

Detailed Program of the Joint

25th EANN / EAAAI 2024

&

20th AIAI 2024

Conferences

**Faculty of Information Science & Informatics,
Library and Information Center Complex,
Ionian University, Corfu, Greece**

GPS coordinates of the Venue:

39.6233, 19.9152

Thursday 27/6/2024

10:00–16:30 Registration

10:15-10:30 Welcome Session

10:30-11:45

Session 1, Keynote 1: “An Evolutionary Approach to the Autonomous Design and Fabrication of Robots for Operation in Unknown Environments”

[Hybrid Session, Room 1 – Keynote 1](#)

Chair: Prof. Ilias Maglogiannis

Keynote Speaker: Professor Emma Hart

FRSE, Professor at Edinburgh Napier University, Edinburgh, Scotland, United Kingdom

12:15 - 13:45

Session 2, AIAI: BC 1 (Biomedical / Classification)

[Hybrid Session, Room 1](#)

Chair: Dr. Alina Delia Calin

Higher-Order Adaptive Dynamical System Modelling of the Role of Epigenetics in Major Depressive Disorder

Taylor Magielse, Diana Pena Lage, Isabel van Lieshout, Jan Treur

IRFold: An RNA Secondary Structure Prediction Approach

David Hurst, Costas Iliopoulos, Zara Lim, Ionut Moraru

Machine Learning Models for Predicting Celiac Disease Based on Non-invasive Clinical Symptoms

Alina Delia Calin

Optimization of healthcare process management using machine learning

Andreas Avgoustis, Themis Exarchos, Aristidis Vrahatis, Panagiotis Vlamos

12:15 - 13:45

Session 3, AIAI: DL 1 (Deep Learning)

[Hybrid Session, Room 2](#)

Chair: Assoc. Prof. Dario Malchiodi

Note that all times are in Athens - EEST (Eastern European Summer Time) Zone

A Deep Learning-Based Framework for Racket Sports Court Registration

Ahmed Jouini, Melek Elloumi, Faten Chaieb

Beyond Sentiment in Stock Price Prediction: Integrating News Sentiment and Investor Attention with Temporal Fusion Transformer

Petr Hajek, Josef Novotny

Cross-Relational Reasoning for Neural Tensor Networks

Tristan Falck, Duncan Coulter

Multivariate Time-Series Methods with Uncertainty Estimation for Correcting Physics-Based Model: Comparisons and Generalization for Industrial Drilling Process.

Mandar Tabib, Adil Rasheed

12:15 - 14:00

Session 4, AIAI: 5G-PINE 1 (5G – Putting Intelligence to the Network Edge (5G-PINE) Workshop)

[Hybrid Session, Room 3](#)

Chair: Dr. Ioannis Chochliouros

Promoting Deployment of Innovative Use Cases in Market Verticals for the Support of 6G Evolution: The 6G-PATH Context

Ioannis Chochliouros, Luís Cordeiro, João Fernandes, Almudena Díaz Zayas, David Guillen, Nicola di Pietro, Juan M. Losada, Andy Edmonds, Cristian Patachia-Sultanoiu, Ovidiu Ana, Qi Wang, Anna Brunstrom, Donal Morris, Nils Lahmann, Andreea Corici, Fihmi Mousa, Susana Sargento, Filipe Pinto, Tilemachos Doukoglou, Ronald Legallais, Marilena Paraskeva, Tarik Taleb, Rafael Marin-Perez, Evi Tziola, Nuno Varandas, Peter Gray, Uthayasankar Sivarajah, Pavlos Lazaridis, Christina Lessi, Anastasia S. Spiliopoulou

Boosting Digitalization across European Regions: The AMBITIOUS Approach

Ioannis Chochliouros, Alexandros Kostopoulos, Markus Aho, Sauro Vicini, Clemence Foltz, Anton Koval, Emanuele Pagliari, George Nikolakopoulos, Aki Happonen, Christos Panagiotou, Dimitris Karadimas, Katerina S. Karadima, Anastasia S. Spiliopoulou, Christos Zaroliagis

A Survey on Machine Learning Approaches in Water Analysis

Ilektra Tsimpidi, Rosa Sartjarvi, Petri Juntunen, George Nikolakopoulos

Testing Plan Description & Field Measurements for Real-Time Wide Area Monitoring of Interconnected Power Systems in the Smart5Grid Project

