

Listă Lucrări

I. Studii publicate în reviste de circulație internațională recunoscute sau în reviste din țară recunoscute de către CNCSIS

1. Alexandra-Ioana Albu, Maria Iuliana Bocicor, Gabriela Czibula, *MM-StackEns: A new deep multimodal stacked generalization approach for protein-protein interaction prediction*. *Computers in Biology and Medicine*, 2023, 153: 106526, <https://doi.org/10.1016/j.combiomed.2022.106526> (indexed Web of Science, 2021 IF=6.698, Journal IF Quartile Q1)
2. Alexandra-Ioana Albu, Gabriela Czibula, Andrei Mihai, Istvan-Gergely Czibula, Sorin Burcea, Abdelkader Mezghani. *NeXtNow: A Convolutional Deep Learning Model for the Prediction of Weather Radar Data for Nowcasting Purposes*. *Remote Sensing, Special issue on Artificial Intelligence-Based Learning Approaches for Remote Sensing*, 2022, 14(16): 3890, <https://doi.org/10.3390/rs14163890> (indexed Web of Science, 2021 IF=5.349, Journal IF Quartile Q1)
3. Gabriela Czibula, Alexandra-Ioana Albu, Maria Iuliana Bocicor, Camelia Chira, *AutoPPI: An ensemble of deep autoencoders for protein-protein interaction prediction*. *Entropy, Special issue on Computational Methods and Algorithms for Bioinformatics*, 2021, 23(6): 643, <https://doi.org/10.3390/e23060643> (indexed Web of Science, 2021 IF=2.738, Journal IF Quartile Q2)
4. Gabriela Czibula, Andrei Mihai, Alexandra-Ioana Albu, Istvan-Gergely Czibula, Sorin Burcea, Abdelkader Mezghani, *AutoNowP: An approach using deep autoencoders for precipitation nowcasting based on weather radar reflectivity prediction*. *Mathematics, Special Issue on Computational Optimizations for Machine Learning*, 2021, 9(14): 1653, <https://doi.org/10.3390/math9141653> (indexed Web of Science, 2021 IF=2.592, Journal IF Quartile Q1)

II. Studii publicate în volumele unor manifestări științifice internaționale recunoscute din țară și din străinătate

1. Alexandra-Ioana Albu. *An Approach for Predicting Protein-Protein Interactions using Supervised Autoencoders*. *26th International Conference on Knowledge-Based and Intelligent Information & Engineering Systems (KES 2022), Procedia Computer Science*, Volume 207, 2022, Pages 2023-2032,

<https://doi.org/10.1016/j.procs.2022.09.261> (indexed Web of Science, B-ranked according to CORE classification)

2. Alexandra-Ioana Albu. Towards learning transferable embeddings for protein conformations using Variational Autoencoders. *25th International Conference on Knowledge-Based and Intelligent Information & Engineering Systems (KES 2021)*, *Procedia Computer Science*, Volume 192, 2021, Pages 10–19, <https://doi.org/10.1016/j.procs.2021.08.002> (indexed Web of Science, B-ranked according to CORE classification)
3. Alexandra-Ioana Albu and Gabriela Czibula. Analysing protein dynamics using machine learning based generative models. In *2020 IEEE 14th International Symposium on Applied Computational Intelligence and Informatics (SACI)*, Pages 000135-000140. IEEE, 2020, <https://doi.org/10.1109/SACI49304.2020.9118834> (D-ranked)
4. Alexandra-Ioana Albu, Alina Enescu, and Luigi Malagò. Tumor detection in brain MRIs by computing dissimilarities in the latent space of a variational autoencoder. In *Proceedings of the Northern Lights Deep Learning Workshop*, Volume 1, 2020, Pages 1-6, <https://doi.org/10.7557/18.5172> (D-ranked)

III. Proiecte de cercetare-dezvoltare-inovare pe bază de contract/ grant

Asistent de cercetare în următoarele proiecte:

1. *WeaMyL - Enhancing the performance and reliability of national weather warning systems by use of deep learning techniques applied on radar, satellite and ground meteorological observations*” - Norway Grants Program 2014-2021 (1.084.919 EUR), <https://weamyl.met.no/>
2. *QuaDeep - Enhancing the quality of software systems using deep learning models for defects prediction and detection*”) - Proiect de cercetare exploratorie PNCDI III - PN-III-P4-ID-PCE-2020-0800 (1.198.032 RON), <https://www.cs.ubbcluj.ro/quadeep/>
3. *DeepRiemann - Riemannian Optimization Methods for Deep Learning*” - Competitiveness Operational Programme 2014-2020 (8.689.500 RON), <https://deepriemann.rist.ro/>

IV. Alte lucrări

1. Alexandra-Ioana Albu, Alina Enescu, and Luigi Malagò. Improved Slice-wise Tumour Detection in Brain MRIs by Computing Dissimilarities between Latent

Representations. *2020 KDD Workshop on Applied Data Science for Healthcare*, August 24, 2020, San Diego, USA.

2. Alexandra-Ioana Albu, Alina Enescu, and Luigi Malagò. Detection of Tumours in Brain MRIs with Variational AutoEncoders. *ECML PKDD 2020 Workshop on Machine Learning for Pharma and Healthcare Applications*, September 14, 2020, Ghent, Belgium.