Computer Science Students Conference 2024

June 28, 2024

CLUJ-NAPOCA, ROMANIA

8:50 - Sala Amfiteatru - Opening CSSC-2024 14.15 - Sala Amfiteatru - Premiere CSSC-2024				
Panel 1, Sala Amfiteatru Grigoreta Cojocar, Gheorghe Sebestyen&Călin Cenan HUB UTCN, Str. Barițiu, Nr. 4, Cluj Napoca			Panel 2, Sala Amfiteatru Bis Manuela Petrescu, Cristina Feier HUB UTCN, Str. Barițiu, Nr. 4, Cluj Napoca	
9:00 – 9:15	Ursa Andra-Gabriela, Bridging Linguistic Gaps: SENTIROM's Approach to Romanian Sentiment Analysis, UBB		9:00 – 9:15	Malancioiu Daniel - George, Optimizing Cold Start Performance in Serverless Computing Environments, UBB
9:15 – 9:30	Topan Oana-Maria, Security Risk Analysis Using Smart Edge Computing for Sets of Android Applications, UBB		9:15 – 9:30	Comănac Dragoș-Mihail, Anchorless object detection based on deep convolutional networks, UBB
9:30 – 9:45	Ada Mitrea Chromium Sandbox Escape Detection on Windows, UTCN		9:30 – 9:45	Alexandra Serban, Autonomous robot with sentiment analysis for serving in restaurants - UTCN
9:45 – 10:00	Tiutin Andrada-Georgia, A Novel Metrics-based Test Case Prioritization Approach for Software Product Lines, UBB		9:45 – 10:00	Dunca George Raul Michael, Automated Hybrid Ransomware Family Classification, UBB
10:00 – 10:15	Galan Maria Lavinia, New Adaptive Strategies of Reinforcement Learning Test Agent for Performance Testing, UBB		10:00 – 10:15	Holgyes Orsolya Dorottya, Predicting Romanian stock movement trends: a complex network approach combined with machine learning, UBB
10:15 – 10:30	Alina Aurică, Creating a smart shopping cart using computer vision for the product classification task, UTCN		10:15 – 10:30	Anamaria Monica Migea, Cook Smarter Not Harder: Enhancing Learning Capacity in Smart Ovens with Supplementary data, UTCN
10:30 – 10:45	Moga Răzvan-Andrei, Feasibility of LSTM-Based Models for Stock Trend Forecasting with Sentiment Analysis and Google Trends, UBB		10:30 – 10:45	Loluță Ștefana, Implementation of PeaceBot: Fine- Tuning and Quantization of LLaMA 2 for Enhanced Mental Health Support, UBB

"BABEŞ-BOLYAI" UNIVERSITY

FACULTY OF MATHEMATICS AND COMPUTER SCIENCE COMPUTER SCIENCE DEPARTMENT

TECHNICAL UNIVERSITY OF CLUJ-NAPOCA FACULTY OF AUTOMATION AND COMPUTER SCIENCE COMPUTER SCIENCE DEPARTMENT

10:45 – 11:00	Neacşu-Miclea Liviu-Ştefan, Joined U-Net and LSTM lightweight architecture for handwritten text lines segmentation, UBB	10:45 – 11:00	Modolea Bogdan, Biomimetic Hand Gesture Replication - An Arduino-Powered Robotic Approach, UBB
11:00 – 11:15	Vlad Adrian Băneasa, Nintendo Switch: An IoT Security Perspective, UTCN	11:00 – 11:15	Alex-Dian Bureția, Analysis of clustering methods for better Spike Sorting pipelines, UTCN
11:15 – 11:30	Dumitru Alexandra-Ștefania, WaveNet-Based Model for Accurate Electrocardiogram Heartbeat Classification, UBB	11:15 – 11:30	Darius Jurjiu, Medical Imaging for Dentistry Using Segmentation and Detection Deep Learning techniques, UBB
11:30 – 11:45	Gherman Paula-Sorana, Detecting Falls with AI: Deep Learning Solutions for Elderly Safety, UBB	11:30 – 11:45	Rusu Raluca-Maria, Adversarial Multitask Learning of Decorrelated Features for Age-Invariant Face Recognition, UBB
11:45 – 12:00	Cezar-Mihai Suciu, XAI-DETR: Explainable AI tool for Detection, UTCN	11:45 – 12:00	Adrian-Valentin Ciu, Self-Healing Model From Uncertain Data, UTCN
12:00 – 12:15	Groza Iulia-Diana, A Proximal Policy Optimization Approach to Detect Spoofing in Algorithmic Trading, UBB	12:00 – 12:15	Demian Ana-Maria, Anomaly Detection on Patient Vitals Data Streams, UBB
12:15 – 12:30	Creţ Ioana-Larisa, A Comparison Between Exact and Approximate Machine Unlearning, UBB	12:15 – 12:30	Custura Stefan-Octavian, Software Visualization through Clothing Representation, UBB
12:30 – 12:45	Claudiu Cândea, Use Retrieval-Augmented Generation on Complex Medical Questions, UTCN	12:30 – 12:45	Eric Toader, LITE: A Modern, C Interoperable Programming Language, UTCN
12:45 – 13:00	<i>Şut George-Mihai,</i> Interactive chatbot-based Romanian news summarization and topic modeling, UBB	12:45 – 13:00	Igreț Ioana-Cristina, Context-Based Adaptation of Neural Network Compression for Unmanned Aerial Vehicles (UAV) Weed Detection, UBB
13:00 – 13:15	Crisan Dragos, Implementation of machine learning algorithms in precision agriculture using soil data, UBB	13:00 – 13:15	Stancu Diana-Elena, ReviveGAN: A generative approach for restoring grayscale old photos, UBB
13:15 – 13:30	Vele Augustin, Harnessing Large Language Models for Automated Privacy Risk Assessment of Institutional Web Data, UTCN	13:15 – 13:30	Vicențiu Cojocaru, Debiasing Image Generation Models via Counterfactual Data Augmentation and Contrastive Learning, UTCN

