Computer Science Students Conference 2025

June 27, 2025

CLUJ-NAPOCA, ROMANIA

8:50 – 9:00 – Deschidere sala 335 14.00 - Premiere (SCSS-2025) sala 335				
Panel 1, Sala 320 UBB, Str. Teodor Mihali, Nr. 58-60, Cluj Napoca		e (SCSS	Panel 2, Sala 321 UBB, Str. Teodor Mihali, Nr. 58-60, Cluj Napoca	
9:00 – 9:15	Ciurcău Leonardo-Iulian, Damaged photograph restoration via image inpainting and desnowing with multi-step enhancement, UBB		9:00 – 9:15	Balint Sergiu-Dacian, Word-level Sign Language Recognition using Ensemble Methods, UBB
9:15 – 9:30	Farcău Anda, Calculating Weather Forecasts for Aerodromes Using Artificial Neural Networks, UBB		9:15 – 9:30	Andrei - Nicoară Sabina – Eleny, A Game of Connection: Assessing Social-Cognitive Patterns in High-Functioning Autism through an Interactive Narrative, UBB
9:30 – 9:45	Alexandra-Maria Marginean, Predicting the Depth of Anesthesia Using Deep Learning - UTCN		9:30 – 9:45	Cadar Andrei Calin, Geographical Quantification of Cyberattack Risks Using Honeypots, UTCN
9:45 – 10:00	Demian Andrada-Maria, AI-driven dog training: Exploring solutions for personalized recommendations, UBB		9:45 – 10:00	Spiridon Dragoş, Deep Learning Approaches for Bird Sound Classification and Mobile Deployment, UBB
10:00 – 10:15	Avram Andrei-Grigore, Lie Detection via Facial and Vocal Analysis: An AI-Driven Application, UBB		10:00 – 10:15	Dumitru Ana-Maria, MeowMap: A Machine Learning Approach to Predicting Cat Adoptability, UBB
10:15 – 10:30	Andrei Bogdan Constantin, VISION-RISK: Vision-Language Model for Risk Assessment in Explainable Autonomous Driving Systems, UTCN		10:15 – 10:30	Dornea Andrei, Intelligent Indoor Plant Monitoring System with IoT Platform and Mobile Application. GreenHouse App – Daniel, UTCN

FACULTY OF MATHEMATICS AND COMPUTER SCIENCE COMPUTER SCIENCE DEPARTMENT

10:30 - 10:45	Azoicai Naomi, The Impact of Data Augmentation on YOLO Object Detection Models for Bone Fracture Detection, UBB	10:30 – 10:45	Stan Ariana-Maria, Simple Yet Effective: Rule-Based Late Fusion for Multimodal Emotion Analysis, UBB
10:45 – 11:00	Avram Alexandru-Andrei, Relation extraction for handling disinformation, UTCN	10:45 – 11:00	Bianca Anamaria Chiorean, Generate Semantic Images with ControlNet, UTCN
11:00 – 11:15	Oprișiu Bogdan-Ioan, Robot Control via Compact LLMs: A Case Study, UBB	11:00 – 11:15	Oltean Irina-Stefania, Enhancing Art Interpretation with AI: A Study on Painting Classification and Description Generation, UBB
11:15 – 11:30	Bence Beke-Szabó, A System for Dynamic Instrumentation and Automated API Reverse Engineering using Large Language Models, UTCN	11:15 – 11:30	Dănciulescu Bianca-Andreea, A hybrid TCN- Transformer model for energy forecasting, UTCN
11:30 – 11:45	Prodan Radu Matei, SeatSurfer: An AI-Driven Architecture for Hybrid Workplace Booking and Smart Office Management, UBB	11:30 – 11:45	Felecan Maria-Iulia, Genre Prediction of Romanian Songs from Lyrics with Machine Learning, UBB
11:45 – 12:00	Buzan Roxana-Catalina, TimeGPT vs LSTM-CNN for predicting PV panels energy production, UTCN	11:45 – 12:00	Cionte Sergiu-Ionut, Automatic Traffic Monitoring System, UTCN
12:00 – 12:15	Hîncu Alice-Ramona, Test Case Prioritization using Artificial Intelligence for faster Continous Integration, UBB	12:00 – 12:15	Muntean Tudor, Transfer Learning - based Test Case Prioritization in Continuous Integration Environments, UBB
12:15 – 12:30	Catalin Cot, Rust in the Kernel: A Practical Evaluation on Windows, UTCN	12:15 – 12:30	Cosmin-Alexandru Cupșea, Forecasting Energy Consumption Using Kolmogorov–Arnold Networks with Different Polynomial Functions, UTCN
12:30 – 12:45	Bacea Andreea-Maria, MedGuide: AI-Assisted Brain Tumor Classification Using Deep Learning and Machine Learning Techniques, UBB	12:30 – 12:45	Mocanu Mihai, Towards breaking the Advanced Encryption Standard, UBB

