ICTAI-2024 Program

DAY-1- OPENING: Professor M. Koubarakis, General Chair – 8:00-8:30am Monday Oct.28, 2024

8:30am-9:30am: Keynote Speaker: Professor Jean-Luc Gaudiot, University of California Irvine, USA
"Enhancing computer security with hardware-level malware detection"

AI FOUNDATIONS - 1

Session Coordinator: **Markus Hecher**

Presentations: 9:30am-11:30am

46- On Weighted Maximum Model Counting: Complexity and Fragments**,** *M. Bannach and M. Hecher*

74- Lazy ad hoc Explanations for the Sum Constraint, *S.Sekar, G.Glorean, W.Suijlen, E.Monfroy and A. Lallouet*

94- Generative Constraint Programming revisited, *F. Regin and E. DeMaria*

121- Forgetting in Counting and Bounded Treewidth, *J. Fichte and M. Hecher*

141- IndiCon: Selecting SAT Encodings for Individual Pseudo-Boolean and Linear Integer Constraints, *F.Ulrich-Oltean, P. Nightingale, and J.A.Walker*

171- Parameterized Treewith for Constraint Modeling Languages**,** *J. Pearson*

320 - Partitioned Linear Orders and Belief Revision, *Jérome Gaigne, Khaled Belahcene and Sylvain Lagrue*

SCHEDULING-PLANNING-SOLVING-1

Session Coordinator: **Sven Hallerbach:**
Presentations: 9:30am-11:30am

28- Advancing the AI-Based Realization of ACAS X Towards Real-World Application *Johann M. Christensen, Akshay A. Girija, Thomas Stefani, Umut Durak, Elena Hoemann, Frank Köster, Thomas Krüger and Sven Hallerbach*

51- Comparing diverse planning strategies with continuous Monte Carlo Tree Search applied to hybrid Gene Regulatory Networks *Romain Michelucci, Jean-Paul Comet and Denis Pallez*

58 Extending Hierarchical Partial-Order Causal-Link Planning to Temporal Problem Solving, *Nicolas Cavrel, Humbert Fiorino and Damien Pellier*

82- Synergizing Evolutionary Task Allocation with Learning-Driven Path Planning, *Yu Yilan, Qiu Jiang and Li Wei*

157- Cross-Paradigm Modelling: A Study of Puzznic, *Joan E Arxer, Ian Gent, Ian Miguel, Peter Nightingale, András Z. Salamon and Mateu Villaret.*

174- Vehicle Energy Consumption Prediction under Real-World Driving Conditions., *Binaya Sharma, Sayda Elmi and Kian Lee Tan*

HIGH SCHOOL TUTORIAL : AI EVOLUTION & CHALLENGES

Session Coordinator: **N. Bourbakis**
Presentations: 10:00 am -- 11:30am

SPEAKERS

Professor N. Bourbakis
"The sides of Artificial Intelligence (AI)"

Professor M. Virvou
"Large Language Models"

Professor M. Koubarakis
"AI and the future of work"

Professor G. Tsihrintzis
"AI-Empowered Decision Support Systems"

Lunch Break: 11:30am – 13:00pm

DAY-1: MAIN PROGRAM - Monday Oct. 28, 2024

CLASSIFICATION-SENTIMENT-SEMANTIC

Session Coordinator: **Taghi Khoshgoftaar**
Presentations: 13:00pm-15:00pm

50- SITH: Semantic Interpreter for Transformer Hierarchy, *Cheng Zhang, Jinxin Lv, Jingxu Cao, Jiachuan Sheng, Dawei Song and Tiancheng Zhang*

91- PatentALL: Multi-label Patent Classification using Adaptive Label Learning, *Yifan Qiang, Gaojie Sun and Hui Liu*

99- Job runtime prediction: a two-stage framework beyond PQR2 with fallback and enhanced classification, *Rémi Lacaze-Labadie.*

116- Comparing Human and BERT-Siamese Network (BertSNN) in Product Domain Similarity Ranking for Cross-Domain Sentiment Analysis, *Haitao Zhao and Jasy Suet Yan Liew*

117- Explainable Object Classification: Integrating Object Parts/Attributes and Expertise, *Jan Stodt, Christoph Reich, Martin Knahl and Nathan Clarke.*