Ioannis Chochliouros, Michalis Rantopoulos, Dimitrios Brodimas, Nikolas Tzanis, Irina Ciornei, Markos Asprou, Anastasia S. Spiliopoulou, Pavlos Lazaridis

On 6G-enabled SDN-based mobile network User Plane with DRL-based Traffic Engineering

Robert Kotakowski, Lechosław Tomaszewski, Sławomir Kukliński

Note that all times are in Athens - EEST (Eastern European Summer Time) Zone

On the efficient architecture for 6G System

Lechosław Tomaszewski, Robert Kofakowski

12:15 - 13:30

Session 5, AIAI: LM-L (Learning - Machine Learning)

[Remote Session, Room 4](#)

Chair: Dr. Ioannis Livieris

Controlling Popularity Bias in Sequential Recommendation Models

Brandon Weaver, Melody Moh, Teng-Sheng Moh

Finding Logical Vulnerability in Policies Using Three-Level Semantic Framework

Karolina Bataityte, Vassil Vassilev, Olivia Jo Gill

From Tweets to Reddit: Leveraging Semi-Supervised Domain Adaptation for Improving Data Filtering

Shelly Gupta, Jumanah Alshehri, Ameen Abdel Hai, Hussain Otudi, Zoran Obradovic

Retail store customer behavior analysis system: Design and Implementation

Tuan Dinh Nguyen, Hihara Keisuke, Tung Cao Hoang, Yumeka Utada, Akihiko Torii, Naoki Izumi, Nguyen Thanh Thuy, Du Pham, Long Quoc Tran

12:15 - 13:30

Session 6, AIAI: AI4GD 1 (AI Applications for Achieving the Green Deal Targets Workshop)

[Remote Session, Room 5](#)

Chair: Dr. Iakovos Michailidis

An Innovative Methodology for Revealing Home Appliances' Consumption Patterns to Transform Energy Management and Maintenance Strategies

Alexios Papaioannou, Asimina Dimara, Ioannis Papaioannou, Aliko Stefanopoulou, Georgios Lepidas, Iakovos Michailidis, Christos Korkas, Christos-Nikolaos Anagnostopoulos, Elias Kosmatopoulos, Stelios Krinidis, Dimitrios Tzouvaras

Open-Source Online Mission-planning In Emergent Environments with PDDL for multi-robot applications

Iakovos Michailidis, Panagiotis Michailidis, Elias Kosmatopoulos, Nick Bassiliades

Resident-oriented Green Energy Optimization using a Multi-Objective Evolutionary Algorithm

Thalis Papakyriakou, Andreas Pamboris, Andreas Konstantinidis

Note that all times are in Athens - EEST (Eastern European Summer Time) Zone

14:45 - 16:30

Session 7, AIAI: BC 2 (Biomedical / Classification)

[Hybrid Session, Room 1](#)

Chair: Asst. Prof Aristidis Vrahatis

Enhancing Monkeypox Detection: A Machine Learning Approach to Symptom Analysis and Disease Prediction

Dea Louisa Magsino, Russel Lenard Mercado, Francesca Nicole Rivera, Ma. Sheila Magboo, Vincent Peter Magboo

Human-In-The-Loop based Success Rate Prediction for Medical Crowdfunding

Yingying Zhou, Jianji Wang, Xin Tang, Yongqiang Ma, Nanning Zheng

MTA-Net: a Multi-task Assisted Network for Whole-body Lymphoma Segmentation

Zhaohai Liang, Jiayi Wu, Siyi Chai, Yingkai Wang, Chengdong Li, Cong Shen, Jingmin Xin

Revisiting the problem of missing values in high-dimensional data and feature selection effect

Marina Elia, Wenting Duan

WristSense: A Wrist-wear Dataset for Identifying Aggressive Tendencies

Norah Almubairik, Fakhri Alam Khan, Rami Mohammad

14:45 - 16:30

Session 8, EANN/EAAAI: ML 1 (Machine Learning)

[Hybrid Session, Room 2](#)

Chair: Prof. Petr Hajek

A new approach to learn spatio-spectral texture representation with randomized networks: Application to Brazilian plant species identification

Ricardo T. Fares, Lucas C. Ribas

Assessing the Impact of Preprocessing Pipelines on fMRI based Autism Spectrum Disorder Classification: ABIDE II results

