# P R O G R A M

## Thursday, October 17, 2024

**NTT DATA Romania, 6th Floor, Șerbota Street no. 1A, 550247 Sibiu**

organized by
*Research Center in Informatics and Information Technology*
**Faculty of Sciences, Lucian Blaga University of Sibiu, Romania**

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| $9^{00} – 9^{20}$ | **Opening ceremony** |
| $9^{20} – 9^{50}$ | **Keynote Speaker** <br> **Stefka Fidanova** <br> *Ant Colony Optimization and Applications* |
| $9^{50} – 10^{30}$ | **Papers presentation –** Chair **Dana Simian** |
| $9^{50} – 10^{10}$ <br><br><br> $10^{10} – 10^{30}$ | **Adrian Bender, Santiago Nicolet** <br> *Pretrained Language Models for Automatic Source Code Generation: Evaluation and Application of problem solving in Spanish.* <br> **Dana Simian, Felix Husac** <br> *Generative AI and Machine Learning-Based Practical Approach for Enhancing the User Experience in the Entertainment Industry* |
| $10^{30} – 10^{50}$ | **Coffee break** |
| $10^{50} – 11^{50}$ | **Papers presentation -** Chair **Stefka Fidanova** |
| $10^{50} – 11^{10}$ <br><br> $11^{10} – 11^{30}$ <br><br><br> $11^{30} – 11^{50}$ | **Cezar-Marian Papară, Ștefan-Horia Schirliu** <br> *Logistics Optimization for Resource Allocation and Scheduling Using Time Slots* <br> **Cristiana Constantinescu** <br> *Comprehending Steganography Through a Comparative Analysis with Watermarking: A Study* <br> **Marin-Eusebiu Serban** <br> *Intelligent text correction approach for searching queries* |
| $11^{50} – 12^{10}$ | **Coffee break** |
| $12^{10} – 12^{40}$ | **Keynote Speaker** <br> **Magda Gregorová** <br> *Deep generative modelling - beyond language and videos* |

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| $12^{40} – 13^{20}$ | **Papers presentation -** Chair **Magda Gregorová** |
| $12^{40} – 13^{00}$ <br><br><br> $13^{00} – 13^{20}$ | **Esther Ademola, Martin Reich, Magda Gregorova** <br> *An Investigative Study Exploring Machine Learning Approaches for Optimising Deep Brain Stimulation Programming* <br> **Petar Zhivkov** <br> *Enhancing Liquidity and Stability in DeFi: USD-Collateralized Leveraged Restaking with Stablecoins* |
| $13^{20} – 14^{40}$ | **Break** |
| $14^{40} – 15^{40}$ | **Papers presentation (online) -** Chair **Florin Stoica** |
| $14^{40} – 15^{00}$ <br><br><br> $15^{00} – 15^{20}$ <br><br><br> $15^{20} – 15^{40}$ | **Daniela Borissova, Naiden Naidenov, Zornitsa Dimitrova, Magdalena Garvanova, Ivan Garvanov, Radoslav Yoshinov** <br> *How to Select Chief Digital Officer to Drive Digital Transformation: A Multiple Attributes Group Decision-Making Model* <br> **Branislav Radomirovic, Luka Jovanovic, Nebojsa Budimirovic, Miodrag Zivkovic, Nebojsa Bacanin, Milos Dobrojevic** <br> *Augmentation and substitution of medical training data with generative adversarial networks for machine learning* <br> **Atanas Atanasov, Miglema Koleva, Lubin Vulkov** <br> *Optimization of Diffusion Parameters in Models of Water Uptake in Grains with Spherical Symmetry* |
| $15^{40} – 16^{00}$ | **Coffee break** |
| $16^{00} – 16^{30}$ | **Keynote Speaker (online)** <br> **Milan Tuba** <br> *Intelligent Systems for Digital Images* |
| $16^{30} – 17^{10}$ | **Papers presentation (online) -** Chair **Dana Simian** |
| $16^{30} – 16^{50}$ <br><br><br> $16^{50} – 17^{10}$ | **Mihai Petrov, Velichka Traneva, Stoyan Tranev, Venelin Todorov, Slavi Georgiev** <br> *The study of the influence of green house pollutants on the adiabatic constant of the atmospheric air* <br> **Ryan Soto, Eva Tuba** <br> *The Use of Convolutional Neural Networks in Autism Detection* |
| $18^{10}$ | **Welcome Dinner** |
| $20^{30}$ | **Sibiu by night (walking in the downtown Sibiu)** |

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| $9^{30} – 10^{50}$ | **Papers presentation -** Chair **Santiago Nicolet** |
| $9^{30} – 9^{50}$<br><br>$9^{50} – 10^{10}$<br><br><br>$10^{10} – 10^{30}$<br><br>$10^{30} – 10^{50}$ | **Marcel Kyas, Joshua Springer, Gylfi Þór Guðmundsson**<br>*Safe autonomous control for landing uncrewed aerial vehicles*<br>**Stefka Fidanova, Ivan Dimov, Denitsa Angelova**<br>*Ant Colony Optimization for Planting Vegetables and Annual Fruit Crops*<br>**Adam Gonšenica, Andrej Mihálik, Roman Ďurikovič**<br>*Queues Detection and Skiers Distribution in the Ski Resorts*<br>**Stefan-Bogdan Marcu, Yanlin Mi, Mark Tangney, Sabin Tabirca**<br>*ChemFlow: Bridging Computational Tools and Bioinformatics through LLM-Driven Workflow Automation* |
| $10^{50} – 11^{10}$ | **Coffee break** |
| $11^{10} – 11^{40}$ | **Keynote Speaker**<br>**Andrei Paun**<br>*Computing with neuron-like devices: SNP Systems* |
| $11^{40} – 12^{40}$ | **Papers presentation -** Chair **Dana Simian** |
| $11^{40} – 12^{00}$<br><br>$12^{00} – 12^{20}$<br><br>$12^{20} – 12^{40}$ | **Alexandru Reuț**<br>*Securing software using Genetic algorithms and encoding*<br>**Snezhana Ribarska, Olga Georgieva, Sophia Lazarova**<br>*Data Analysis for Cognitive States Identification*<br>**Oana-Adriana Ticleanu, Daniel Hunyadi, Nicolae Constantinescu**<br>*Enhanced devices security using elliptic curves defined over particular spaces* |
| $12^{40} – 13^{00}$ | **Coffee break** |
| $13^{00} – 14^{20}$ | **Papers presentation -** Chair **Marcel Kyas** |

| $13^{00} - 13^{20}$ | **Amelia Bucur** <br> *Fractional Programming Problems* |
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| $13^{20} - 13^{40}$ | **Atanas Atanasov, Slavi Georgiev, Lubin Vulkov** <br> *Parameter Optimization in a Model of Influence of Brood Deaths on Honeybee Population Dynamics* |
| $13^{40} - 14^{00}$ | **Dragoș Iliescu** <br> *Conceptual Modeling of a Laboratory's Products and some Assisted Management Applications* |
| $14^{00} - 14^{20}$ | **Elena Cristina Răulea** <br> *The study of influencing factors impacting the selection of a higher education institution* |
| $18^{00}$ | **Official dinner** |