145- A Comparison of Low-Shot Learning Methods for Imbalanced Binary Classification, *Preston Billion Polak and Taghi Khoshgoftaar.*

RECOMMENDATION SYSTEMS

Session Coordinator: **Emmanuel Viennet**
Presentations: 13:00pm-15:00pm

37- Modeling Long & Short-term Interests and Assigning Sample Weight for Multi-behavior Sequential Recommendation, *Tianyang Li, Hongbin Yan and Hanwen Xu*

113- Biterm Tensor Topic Model for Short Reviews in Recommender System, *Chengcheng Hao, Hui Liu, Wenping Shi and Shaoyun Zhang*

162- Machine Learning Based Recommendation Queries For Constraint Acquisition, *Hamza Islah and Younes Mechqrane*

316- LSMRec: Leveraging Hash-Enhanced Semantic Mapping for Superior Sequential Recommendations, *Haoyu Zhang and Wenfang Li*

388- Power of Suggestion: Strategic Feature Manipulation in Transformer-Based Models, *Issam Benamara and Emmanuel Viennet*.

375- An Ontology for Conversations with Virtual Research Assistants, *Anmol Saini, Jeffrey Ethier and Cogan Shimizu*

MACHINE LEARNING - 1

Session Coordinator: **M. Alexiou**
Presentations: 13:00pm-15:00pm

32- SUDS: a new Strategy for Unsupervised Drift Sampling, *Christofer Fellicious, Lorenz Wendlinger, Mario Lopez Gancarski, Jelena Mitrović and Michael Granitzer*

34- Accelerating prototype selection with spatial abstraction, *Joel Luis Carbonera.*

62- Physics-informed Machine Learning for Better Understanding Laser-Matter Interaction, *Fayad Ali Banna, Jean-Philippe Colombier, Rémi Emonet and Marc Sebban*

64- Continual Learning of 3D Point Cloud with Hyperbolic Manifold Replay, *Jin Yu, Zihao Xu, Zhengyu Li, Mingsong Chen, Xuan Tang and Xian Wei.*

233- Toward Predictive Stock Trading with Hidformer Integrated into Reinforcement Learning Strategy *Kamil Ł. Szydłowski and Jarosław A. Chudziak*

392- Unsupervised Learning and Effective Complexity: introducing JPG and Neural Sophistication, *Erick Gomez, Rémi Emonet and Marc Sebban*

Break: 15:00pm – 15:30pm

DAY-1: MAIN PROGRAM – Monday Oct. 28, 2024

KNOWLEDGE GRAPHS -1

Session Coordinator: **Taghi Khoshgoftaar**
Presentations: 15:30pm-17:30pm

111- Adversarial Regularized Graph Embedding for User Identity Linkage across Social Networks, *Xiaoyu Guo, Yan Liu and Fenlin Liu.*

131- Confident Labels: A Novel Approach to New Class Labeling and Evaluation on Highly Imbalanced Data, *Mary Anne Walauskis and Taghi Khoshgoftaar.*

183- Quadratic Assignment Contrastive Loss and Application on Graph Matching *Xiangsheng Shi and Zhipeng Jiang*

214- Multi-Level Graph Convolutional Network for Document Information Extraction, *Li-Ang Zhang, Peng Guo, Lin Dong, Fangfang Yuan, Dakui Wang, Cong Cao and Yanbing Liu.*

223- Enhancing Medicare Fraud Detection: Random Undersampling Followed by SHAP-Driven Feature Selection with Big Data, *Qianxin Liang, Richard Bauder and Taghi Khoshgoftaar*

307- CSFI for Social Media: Understanding and Predicting Cross-Community Information Propagation, *Yuhang Wang, Wei Zhou, Ziang Hu, Jizhong Han and Tao Guo*

ANOMALY DETECTION-1

Session Coordinator: **Jophin John**
Presentations: 15:30pm-17:30pm

45- Multi-type Vulnerability Detection with Staged Feature Fusion and Group Data Balance, *Boyang Zheng, Yawen Wang, Dongming Zhu and Yunzhan Gong*

55- Exploring the Suitability of the Cerebras Wafer Scale Engine for the Fast Prototyping of a Multilingual Hate Speech Detection System, *Michael Hoffmann, Jophin John and Nicolay Hammer*