FATIMA EZ-ZAHRAA BAZAY, Ahmed Drissi El Maliani

Data-Driven Methods for Wi-Fi Anomaly Detection

Telma Garcao, Joana Sousa, Luis André, Carlos Alves, Nuno Felizardo, Carlos Silva, João Ferreira

Machine Learning-Based Feature Mapping for Enhanced Understanding of the Housing Market

Michael Lystbaek, Tharsika Pakeerathan Srirajan

Security Analysis of Cryptographic Algorithms: Hints from Machine Learning

Note that all times are in Athens - EEST (Eastern European Summer Time) Zone

14:45 - 16:45

Session 9, AIAI: 5G-PINE 2 (5G – Putting Intelligence to the Network Edge (5G-PINE) Workshop)
[Hybrid Session, Room 3](#)

14:45 - 16:00

Chair: Dr. Christos Gizelis

Boosting Data Monetization with DATAMITE

Jordi Arjona Aroca, María José López Osa, Urtza Iturraspe Barturen, Vasileios Siopidis, Konstantinos Votis, Anastasios Nikolakopoulos, Efthymios Chondrogiannis, Marcin Plociennik, Achilleas Marinakis, Konstantinos Nestorakis, Joel Himanen

Data Monetization Opportunities and Challenges: The European Landscape by DATAMITE

Christos Gizelis, Maria Panagiotidou, Sotiria Petrova, Daniela Fuchs, Margit Hofer, Marcin Plociennik, Agnieszka Rausch, Santiago Cáceres Elvira, Liliana Beltrán Blanco, Gabriel Gonzales Castane, Vivi Lähteenoja, Udo Bub, Polina Petrova, Martina Bogdanova, Elisa Cauche

Market Analysis of a Data Platform in the European Data Ecosystem

Gabriel Castane, Alejandro Martinez, Qusai Ramadan, Zaneta Gkika, Panagiotis Mpempis, Eduardo Vyhmeister

Scalable Data Profiling for Quality Analytics Extraction

Anastasios Nikolakopoulos, Efthymios Chondrogiannis, Efstathios Karanastasis, María José López Osa, Jordi Arjona Aroca, Michalis Kefalogiannis, Vasiliki Apostolopoulou, Efstathia Deligeorgi, Vasileios Siopidis, Theodora Varvarigou

16:00-16:45

Extra Interactive Session – Panel discussion (organised by DATAMITE), focusing on the power of data.

This session aims to bring together experts from various projects to discuss **the importance and impact of data and its monetisation in various industries.**

The session will provide a platform for knowledge exchange, collaboration, and networking between project representatives, industry experts, and researchers.

Representatives of the following projects will be present at the panel discussion:

Panel Moderation: Antonis Sapountzis (AUSTRALO)

Note that all times are in Athens - EEST (Eastern European Summer Time) Zone

- **DATAMITE:** DATA Monetization, Interoperability, Trading & Exchange - **Dr. Christos Gizelis**
 - **ELOQUENCE:** Multilingual and Cross-cultural interactions for context-aware and bias-controlled dialogue systems for safety-critical applications - **Prof. Haris Mouratidis**
 - **CyberSecDome:** An innovative Virtual Reality based intrusion detection, incident investigation and response approach for enhancing the resilience, security, privacy and accountability of complex and heterogeneous digital systems and infrastructures - Dr **Shareeful Islam**
 - **6G-PATH:** 6G Pilots and Trials Through Europe - Dr. **Ioannis Chochliouros**
 - **AMBITIOUS:** Advanced CoMputing Continuum Solutions for Boosting DigITalization across European RegionS - Dr. **Alexandros Kostopoulos**
 - **Smart5Grid:** Demonstration of 5G solutions for SMART energy GRIDs of the future - Mr. **Michalis Rantopoulos**
-

14:45 - 16:30

Session 10, EANN/EAAAI: ML 2 (Machine Learning)

[Remote Session, Room 4](#)

Chair: Prof. Cira Perna

Application of Directional Vectors for Independent Subspaces in Bio-inspired Networks

Naohiro Ishii, Kazunori Iwata, Kazuya Odagiri, Tokuro Matsuo

Discrete-Time Replicator Equations and The Price of Cognition on Parallel Neural Networks

Armen Bagdasaryan, Antonios Kalampakas, Mansoor Saburov

Evaluating forecast distributions in neural network HAR-type models for range-based volatility

