

Sesiunea de Comunicări Științifice ale Studenților 2025

27 Iunie, 2025

CLUJ-NAPOCA, ROMANIA

8:50 – 9:00 – Deschidere sala 335					
14.00 - Premiere (SCSS-2025) sala 335					
Panel 1, Sala 320 Ioan Gabriel Mircea, Calin Cenan UBB, Str. Teodor Mihali, Nr. 58-60, Cluj Napoca				Panel 2, Sala 321 Anamaria Briciu, Ciprian Oprisa 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 Dragoș, 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			10:15 – 10:30	Dornea Andrei, Intelligent Indoor Plant Monitoring System with IoT Platform and

	Explainable Autonomous Driving Systems, UTCN			Mobile Application. GreenHouse App – Daniel, UTCN
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 Continuous 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

12:45 – 13:00	<i>Cristian Eusebiu Scărișoreanu</i> , Deep-Q-Network-based Approach, for Scheduling in Smart Homes UTCN		12:45 – 13:00	<i>Cristina Man</i> , 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	<i>Chirvasiu Mihai</i> , Intelligent audio processing and classification system of mechanical problems for combustion engines, UBB
13:15 – 13:30	<i>Darius-Ionut Oltean</i> , Code Vulnerability Detection Using Graph Neural Networks, UTCN		13:15 – 13:30	<i>Diana-Laura Vaida</i> , 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 Ioan Daniel Pop, Cristina Feier UBB, Str. Teodor Mihali, Nr. 58-60, Cluj Napoca			Panel 4, Sala 336 Alexandru Manole, Cristinel Mocan UBB, Str. Teodor Mihali, Nr. 58-60, Cluj Napoca	
9:00 – 9:15	Stanciu Andrei-Calin, Exploring Compositionality in Scalar Functions, 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

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

11:45 – 12:00	<i>Mihai Anca</i> , An explainable framework for fundus image curation and lesion detection in diabetic retinopathy, UTCN		11:45 – 12:00	<i>Oana Denisa Zaharie</i> , Image Colorization with Stable Diffusion, UTCN
12:00 – 12:15	<i>Voinea Andrei</i> , 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	<i>Radu Dragos Imbuzan</i> , FBTaint: A Forward-Backward Taint Analyzer for C source code and binary executables, UTCN		12:15 – 12:30	<i>Răzvan-Ionuț Fucă</i> , InferedSymbiosis: A Hybrid Method for Automatic Vulnerability Detection and Remediation, UTCN
12:30 – 12:45	<i>Diana-Nicoleta Zaha</i> , Electronic Control Unit Mechanical Architecture Optimization using Machine Learning, UBB		12:30 – 12:45	<i>Ion Andreea-Marina</i> , Beyond the Grades: Gamifying Learning Whilst Taking Into Account Mental Health, UBB
12:45 – 13:00	<i>Sabina Volcov</i> , Transformer models in EEG interpretation, UTCN		12:45 – 13:00	<i>Stefan Cadar</i> , Predicting wind speed in Wind Farms with Physics-Informed Kolmogorov-Arnold Networks, UTCN
13:00 – 13:15	<i>Stolniceanu Denisa-Elena</i> , From Classical to Transformer-Based Techniques: Classification and Semantic Recommendation of Romanian Baccalaureate Mathematics Exercises, UBB		13:00 – 13:15	<i>Osvath Robert-Levente</i> , Impact of frame-based representations of event-based data for gesture recognition, UBB
13:15 – 13:30	<i>Stefan Socoleanu</i> , Verifying Smart Contracts for Home Rentals using Kontrol, UTCN		13:15 – 13:30	<i>Tompea Radu-Gabriel</i> , 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 Iulian Bența, Cristian Lelutiu UBB, Str. Teodor Mihali, Nr. 58-60, Cluj Napoca	
9:00 – 9:15	<i>Back Andrei-Gheorghe</i> , Adaptive Offloading Strategies in Edge-Cloud Integrated Systems Used for Latency Sensitive Applications, UBB
9:15 – 9:30	<i>Rafain Emőke</i> , Improving Cognitive Distortion Classification with Sentiment-Driven Machine Learning, UBB
9:30 – 9:45	<i>Tudor Giuroiu</i> , Smart Shell: an AI Command Predictor Shall, UTCN
9:45 – 10:00	<i>Raicu Maria-Camelia</i> , Detection and Classification of Logical Fallacies in Political Speeches, UBB
10:00 – 10:15	<i>Remus Andrei Bujor</i> , DepthSegmentJointAnything: Leveraging Multi task dense predictions using Visual Transformers, UBB
10:15 – 10:30	<i>Tudor Cristea</i> , CTF-PWN100: Automated Evaluation of LLMs on Binary Exploitation Challenges, UTCN

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