189- MN-Net: Multi-Scale Feature Fusion and Neighborhood Attention Self-Supervised Network for Industrial Spool Surface Anomaly Detection, *Yuming Su, Dongming Tang, Lijun Yang, Yuxing Liu and Chao Yang.*

212-Fuzzy-Empowered Decision Making Integrated with DDDAS-Matrix Profile Framework for Anomaly Detection in Radiation Measurements, *Miltos Alamaniotis.*

218- Problematic News Topic Spreader Prediction via Uncertainty-based Contrastive Learning for Temporal Point Processes, *Haoran Chen and Dongmei Han.*

364 - A Legal Judgment Prediction Model Based on BERT, Attention, and Graph Convolutional Network, *Binxia Yang, Guibin Chen and Xudong Luo*

NEURAL NETS -1

Session Coordinator: **Chen Zhao**
Presentations: 15:30pm-17:30pm

88- Enhanced Multimodal Sentiment Analysis via Tensor Decomposition and Hypergraph Convolutional Networks, *Xinyin Zhang, Yonghua Zhao, Yang Liu and Dingye Zhang*

137- Where to go Next ? Social and Spatio-Temporal Learning for Next Points-of-Interest Prediction using Residual Vision Transformer, *Sayda Elmi and Sai Karthik Navuluru*

139- AGFA-Net: Attention-Guided Feature-Aggregated Network for Coronary Artery Segmentation using Computed Tomography Angiography, *Xinyun Liu, Pengcheng Xiao, Michele,Esposito, Manohar Raavi and Chen Zhao.*

164- Near-Linear Time Projection onto the $\ell_{1,\infty}$ Ball; Application to Sparse Neural networks, *Guillaume Perez, Laurent Condat and Michel Barlaud*

267- Contrastive Point Cloud Pretraining for Enhanced Transformers, *Divyashree S. Koti, Joshua Phillips & Frederick Cottle*

311- Multi-Task Learning of Visual Attributes for Image Aesthetics Assessment, *Ting Yu*

END DAY-1

DAY—2: MAIN PROGRAM - Tuesday Oct. 29, 2024

8:30am-9:30am : Keynote Speaker: Professor Maria Virvou, University of Piraeus, GR
"Large Language Models and Trust in AI: Critical Challenges and Solutions "

AI FOUNDATIONS - 2

Session Coordinator: **Chiaki Sakama**
Presentations: 9:30am – 11:30am

209- Linear Algebraic Partial Evaluation of Logic Programs, *Tuan Nguyen, Katsumi Inoue and Chiaki Sakama.*

257- Optimizing Power Peaks in Simple Assembly Line Balancing through Maximum Satisfiability, *Zhifei Zheng, Sami Cherif and Rui Shibasaki.*

272- The Power of Collaboration: Learning Large Bayesian Networks at Scale, *Vaidyanathan Peruvemba Ramaswamy, Stefan Szeider and Hai Xia*

334- Introducing Constraint Well-Founded Semantics for Constraint Logic Programming through Rewriting Transformations, *Bryan Garreau, Martín Diéguez, Eric Monfroy and Igor Stéphan.*

349- Virtual Network Embedding as Boolean Satisfiability, *Pavel Surynek, Yi Zheng, Erik Kline, Sven Koenig and T. K. Satish Kumar*

354- Counterfactual Explanation through Constraint Relaxation, *Sharmi Dev Gupta, Barry O'Sullivan and Luis Quesada*

278- Fast Evasion Detection & Alert Management in Tree-Ensemble-Based Intrusion Detection Systems, *Valency Oscar Colaco and Simin Nadjm-Tehrani*

SCHEDULING-PLANNING-SOLVING-2

Session Coordinator: **M. Alamaniotis**
Presentations: 9:30am – 11:30am

290- A User Study on Contrastive Explanations for Multi-Effector Temporal Planning with Non-Stationary Costs, *Xiaowei Liu, Kevin McAreavey and Weiru Liu.*

362- Benchmarking Autonomous Driving Systems using a Modular and Scalable Simulation Environment, *Dávid Szilágyi, Kuderna-Iulian Benţa and Christian Săcărea*

370-Association of Multi-sensor Data for Autonomous Car Driving: A Comparative Evaluation, *E. Ghiasi, G. Ghajari, M. Gottipati, P.S.S. Gogineni, R. Galla, and N. Bourbakis*