Michele La Rocca, Cira Perna

Machine Learning Classification of Water Conductivity raw values of "Faneromeni" Reservoir in Crete

Lazaros Iliadis, Nichat Kiourt, Christos Akratos, Antonios Papaleonidas

Machine Unlearning; A Comparative Analysis

Ziad Doughan, Sari Itani

14:45 - 16:30

Session 11, AIAI: DL 2 (Deep Learning)

[Remote Session, Room 5](#)

Chair: Dr. Athanasios Kallipolitis

Active Learning with Unfiltered Informativeness Technique for Object Detection

Rafael Amauri DINIZ AUGUSTO, Mohamad Ghassany, Faten CHAIEB, Fouad HADJ SELEM

Note that all times are in Athens - EEST (Eastern European Summer Time) Zone

C-XGBoost: A tree boosting model for causal effect estimation

Niki Kiriakidou, Ioannis Livieris, Christos Diou

FCGAN: Spectral Convolutions via FFT for Channel-Wide Receptive Field in Generative Adversarial Networks

Pedro Gomes, Luiz Fernando Santos, Marcelo Gattass

Forecasting Longitudinal Acceleration in Urban Vehicles

János Kontos, László Bódis, Ágnes Vathy-Fogarassy

Towards Semantically Conscious, Conversation-based Chatbot Services for Migrants

Georgios Meditskos, Stergios Tegos, Christos Bouas, Alexandros Tassios, Konstantinos

Manousaridis, Maria Papoutsoglou, Thanassis Mavropoulos, Stefanos Vrochidis

18:00 - 22:00 Social Activity.

Walking tour around city center & Welcome cocktail

Walking tour around city center:

Meeting point: In front of the Old Fortress (Fortezza) / Porta Maggiore

GPS coordinates: 39.6234, 19.92588

Starting time: 18:00

Expected duration: 1 hour and half to two hours.

Description of the activity: We will visit the most emblematic monuments and places in the city of Corfu (Old Fortress, Boschetto gardens, Palace of St. Michael and St. George, Saint Spyridon Church, Campiello & The Kandounia of old town, City Hall, Duomo, Galinos building) accompanied by touristic guides who will explain it and review the history of Corfu. Tour will end at the welcome cocktail patio.

Welcome cocktail:

Patio of Galinos building, Ionian University

GPS coordinates: 39.620994, 19.91507

Starting time: 20:00

Expected duration: 2 hours.

Description of the activity: the welcome cocktail will be a networking event that includes a variety of finger food and drinks which will be served to the participants in an informal way, accompanied by live Greek music.

Note that all times are in Athens - EEST (Eastern European Summer Time) Zone

The above social activity is complimentary and free for all registered conference participants. Please be sure to have your name badge/ QR code with you.

Accompanying persons can freely join the 1st part of the activity while a ticket is required for the welcome cocktail event.

More info can be found at the conference registration desk.

Note that all times are in Athens - EEST (Eastern European Summer Time) Zone

Friday 28/6/2024

9:30–16:00 Registration

10:00-11:15

Session 12, Keynote 2: “Developmental Robotics for Language Learning, Trust and Theory of Mind”

[Hybrid Session, Room 1 – Keynote 2](#)

Chair: Prof. Markos Avlonitis

Keynote Speaker: Professor Angelo Cangelosi

University of Manchester and Alan Turing Institute, UK

11:45 - 13:15

Session 13, AIAI: DLC (Deep Learning / Convolutional)

[Hybrid Session, Room 1](#)

Chair: Asst. Prof Nicholas Ampazis

Deep Sleep Recognition Based on CNNs and Data Augmentation

Ruixuan Chen, Linfeng Sui, Mo Xia, Jianting Cao

Gamified Crowd Management Utilizing AR and Computer Vision on the Edge

Dionysios Koulouris, Andreas Menychtas, Ilias Maglogiannis

KeepOriginalAugment: Single Image-based Better Information-Preserving Data Augmentation Approach

Teerath Kumar, Alessandra Mileo, Malika Bendeche

Using DCGANs and HOG+Patch-based CNN for Face Spoofing Mitigation

John Jenkins, Kaushik Roy

Vertical Federated Image Segmentation

Paul Mandal, Cole Leo

11:45 - 13:15

Session 14, AIAI: DLBC (Deep Learning - Biomedical / Classification)

[Hybrid Session, Room 2](#)

