Lista de Lucrări

I. Lista celor mai relevante lucrări

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.compbiomed.2022.106526 (indexată în Web of Science)

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 (indexată în Web of Science)

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 (indexată în Web of Science)

4. 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 (indexată în Scopus)

II. Teza de doctorat

Titlu: *Unsupervised Representation Learning and Feature Fusion in Supervised Tasks. Applications in Natural Sciences*
Conducătorul de doctorat: Prof. Univ. Dr. Gabriela Czibula
Data susținerii: 29.09.2023

III. Articole/studii in extenso, publicate în reviste din fluxul ştiinţific internaţional principal

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.compbiomed.2022.106526 (indexată în Web of Science)

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 (indexată în Web of Science)

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 (indexată Web of Science)

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 (indexată în Web of Science)

IV. Publicaţii in extenso, apărute în lucrări ale principalelor conferinţe internaţionale de specialitate

1. Alexandra-Ioana Albu. Temporal Ensembling-based Deep k-Nearest Neighbours for Learning with Noisy Labels. *31st European Symposium on Artificial Neural Networks, Computational Intelligence and Machine Learning,* 2023, https://www.esann.org/sites/default/files/proceedings/2023/ES2023-144.pdf

2. Alexandra-Ioana Albu. Improving radar echo extrapolation models using autoencoder-based perceptual losses. *27th International Conference on Knowledge-Based and Intelligent Information & Engineering Systems (KES 2023), Procedia Computer Science*, Volume 225, Pages 1611-1620, https://doi.org/10.1016/j.procs.2023.10.150 (indexată în Scopus)

3. 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 (indexată în Scopus)

4. 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 (indexată în Web of Science)

5. 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 (indexată în Web of Science)

6. 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

V. Alte lucrări şi contribuţii ştiinţifice

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.