371- Planning With Incomplete Knowledge and Uncertain Goals: A Comparative Evaluation, *H C. Nagalla, R.V.Nagireddypalli, S. B. Naidu, N. G. Nalamasa, K. P. Nalla and N. Bourbakis*

372- Explainable AI Assisted Evolutionary Search of Engineering Designs, *Rahul Dubey.*

402- Intelligent Scheduling of Floating Nuclear Reactor Operation for Implementation of Distributed Smart Energy Systems in Remote Coastal Locations, *Miltos Alamaniotis*

LARGE LANGUAGE MODELS

Session Coordinator: **G. Tsihrintzis**
Presentations: 9:30am – 11:30am

87- Memory and Schema in Human-Generative Artificial Intelligence Interactions, *D. Panagoulias, P. Papatheodosiou, A. Bonakis, D. Dikeos, M. Virvou and G.A. Tsihrintzis.*

219- Weakly Supervised Video Anomaly Detection with Large Language Models Knowledge Enhancement Framework *Sicong Zhan, Jia Wang and Dandan Zhang.*

228- ESC-CoT: Easy-to-Hard Self-Comparative Chain-of-Thought for News Discourse Profiling, *Rong Zhu, Jingyuan Huang, Zejiang He, Menglong Lu, Zhen Huang, Jinhui Zhao and Yan Cao.*

286- KB2Bench:Toward a Benchmark framework for Large Language Models on Medical Knowledge, *Douglas Adjei-Frempah, Lisa Chen and Paea LePendu*

313- An Evaluation of Large Language Models for Geological Named Entity Recognition, *Rafael Oleques Nunes, Andre Suslik Spritzer, Dennis Giovani Balreira, Carla Maria Dal Sasso Freitas and Joel Luís Carbonera*

319- LLMs for Sentiment Analysis in Tourism Reviews: A Resource-Efficient Approach, *Dario Guidotti, Laura Pandolfo and Luca Pulina*

Lunch Break: 11:30am – 13:00pm

DAY-2: MAIN PROGRAM - Tuesday Oct. 29, 2024

DEEP LEARNING

Session Chairs: **Jason T.L. Wang**
Presentations: 13:00pm-15:00pm

33- Interpretable Deep Learning for Solar Flare Prediction, *Vinay Ram Gazula, Katherine G. Herbert, Yasser Abduallah and Jason T.L. Wang.*

76- A systematic analysis of deep learning algorithms in high-dimensional data regimes of limited size, *Simon Jaxy, Pieter Libin and Ann Nowe.*

92- Domain knowledge guided deep neural networks (DKG-DNN) for prediction of diaphragm wall deformation induced by excavation, *Huajing Zhao and Meng Wang*

165- Remember Your Best: Improving Exploitation in Deep Q-Network, *Trupal Patel, Aasmaan Gupta and Raghuram Bharadwaj Diddigi*

203- Phoneme Substitution: A Novel Approach for Backdoor Attacks on Speech Recognition Systems, *Xiong Bicheng and Wen Weiping*

239- Predicting Protein-Protein Binding Affinity with Deep Learning: A Comparative Analysis of CNN and Transformer Models, *Lingtao Chen, Kazi Fahim Ahmad Nasif, Bobin Deng, Shuten Niu and Chloe Yixin Xie*

ANOMALY DETECTION-2

Session Coordinator: **Guillaume Sagno**
Presentations: 13:00pm-15:00pm

93- Stable Discrete Segmented Reverse Diffusion Model for Solving Class Imbalance in Malicious Websites Detection, *Jiyang Shen, Tianlan Wei and Cong Cao*

275- NNTailor:A Neural Network-Driven Fuzzer for DataBase Management Systems, *Shutao Chu, Yongjun Wang, Haoran Xu, Zhiyuan Jiang and Yongxin Chen*

324- AgileAD: Anchor-Guided Contrastive Learning with a General Data Augmentation Strategy for Time Series Anomaly Detection, *Yulong Tian, Jiaxuan Xu, Jie Zuo and Lei Duan*

339- TSFeatLIME: An Online User Study in Enhancing Explainability in Univariate Time Series Forecasting, *Hongnan Ma, Kevin McAreavey and Weiru Liu*

390- Patch-aware Vector Quantized Codebook Learning for Unsupervised Visual Defect Detection, *Qisen Cheng, Shuhui Qu and Janghwan Lee*