Chair: Prof. Serafin Alonso

Note that all times are in Athens - EEST (Eastern European Summer Time) Zone

A Comparison of AI methods for Groundwater Level Prediction in Burkina Faso

Abdoul Aziz BONKOUNGOU, RODRIQUE KAFANDO, Aminata SABANE, Souleymane ZIO, Tegawendé F. BISSYANDE, Abdoul Kader KABORE

Advancing scRNA-seq Data Integration via a Novel Gene Selection Method

Konstantinos Lazaros, Themis Exarchos, Ilias Maglogiannis, PANAGIOTIS VLAMOS, Aristidis Vrahatis

Lip Recognition Based on Bi-GRU with Multi-Head Self-Attention

Ran Ni, Haiyang Jiang, Lu Zhou, Yuanyao Lu

Modeling Distributed and Flexible PHM Framework based on the Belief Function Theory

Safa Ben Ayed, Malika Ben Khalifa, Samir Ouchani

Towards robust Road Quality Detection using different Detection Models

Aayushi Thantharate, Morten Goodwin, Per-Arne Andersen, Aditya Gupta

11:45 - 13:15

Session 15, AIAI: MHDW 1 (Mining Humanistic Data Workshop (MHDW))

[Hybrid Session, Room 3](#)

Chair: Asst. Prof Aristidis Vrahatis

Efficient Energy Disaggregation using DBSCAN: A Novel Approach for Enhanced Energy Management

Emmanouela-Electra Economopoulou, Gerasimos Vonitsanos, Phivos Mylonas, Andreas Kanavos

Integrating Machine Learning and Biological Context for Single-Cell Gene Regulatory Network Inference

Dimitrios E. Koumadorakis, Georgios N. Dimitrakopoulos, Themis P. Exarchos, Panagiotis Vlamos, Aristidis G. Vrahatis

Museum Education: Integration of Cultural Heritage and Educational Metadata Schemas

Eleni Vlachou, Ioannis Karydis

Transformer-based anomaly detection in energy consumption data

Dimitrios Karpontinis, Georgios Alexandridis

Unraveling Negation in Modern Greek Using Machine Learning: A Comprehensive Analysis and Detection Framework

Styliani Adam, Kleitos Anastasiou, Panagiotis Karastathis, Avraam Kioseoglou, Giorgos Tsivelekidis, Katia Lida Kermanidis

Note that all times are in Athens - EEST (Eastern European Summer Time) Zone

11:45 - 13:15

Session 16, AIAI: DAAI 1 (Defense Applications of AI)

[Remote Session, Room 4](#)

Chair: Dr. Isidoros Monogioudis

Trustworthiness of AI in Defence Whitepaper

Isidoros Monogioudis

Automating Security Workflows using LLMs

Fotis Chantzis

Artificial Intelligence for Core Defence Functions: Optimized Mission Planning & Cyber Threat Detection

Scott Nichols and Cedric de Ville de Goyet

Validation of data generated with LLM; a prerequisite for their use for defence ackling the risks of deploying LLMs

Ulysse Oliveri and Claude Fenzi

11:45 - 13:00

Session 17, AIAI: 5G-PINE 3 (5G – Putting Intelligence to the Network Edge (5G-PINE)

Workshop)

[Remote Session, Room 5](#)

Chair: Dr. Ioannis Chochliouros

Beyond 5G Networking: The Case of NANCY Project

Ioannis Chochliouros, Maria Belesioti, Stylianos Trevlakis, Ramon Sanchez-Iborra, Rodrigo Asensio-Garriga, Dimitris Arvanitosis, Carolina Fortuna, Francisco Javier de Vicente Gutierrez, Sotiris Soukaras, Dimitris Kavallieros

Innovative digital forensic and investigation tools for Law Enforcement: The EMPOWER & TRACY Approach

Nikos Avgerinos, Panagiotis Mertis, Manolis Tsangaris, Nikos Desipris, George Lyberopoulos, Elina Theodoropoulou, Konstantinos Filis, Jelena Sarajlić, Manuel Pastor, Despoina Chatzakou, George Kalpakis, Christos Chatzikonstantinou, Dorothea Tsatsou, Stefanos Demertzis, Peter Leskovsky, Shona Linehan, John Mulcahy, Ioannis Karvelas, Manuel Álvarez Fernández, André Alegria

OCTAPUS: Empowering Next Generation Central Offices with Cross-Layer Network Intelligence towards a Reconfigurable Data Plane

