conference of Doctoral Schools from "Dunărea de Jos" University of Galati SCDS-UDJG, 12th Edition, 6th- 7th of June 2024 - Section 2. Advanced investigation methods in environment and biohealth*, Galați, 6-7.iunie.2024;
8. *28th Internation Conference on System Theory, Control and Computing (ICSTCC)*, Sinaia, Romania, 10-12.octombrie.2024;
9. *Scientific Conference of Doctoral Schools from "Dunărea de Jos" University of Galati SCDS-UDJG, 13th Edition, 12th- 13th of June 2025 - Section 2. Advanced investigation methods in environment and biohealth*, Galați, 12-13.iunie.2025;

D. Brevete

E. Proiecte de cercetare științifică – membru grup țintă

1. Project 'MELCHIOR - MECHANICAL IMPEDANCE and MULTIPHYSICS CONCEALED AND HIDDEN OBJECTS INTERROGATION', MELCHIOR, NR. 82PHE/2024, PN-IV-P8-8.1-PRE-HE-ORG-2024-0209, PNCDI IV European and International Cooperation Program.
2. Project "DINAMIC", financed by the Romanian Ministry of Research and Innovation, Contract no. 12PFE/2021

F. Stagii de perfecționare

G. Cursuri de perfecționare

1. Programul postuniversitar de formare și dezvoltare profesională continuă „*Managementul referințelor bibliografice*”, iunie.2022.

H. Membru în comitete de organizare sau comitete științifice ale conferințelor/colective de redacție ale unor reviste

1. Membru în Consiliul Școlii Doctorale de Inginerie Mecanică și Industrială.