394- Evaluating the Potential of Reinforcement Learning for Stochastic Machine Scheduling Problems, *Mohammed Majthoub Almoghrabi and Guillaume Sagno*

CVPR-1

Session Coordinator: **M. Alexiou**
Presentations: 13:00pm-15:00pm

54- INRNet: Neighborhood Re-ranking Based Method for Pedestrian Text-Image Retrieval, *Kehao Wang, Yuhui Wang and Qifeng Li*

65- Towards Releasing ViT from Pre-training, *Mario Haddad-Neto, André Silva, Rayol Mendonca-Neto, Moyses Mendes and Luiz Cordovil-Jr*

96- 3D-PSH: Lightweight 3D LiDAR Object Detection Using Adaptive Clustering and 3D Point Spatial Histograms, *Junaid Baber and Olivier Aycard*

90- Low-Density 3D Point Cloud Classification, *Ahmed Baha Ben Jmaa and Faten Chaieb*

181- ICLD: An Instance Contrastive Learning Domain Adaptive SAR Object Detection Network *Shouhong Wan, Risheng Xie, Rui Wang, Hantao Zhang and Peiquan Jin*

185- MDT-AF: Multi-dimension Transformer with Attention-based Filtering for Medical Image Segmentation, *Wentao Wang, Xi Xiao, Mingjie Liu, Qizhen Lan, Xuanyao Huang, Qing Tian, Swalpa Kumar Roy and Tianyang Wang*

Break: 15:00 pm– 15:30pm

DAY-2: MAIN PROGRAM - Tuesday Oct. 29, 2024

KNOWLEDGE GRAPHS - 2

Session Coordinator: **Vincent Derkinderen**
Presentations: 15:30pm-17:30pm

248- LRIRL: Improving Knowledge Graph Reasoning through Representation Learning-Based Rule Induction, *Yingjie Liu, Yingchi Mao, Fudong Chi, Bo Wu, Silong Ding and Rongzhi Qi*

258- KRLGI: Knowledge Representation Learning based on Global Information for Reasoning, *Bo Wu, Yingchi Mao, Fudong Chi, Yingjie Liu, Silong Ding and Rongzhi Qi*

346-LLM-Based Digital Twin Water Conservancy Knowledge Graph Construction, *Yan Yang, Feng Ye, Dong Xu, Jin Xu and Xuejie Zhang*

365- Pruning Boolean d-DNNF Circuits Through Tseitin-Awareness, *Vincent Derkinderen*

361- Fuzzy Concession Strategy for Emotional Human-Computer Negotiation *Xudong Luo, Ying Luo, Kaili Sun and Yanling Li*

276- Semi-Automatic Discovery of Dependency Relationships among Properties for Ranking-based Semantics, *Kengo Hayashi and Ryuta Arisaka*

AGENTS

Session Coordinator: **Bettina Fazzinga**
Presentations: 15:30pm-17:30pm

29- Autonomous Agents for Interrogation, *Merav Chkroun and Amos Azaria*

191- An Efficient Approach for Cooperative Multi-Agent Learning Problems, *Ángel Aso-Mollar and Eva Onaindia*

260- A Chatbot for Asylum-Seeking Migrants in Europe, *Bettina Fazzinga, Elena Palmieri, Margherita Vestoso, Luca Bolognini, Andrea Galassi, Filippo Furfaro and Paolo Torroni*

285- Multi-agent Path Finding in Continuous Environment, *Kristýna Janovská and Pavel Surynek*

350- Enhancing Multi-Agent Robustness: Addressing the Off-Diagonal Problem with Population-Based Training, *Petra Vysušilová, Přemysl Bašta and Martin Pilát*

383- Learning Reliable PDDL Models for Classical Planning from Visual Data, *Aymeric Barbin, Federico Cerutti and Alfonso Gerevini.*

MACHINE LEARNING - 2

Session Coordinator: **Santonu Sarkar**
Presentations: 15:30pm-17:30pm

102- A Machine Learning based tool to estimate coolant engine temperature based on motorcycle riding data, *Federico Pennino, David Attisano, Davide Sette and Maurizio Gabbrielli*

103- Estimating Power Consumption of GPU Application using Machine Learning Tool, *Gargi Alavani, Tanish Desai, Sharvil Potdar, Nayan Gogari, Snehanshu Saha and Santonu Sarkar*