Note that all times are in Athens - EEST (Eastern European Summer Time) Zone

Marios Gatzianas, George Kalfas, Christos Vagionas, Mary Vargemidou, Georgios Papadakis, Fabienne Saliou, Elina Theodoropoulou, George Lyberopoulos, Pietro Piscione, Ahmed Abdulwahed, Pietro Giardina, Voica Gavrilit, Christopher Alsted, Frederic Gardes, Ioannis Zeimpekis, Thalia Dominguez, Xingshi Yu, Ipsita Chakraborty, Hawraa Atwi, Stefanos Dris, Nikos Argyris, Paraskevas Bakopoulos, Sophia Petridou, Amalia Miliou, Nikos Pleros

Seamless Integration of Efficient 6G Wireless Technologies for Communication and Sensing enabling Ecosystems

Jesus Gutierrez Teran, Vladica Sark, Mert Özates, Anna Tzanakaki, Markos Anastasopoulos, Valerio Frascolla, Ioanna Mesogiti, Elina Theodoropoulou, George Lyberopoulos, Luis Diez, Ramon Agüero, Ignacio Santamaría, Padmanava Sen, Simon Pryor, Shahid Mumtaz, Salvatore Pontarelli, Federico Trombetti, Novella Bartolini, Eduard Jorswieck, Xi Ding, Navid Nikaein

14:15 - 15:45

Session 18, AIAI: RNL 1 (Reinforcement / Natural Language)

[Hybrid Session, Room 1](#)

Chair: Prof. Marco Vannucci

GreekT5: Sequence-to-Sequence Models for Greek News Summarization

Nikolaos Giarelis, Charalampos Mastrokostas, Nikos Karacapilidis

Improving RAG Quality for Large Language Models with Topic-Enhanced Reranking

Nicholas Ampazis

Multi-Dimensional Classification on Social Media Data for Detailed Reporting with Large Language Models

Riccardo Cantini, Cristian Cosentino, Fabrizio Marozzo

Online Reinforcement Learning for Designing Automotive Hybrid Assembly Sequence: A Task Clustering-Guided Approach

Anass ELHOUD, Benoit Piranda, Raphael De Matos, Julien Bourgeois

Strategizing the Shallows: Leveraging Multi-Agent Reinforcement Learning for Enhanced Tactical Decision-Making in Littoral Naval Warfare

Lauri Vasankari, Kalle Saastamoinen

14:15 - 15:45

Session 19, EANN/EAAAI: DL 1 (Deep Learning)

Note that all times are in Athens - EEST (Eastern European Summer Time) Zone

[Hybrid Session, Room 2](#)

Chair: Prof. Yuanyao Lu

Active Learning with Aggregated Uncertainties from Image Augmentations

Tamás Janusko, Colin Simon, Kevin Kirsten, Serhiy Bolkun, Eric Weinzierl, Julius Gonsior, Maik Thiele

An Autoencoder-based approach for Anomaly Detection of Machining Processes using Acoustic Emission signals

Antonio Nappa, Juan Luis Ferrando Chacón, Izar Azpiroz, Pedro José Arrazola

HEADS: Hybrid Ensemble Anomaly Detection System for Internet-of-Things Networks

Zeeshan Ahmad, Andrei Petrovski, Murshedul Arifeen, Adnan Shahid Khan, Syed Aziz Shah

Leveraging Diverse Data Sources for Enhanced Prediction of Severe Weather-Related Disruptions Across Different Time Horizons

Hussain Otudi, Shelly Gupta, Zoran Obradovic

14:15 - 15:45

Session 20, AIAI: MHDW 2 (Mining Humanistic Data Workshop (MHDW))

[Hybrid Session, Room 3](#)

Chair: Assoc. Prof. Ioannis Karydis

Inviter Speaker:

14:15 - 15:45

Session 16, AIAI: DAAI 2 (Defense Applications of AI)

[Remote Session, Room 4](#)

Chair: Dr. Isidoros Monogioudis

Tackling the risks of deploying LLMs

Mike Speirs

Autonomous Cyber Defence Agents using DRL and LLMs to protect Critical Infrastructure Networks

Roberto Rigolin

The Dual Role of Generative AI and Large Language Models in Cybersecurity: Balancing Risks and Optimised Defence