FACULTY OF MATHEMATICS AND COMPUTER SCIENCE COMPUTER SCIENCE DEPARTMENT

12:45 – 13:00	Cristian Eusebiu Scărișoreanu, Deep-Q-Networkbased Approach, for Scheduling in Smart Homes UTCN	12:45 – 13:00	Cristina Man, AI-driven Statistical Analysis of the Worst-Case Power Dissipation in PCB Configurations, UTCN
13:00 – 13:15	<i>Țarcă Andrei-Ioan</i> , ArrowFormer - Detecting Painted Arrows using DEViT, UBB	13:00 – 13:15	Chirvasiu Mihai, Intelligent audio processing and classification system of mechanical problems for combustion engines, UBB
13:15 – 13:30	Darius-Ionut Oltean, Code Vulnerability Detection Using Graph Neural Networks, UTCN	13:15 – 13:30	Diana-Laura Vaida, Enhancing Children's Story Comprehension Through a RAG-Based Conversational AI System, UTCN

8:50 – 9:00 – Deschidere sala 335 14.00 - Premiere (SCSS-2025) sala 335				
Panel 3, Sala 335 UBB, Str. Teodor Mihali, Nr. 58-60, Cluj Napoca			Panel 4, Sala 336 UBB, Str. Teodor Mihali, Nr. 58-60, Cluj Napoca	
9:00 – 9:15	Stolniceanu Denisa-Elena, From Classical to Transformer-Based Techniques: Classification and Semantic Recommendation of Romanian Baccalaureate Mathematics Exercises, UBB		9:00 – 9:15	Gabor Ioana, Embedding-Efficient Brain-to- Image Reconstruction Using Diffusion Models, UBB
9:15 – 9:30	Persa Boc Maria, Analyzing Human-Computer Interaction Prompting of High-Performing Mathematics Users, UBB		9:15 – 9:30	Tuslea Andreea, Comparative EEG Analysis of Affective and Cognitive Responses to Modernist Poetry: Reading vs. Listening, UBB

FACULTY OF MATHEMATICS AND COMPUTER SCIENCE COMPUTER SCIENCE DEPARTMENT

9:30 – 9:45	David Oliver Sipos, HAL10000: Extending the HAL9000 educational OS with UEFI boot and live debugging, UTCN	9:30 – 9:45	Gelu-Samuel Josan, Wildfire Detection using Binary Classification and Semantic Segmentation, UTCN
9:45 – 10:00	Kocsis Antonia Krisztina, A Context-Aware Recipe Application Leveraging Semantic Search and Retrieval-Augmented Generation, UBB	9:45 – 10:00	Raul-Sorin Frandeş, Automatic Detection and Remediation of Faults in Wi-Fi Networks: An Artificial Intelligence-Based Approach, UBB
10:00 – 10:15	Petricele Georgiana-Maria, Computer-Aided Melanoma Diagnosis Through Lesion Detection and Shape Feature Analysis, UBB	10:00 – 10:15	Suciu Bogdan, Glossary-enhanced word vector representations for natural language processing, UBB
10:15 – 10:30	George-Octavian Floare, System Monitoring Using Large Language Models, UTCN	10:15 – 10:30	George Catalin Robotin, AskUTCN: A Llama-3 Based Chatbot Finetuned for University Information Retrieval, UTCN
10:30 – 10:45	Halbeş Cătălin, GPGPU and Multithreaded Parallel Implementation of a JPEG Encoder, UBB	10:30 – 10:45	Silivăstru Oana Maria, Automatic Question Answering and Test Generation from Documents in Romanian and English, UBB
10:45 – 11:00	Iulia-Olivia Cipleu, Hybrid Bio-Inspired Method for Optimal Energy Trading Between Interconnected Microgrids, UTCN	10:45 – 11:00	Lisandra Huza, Solar Flares Prediction from AIA and HMI Satellite Images, UTCN
11:00 – 11:15	Jinga Tudor, Deductive Verification of Rust- C Cross-Language Projects With Automated Specification Translation, UBB	11:00 – 11:15	Neamtiu Cosmin-Ioan, Unsupervised Recognition of Sparse Facial Movements using Convolutional Spiking Neural Networks, UBB
11:15 – 11:30	Maria-Cătălina Burlea, Optimizing Surface- Mount Technology Process Planning Using a Hybrid Machine Learning and Genetic Algorithm Framework, UTCN	11:15 – 11:30	Mihaela Macarie-Ancau, Deep Clustering for Blood Cell Classification and Quantification, UTCN
11:30 – 11:45	Timis Cosmin-Alexandru, Deepfake Detection: A Hybrid Inception-Transformer Model for Video Analysis, UBB	11:30 – 11:45	Ardelean Daniel-George, Multipath variants for congestion control in context of WebRTC, UBB