132- Subspace Rotation Algorithm for Training Restricted Hopfield Network *Ci Lin, Tet Yeap and Iluju Kiringa*

202- MDRPC: Music-Driven Robot Primitives Choreography, *Lihua Zhang, Peng Zhai, Haiyang Guan, Xiaoyi Wei, Weifan Long and Dingkang Yang*

246- InFusionLayer: a CFA-based ensemble tool to generate new classifiers for learning and modeling, *Eric Roginek, Jingyan Xu and D. Frank Hsu*

GALA DINNER – 19:00pm – 21:00pm

END – DAY-2

DAY-3: MAIN PROGRAM Wednesday Oct. 30, 2024

8:30am-9:30am : Keynote Speaker: Professor Alex Brodsky, George Mason University, USA

"Decision Guidance Management System (DGMS) and its Applications to Renewable Energy Investment, Markets of Virtual Things, Sensor Optimization and Pandemic Mitigation"

OPTIMIZATION - CLASSIFICATION

Session Coordinator: **Emmanuelle Ménétrier**
Presentations: 9:30am – 11:30am

105- Selecting Search Strategy in Constraint Solvers using Bayesian Optimization, *Hedieh Haddad, Pierre Talbot and Pascal Bouvry*

160- SyREC: A Symbolic-Regression-Based Ensemble Combiner, *Kei Sen Fong and Mehul Motani*

210- Renyi Entropy Search for Bayesian Optimization, *Maxime Macé, Tassadit Amghar, Paul Richard and Emmanuelle Ménétrier*

256- Boosting Imperceptibility of Adversarial Attacks for Environmental Sound Classification *Shaojian Qiu, Xiaokang You, Wei Rong, Lifeng Huang and Yun Liang*

368- Rule-based Constraint Elicitation For Active Constraint-Incremental Clustering, *Aymeric Beauchamp, Thi-Bich-Hanh Dao, Samir Loudni and Christel Vrain*

389- Neural Tangent Bayesian Optimization for Accurate and Efficient Influence Maximization, *Zijian Zhang, Zonghan Zhang and Zhiqian Chen*

NATURAL LANGUAGE–TEXT-IMAGE

Session Coordinator: **Ouassila L. Narsis**
Presentations: 9:30am – 11:30am

136- A Legal Multi-Choice Question Answering Model Based on DeBERTa and Attention Mechanism, *Ying Luo, Xudong Luo and Guibin Chen*

154- Worldafford:Affordance Grounding based on Natural Language Instructions, *Changmao Chen, Yuren Cong and Zhen Kan*

198- MBTSAD: Mitigating Backdoors in Language Models Based on Token Splitting and Attention Distillation, *Yidong Ding, Jiafei Niu and Ping Yi*

265- Identifying Logical Patterns in Text for Reasoning, *Pauline Armary, El Vaigh C. Brahim, Antoine Spicher, Ouassila L. Narsis &C. Nicolle*

330- ConsfomerST:Multilayer Transformer and Contrast Learning for Image Style Transfer, *Yuanfeng Zheng and Honggang Zhao*

332- A DeBERTa-GPLinker-Based Model for Relations Extraction from Medical Texts, Zhiqi Deng, Shutao Gong and Xudong Luo

MACHINE LEARNING -3

Session Coordinator: **Barry O'Sullivan**
Presentations: 9:30am – 11:30am

163- Investigating the Duality of Interpretability and Explainability in Machine Learning, *Moncef Garouani, Josiane Mothe, Ayah Barhrhouj and Julien Aligon*

169- Learning and Simulating Human Behaviour with Relational Decision Trees, *Stanislav Sitanskiy, Laura Sebastia and Eva Onaindia*

177- Unnecessary Budget Reduction in Federated Active Learning, *Enzhi Zhang and Liu Yang*

326- A Machine Learning Approach to Model Counting, *Marco Dalla, Andrea Visentin and Barry O'Sullivan*

333- Efficient Compensation of Action for Reinforcement Learning Policies in Sim2Real, *Weitao Zhang, Shaorong Xie, Xiangfeng Luo, Wenwen Xiao and Tao Wang*

391- On the Learning of Explainable Classification Rules through Disjunctive Patterns, *Amel Hidouri, Said Jabbour, Ahmed Samet and Badran Raddaou*