Note that all times are in Athens - EEST (Eastern European Summer Time) Zone

Panagiotis Radoglou-Grammatikis

Enhancing Virtual Environments with LLMs and Generative AI

Chris Arthurs

14:15 - 15:45

Session 22, AIAI: CSAD-EAO (Cyber Security / Anomaly Detection - Explainable AI - Optimization)

[Remote Session, Room 5](#)

Chair: Assoc. Prof. Andreas Menychtas

Effective Machine Learning Techniques and API Realizations for Visualizing Fraud Detection in Customer Transactions

Rina Ajay Yadav, Doina Logofatu, Sheikh Sharfuddin Mim, Jiban Kumar Ray

FASTER-CE: Fast, Sparse, Transparent, and Robust Counterfactual Explanations

Shubham Sharma, Alan Gee, Jette Henderson, Joydeep Ghosh

Local Community-Based Anomaly Detection in Graph Streams

KONSTANTINOS CHRISTOPOULOS, KONSTANTINOS TSICHLAS

Optimizations for Learning from Linear Feedback Shift Register Variations with Artificial Neural Networks

Sara Boanca

16:15 - 18:00

Session 23, AIAI: RC (Recommendation / Classification)

[Hybrid Session, Room 1](#)

Chair: Asst. Prof Fabrizio Marozzo

A Machine Learning Approach for Points of Interest Extraction and Event Classification

Pedro Dias, Flora Ferreira, Pedro Miguel Ferreira Guimarães, Weronika Wojtak, Wolfram Erlhagen, Sérgio Paulo Carvalho Monteiro, Emanuel Augusto Freitas de Sousa, Estela Bicho

An Empirical Analysis of Data Reduction Techniques for k-NN Classification

Stylianios Eleftheriadis, Georgios Evangelidis, Stefanos Ougiaroglou

Enhanced Item Recommendation via Graph Properties in Sparse Data

Şükrü Demir İnan Özer, Günce Keziban Orman

Note that all times are in Athens - EEST (Eastern European Summer Time) Zone

Modeling the Air Conditioner Performance Tests using Artificial Neural Network Simulator (ANNS-AC)

Yousef Almutairi, Mohammed Alrashidi, AbdulRahman Alqahtani, Turki Alqahtani, Amr Sadek

Pattern Matching in Polyphonic Musical Sequences

Mai Alzamel, Costas Iliopoulos, Zara Lim, Marie Moser-Schwaiger

16:15 - 18:00

Session 24, EANN/EAAAI: NN (Neural Networks)

[Hybrid Session, Room 2](#)

Chair: Dr. Zeeshan Ahmad

A Spike Vision Approach for Multi-Object Detection and Generating Dataset Using Multi-Core Architecture on Edge Device

Sanaullah, Shamini Koravuna, Ulrich Rückert, Thorsten Jungeblut

Feature selection with L1 regularization in formal neurons

Leon Bobrowski

Machine Learning Modeling in Industrial Processes for Visual Analysis

Antonio Morán, Serafin Alonso, Juan J. Fuertes, Miguel Ángel Prada, Lidia Roca, Manuel Dominguez

Unsupervised Anomaly Detection Combining PCA and Neural Gases

Marco Vannucci, Valentina Colla, Antonella Zaccara, Stefano Dettori, Laura Laid

16:15 - 18:00

Session 25, AIAI: MHDW 2 (Mining Humanistic Data Workshop (MHDW))

[Hybrid Session, Room 3](#)

Chair: Assoc. Prof. Katia Lida Kermanidis

Comparative Analysis of Time Series and Machine Learning Models for Air Quality Prediction Utilizing IoT Data

Gerasimos Vonitsanos, Theodor Panagiotakopoulos, Achilles Kameas

Net Zero Strategies: Empowering Climate Change Solutions Through Advanced Analytics and Time Series

Tariq Najr, Chrissie Aldo, Ioannis Karamitsos, Andreas Kanavos, Sanjay Modak

Note that all times are in Athens - EEST (Eastern European Summer Time) Zone

New Perspectives in e-Learning: EEG-based Modelling of Human Cognition Individual Differences

Maria Trigka, Elias Dritsas, Phivos Mylonas

Optimizing Vehicle-to-Vehicle Energy Sharing with Predictive Modeling

Marwa Alghawi, Jinane Mounsef, Ioannis Karamitsos

Predicting Song Popularity through Machine Learning and Sentiment Analysis on Social Networks