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Panel 3, Sala 1 Anamaria Briciu, Teodor Stefănuț HUB UTCN, Str. Barițiu, Nr. 4, Cluj Napoca			Panel 4, Sala 2 Tudor Mihoc, Tiberiu Marita HUB UTCN, Str. Barițiu, Nr. 4, Cluj Napoca	
9:00 – 9:15	Rotaru Mira Teodora, Emotion Authenticity in a Static Driving Simulator for Preliminary Multimodal Data Collection, UBB		9:00 – 9:15	Ivan Ioan-Adrian, Landmark-based Hand Movement Recognition for Human-Computer Interaction, UBB
9:15 – 9:30	Mesesan Melissa-Cristina, Load Shedding Techniques in Data Stream Management Systems – An Experimental Study and A New Algorithm, UBB		9:15 – 9:30	Petec Răzvan-Gabriel, Alexandrescu Andrei- Robert, ContRailNet: Realistic Railway Image Synthesis using ControlNet, UBB
9:30 – 9:45	Florin Petrean, PwnMaster: Automatic Buffer Overflow and Format String Vulnerability Detection and Exploitation, UTCN		9:30 – 9:45	Laurențiu Popa, Real-Time CAN Bus Security in Internet of Vehicles: Intrusion Detection Using Deep Learning, UTCN
9:45 – 10:00	Vaida Radu Andrei, High performance approaches to architecture in modern payment systems, UBB		9:45 – 10:00	Crudu Mălina, Neural Network Methods for Detection of Textual Deception in Romanian Courtroom Testimonies, UBB
10:00 – 10:15	Ármin Török, Dávid Szilágyi, Personalized Passenger Comfort Assessment Using CAN Bus Data and Explainable AI, UBB		10:00 – 10:15	Gălițianu Andrei, A Flexible Framework for Automated Data Processing with LLMs: Application in CV Ranking for Recruiting, UBB
10:15 – 10:30	Leonard-Andrei Pop, Windows kernel driver fuzzing using source code instrumentation, UTCN		10:15 – 10:30	Liviu Iacob, Contrastive Learning in Lesion Detection for Mammography Screening Programs, UTCN
10:30 – 10:45	Cibotariu Andrei, PlantBuddy - Automating household watering systems using Internet of Things, UBB		10:30 – 10:45	Dávid Szilágyi, Răzvan-Gheorghe Filea, Benchmarking Autonomous Driving Systems using a Modular and Scalable Simulation Environment, UBB

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10:45 – 11:00	Matişan Rareş-Ştefan, Conf. Dr. Cristea Diana, Comparative analysis of deep learning models for lung and heart segmentation in chest X-Rays, UBB	10:45 – 11:00	Diana-Georgiana Drăgușin, AI-Driven Roommate Matching: Leveraging the Big Five Personality Traits for Harmonious Dormitory Living, UBB
11:00 – 11:15	Stefan Atitienei, Exploring the Limits of T5: Multitask Fine-Tuning for Reasoning, Summarization, Sentiment Analysis and Figurative Language Understanding, UTCN	11:00 – 11:15	Luca-Manea, Enhancing docker security on Linux with eBPF, UTCN
11:15 – 11:30	Pater Stefan-Otniel, Increasing the efficiency of Robotic Process Automation through API connectors, UBB	11:15 – 11:30	Pop Raul Stefan, 3D Keypoints Learning in a Multi-task Setup, UBB
11:30 – 11:45	Biriş David, Deep learning approaches for detecting text generated by artificial intelligence, UBB	11:30 – 11:45	Ilina Mircea Nicolae, Developing an Affordable, Real-Time Assistive System for Visually Impaired Individuals, UBB
11:45 – 12:00	David Lukacs, Implementation of a RISC Computing System on FPGA, UTCN	11:45 – 12:00	Mihai Enache, Integrating Large Language Models and Diffusion Models for Idiom Visualization, UTCN
12:00 – 12:15	Negoițescu Andreea, Intelligent Human Iris Recognition System Based on Deep Learning Models, UBB	12:00 – 12:15	Dávid Szilágyi, Răhăian Rareş, Real-Time Path Planning using Cubic Spirals for Vehicle Simulation Environments, UBB
12:15 – 12:30	Sasaran Tania, Classification of Romanian Poems in Literary Currents using Machine Learning, UBB	12:15 – 12:30	Avram Irina, An Analysis of Fine-Tuned Models for Dog Breed Image Classification, UBB
12:30 – 12:45	Monica Uţiu, Assessing Long-term Performance And Contributing Anomalies, UTCN	12:30 – 12:45	Răzvan Bolunduţ, Automatic Identification of Required Linux Capabilities, UTCN
12:45 – 13:00	Bejan Andrei-Paul, FastSightNet: Real-time Eye- Tracking-based Human-Computer Interface, UBB	12:45 – 13:00	Oprişor Raul-Alexandru, Design and Implementation of a High-Performance Hybrid E- Commerce CMS Using Next.js, UBB
13:15 – 13:30	Mîrţ Leonard, Clickbait Detection Using Transfer Learning, UBB	13:15 – 13:30	Zirbo Samuel-George-Vasile, Fairness in Translation: Mitigating Gender Bias in Neural Machine Translation, UBB
13:30 - 13:45	Simona Tivadar, Measuring nAMD biomarkers from OCTA images, UTCN	13:30 - 13:45	Sorin Banc, Black box application fuzzing by combining ardware control-flow tracing with coverage guided test generation, UTCN