FACULTY OF MATHEMATICS AND COMPUTER SCIENCE COMPUTER SCIENCE DEPARTMENT

11:45 – 12:00	Mihai Anca, An explainable framework for fundus image curation and lesion detection in diabetic retinopathy, UTCN	11:45 – 12:00	Oana Denisa Zaharie, Image Colorization with Stable Diffusion, UTCN
12:00 – 12:15	Voinea Andrei, Reconstruction of Babylonian Texts: Integrating Transformers with Symbolic Reasoning, UBB	12:00 – 12:15	<i>Țenche Eduard-Marian</i> , EMG-Controlled Supernumerary Finger for Human Hand Augmentation, UBB
12:15 – 12:30	Radu Dragos Imbuzan, FBTaint: A Forward-Backward Taint Analyzer for C source code and binary executables, UTCN	12:15 – 12:30	Răzvan-Ionuț Fucă, InferedSymbiosis: A Hybrid Method for Automatic Vulnerability Detection and Remediation, UTCN
12:30 – 12:45	Diana-Nicoleta Zaha, Electronic Control Unit Mechanical Architecture Optimization using Machine Learning, UBB	12:30 – 12:45	Ion Andreea-Marina, Beyond the Grades: Gamifying Learning Whilst Taking Into Account Mental Health, UBB
12:45 – 13:00	Sabina Volcov, Transformer models in EEG interpretation, UTCN	12:45 – 13:00	Stefan Cadar, Predicting wind speed in Wind Farms with Physics-Informed Kolmogorov-Arnold Networks, UTCN
13:00 – 13:15	Stanciu Andrei-Calin, Exploring Compositionality in Scalar Functions, UBB	13:00 – 13:15	Osvath Robert-Levente, Impact of frame-based representations of event-based data for gesture recognition, UBB
13:15 – 13:30	Stefan Socoleanu, Verifying Smart Contracts for Home Rentals using Kontrol, UTCN	13:15 – 13:30	Tompea Radu-Gabriel, Real-time Wireless Telemetry System for a Formula Student Electric Vehicle, UTCN

8:50 – 9:00 – Deschidere sala 335			
14.00 - Premiere (SCSS-2025) sala 335			
Panel 5, Sala 338 UBB, Str. Teodor Mihali, Nr. 58-60, Cluj Napoca			
9:00 – 9:15	Back Andrei-Gheorghe, Adaptive Offloading Strategies in Edge-Cloud Integrated Systems Used for Letoney Sensitive Applications URP		
9:15 – 9:30	Used for Latency Sensitive Applications, UBB Rafain Emőke, Improving Cognitive Distortion Classification with Sentiment-Driven Machine Learning, UBB		
9:30 – 9:45	Tudor Giuroiu, Smart Shell: an AI Command Predictor Shall, UTCN		
9:45 – 10:00	Raicu Maria-Camelia, Detection and Classification of Logical Fallacies in Political Speeches, UBB		
10:00 – 10:15	Remus Andrei Bujor, DepthSegmentJointAnything: Leveraging Multi task dense predictions using Visual Transformers, UBB		
10:15 – 10:30	Tudor Cristea, CTF-PWN100: Automated Evaluation of LLMs on Binary Exploitation Challenges, UTCN		
10:30 – 10:45	Ignat Alex-Matei, TripVault: A Smart Cultural Trip Planning System for Romania, UBB		

FACULTY OF MATHEMATICS AND COMPUTER SCIENCE COMPUTER SCIENCE DEPARTMENT

10:45 - 11:00	Valentin Tilneac, Real Time Traffic Scene
	Understanding and Awareness Framework,
	UTCN
11:00 - 11:15	Grigorescu Andrei-Viorel, Exploration of
	capabilities and applications of recent specialized
	hardware components in modern GPUs, UBB
11:15 – 11:30	Vlad Lazar, L-Shape Bounding Box Detector for
	LiDAR Point-Clouds, UTCN
11:30 - 11:45	Andrei Cosmin, Hybrid Analysis on Windows
	Executables for Malware Detection using
	Random Forest Class, UBB
11:45 – 12:00	Laura-Luisa Voicu, Concept Attribution and Dual
	Explainability in Vision-Language Models, UTCN
12:00 - 12:15	Coşman Iulian, From Flat to Curve: A Geometrical
	Perspective on VAEs, UBB
12:15 – 12:30	Mîndrilă Mihail-Alexandru, A Modular MIP-
12.13 12.50	Based Solver for University Timetabling, UBB
	Bused server for emiversity Timemening, eBB
12:30 – 12:45	Şeu David, Sensor-Invariant Emotion Recognition
	from Wrist Photoplethysmography Using a
	Lightweight One-Dimensional Convolutional
	Neural Network, UBB