Break: 11:30 am– 13:00pm

DAY-3: Main Program - Wednesday Oct. 30, 2024

AI - APPLICATIONS

Session Coordinator:
Euripides Petrakis & M.Alexiou
Presentations: 13:00pm-15:00pm

89- Explaining Teleo-reactive Strategic Behaviour, *Nausheen Saba Shahid, Agnieszka Mensfelt and Kostas Stathis*

172- Revisiting Frequent (Closed) Gradual Itemsets Mining. *Jerry Lonlac, Bernoulli Fotsing Tchide, Alain Bomgni, Arnaud Doniec and Engelbert Mephu Nguifo*

176- A Robust Random Search Approach for Matching Formulas in Math Information Retrieval Systems, *Megan Shellman, Kate Hill and Yiu-Kai Ng*

250- An Integrated Framework for Device and Service Descriptions in the Web of Things, *Aimilios Tzavaras, Chrisa Tsinaraki and Euripides Petrakis*

253- An Improved Negative Selection Algorithm Based on a T Cell Multilayer Immune Tolerance Mechanism, *Lu Peng, Yiwen Liang and He Yang*

242- A Robust UAV Tracking Solution in the Adversarial Environment, *Mengjie Jia, Yanyan Li and Jiawei Yuan*

401- Recognizing Binary Code Semantics Towards Achieving Software Segmentation *M. Alexiou, Z.Ryu, G.Abawe, S.Mertoguno*

MACHINE LEARNING - 4

Session Coordinator: **Marco Battaglieri**
Presentations: 13:00pm-15:00pm

292- Unfolding Particle Detector Acceptance in High Energy Physics with Generative AI, *Tareq Alghamdi, Tommaso Vittorini, Marco Spreafico, Marco Battaglieri, Nobuo Sato and Yaohang Li*

337- Towards Designing an Energy-Efficient Accelerated Sparse Convolutional Neural Network, *Kshira Sahoo, Vijaypal Singh Rathor, Munesh Singh, Rahul Gupta, G. K. Sharma and Monowar Bhuyan*

234- Permutation Equivariant Deep Reinforcement Learning for Multi-Armed Bandit, *Zhuofan Xu, Benedikt Bollig, Matthias Függer and Thomas Nowak.*

343- Improved Pig Behavior Analysis Through Strategic Data Preprocessing Framework in Machine Learning, *Pranjal Ranjan, Sanjana Bharadwaj, Yingqi Pei, Kenan Burak Aydin, Dong Ha, Gota Morota and Sook Shin*

358- Detecting Environment Drift in Reinforcement Learning Using Gaussian Process, *Zhizhou Fang and Uwe Zdun*

396- Rapid Autonomy Transfer in Reinforcement Learning with a Single Pre-Trained Critic, *Muhammad Faraz Karim, Yunjie Deng, Luyao Niu, Bhaskar Ramasubramanian, Michail Alexiou, Dinuka Sahabandu, Radha Poovendran and Sukarno Mertoguno*

CVPR- 2

Session Coordinator: **Joel Carbonera**
Presentations: 13:00pm-15:00pm

264- HTPSeg: A Semantic Segmentation Database for House-Tree-Person Psychological Test, *Hao Wang, Jin Wang, Ting Pan, Bingfeng Zhang and Weifeng Liu*

299- Temporal Scene Understanding using Contextually Unique Identification, *Sanjiv Subodhnarayan Jha, Kimberly Garcia, Yasmine Sheila Antille, Marc Elias Solèr, Simon Padua and Simon Mayer*

369- Investigating performance patterns of pre-trained models for feature extraction in image classification, *Matheus V. Todescato and Joel L. Carbonera*

381- A Novel Multi-Pose Person Re-Identification Method Based on Semantic- and Pose-Guided Feature Fusion, *Yuefeng Ma, Deheng Liu, Zhiqi Cheng and Shijian Li*

385- Face Verification with Veridical and Caricatured Images using Prominent Attributes, *Jayam Sutariya, Emily Hand, Cooper Flourens and Nathan Thom*

345- Multi-Input Deep Learning Models for Weight Forecasting of Pigs Using Depth Images, *Pranjal Ranjan, Dong Ha, Gota Morota and Sook Shin*

15:00 – 16:00pm : CLOSING REMARKS & ANNOUNCEMENTS