Gerasimos Rompolas, Athanasios Smpoukis, Eleana Kafeza, Christos Makris

16:15 - 17:45

Session 26, AIAI: ML 1 (Machine Learning)

[Remote Session, Room 4](#)

Chair: Prof. Ioannis Vlahavas

A Prediction Analysis for the Case of a Korean Police Dataset

Benjamin Aziz, Alaa Mohasseb, Jeyong Jung

Detecting Illicit Data Leaks on Android Smartphones Using an Artificial Intelligence Models

Serge Lionel NIKIEMA, Aminata SABANE, Abdoul Kader KABORE, Rodrique KAFANDO, Tegawende F. BISSYANDE

Improved NO₂ Prediction using Machine Learning Algorithms

Chukwuemeka Jaja-Wachuku, Lorenzo Garbagna, Lakshmi Babu Saheer, Mahdi Maktabdar Oghaz

Predictive Maintenance under Absence of Sensor Data

Ioannis Pierros, Vasileios Kochliaridis, Eirini Apostolidou, Eleni Delimpasi, Vasileios Zygouris, Ioannis Vlahavas

16:15 - 17:45

Session 27, AIAI: BC-DMM (Biomedical / Classification -Data Mining / Modeling)

[Remote Session, Room 5](#)

Chair: Prof. Dimitris Iakovidis

An evaluation framework for synthetic data generation models

Ioannis Livieris, Nikos Alimpertis, George Domalis, DIMITRIOS TSAKALIDIS

Evaluation of Language Models for Multilabel Classification of Biomedical Texts

Panagiotis G. Syriopoulos, Andreas D. Andriopoulos, Dimitrios Koutsomitropoulos

Note that all times are in Athens - EEST (Eastern European Summer Time) Zone

Risk Assessment of COVID-19 Transmission on Cruise Ships Using Fuzzy Rules

Georgia Sovatzidi, Georgios Triantafyllou, George Dimas, Panagiotis Kalozoumis, Dimitris Drikakis, Ioannis Kokkinakis, Ioannis Markakis, Christina Golna, Dimitris Iakovidis

Vision transformer based tokenization for enhanced breast cancer histopathological images classification

Mouhamed Laid ABIMOULOUD, Khaled BENSID, Mohamed Elleuch, Oussama AIADI, Monji KHERALLAH

Saturday 29/6/2024

9:30–17:45 Registration

10:00 - 11:15

Session 28, AIAI: BC 3 (Biomedical / Classification)

[Hybrid Session, Room 1](#)

Chair: Assoc. Prof. Shareeful Islam

Advanced Mortality Prediction in Adult ICU: Introducing a Deep Learning Approach in Healthcare

Dimitrios Simopoulos, Dimitrios Kosmidis, Sotiria Koutsouki, Nicolas Bonnotte, George Anastassopoulos

Data Augmentation Techniques for Cross-Domain WiFi CSI-based Human Activity Recognition

Julian Strohmayer, Martin Kampel

The Role of Epigenetics in OCD: a Multi-Order Adaptive Network Model for DNA-Methylation Pathways and the Development of OCD

Lotte Huisman, Catherine Ong, Marco Van de Werken, Jan Treur

Towards an Unbiased Classification of Chest X-ray Images using a RL Powered ACGAN Framework

Melissa Beaini, Mariette Awad

10:00 - 11:15

Session 29, AIAI: EAO (Explainable AI - Optimization)

[Hybrid Session, Room 2](#)

Chair: Dr. Chondrogiannis Efthymios

A Voting Approach for Explainable Classification with Rule Learning

Albert Nössig, Tobias Hell, Georg Moser

Dynamic Stacking Optimization in Unpredictable Environments : A Focus on Crane Scheduling

Jiban Kumar Ray, Doina Logofatu, Costin Badica

Path planning optimisation for multiple drones: Repositioning the Starting Point

Gregory Gasteratos, Ioannis Karydis

The Faculty Assignment Problem in Higher Education: A Shapley Value-based Approach

Note that all times are in Athens - EEST (Eastern European Summer Time) Zone

*Vassilios S. Verykios, Evgenia Paxinou, Aris Gkoulalas-Divanis, Manolis Tzagarakis,
Sotirios Kotsiantis, Georgios Feretzakis, Dimitris Kalles*

10:00 - 11:15

Session 30, AIAI: AI4GD 2 (AI Applications for Achieving the Green Deal Targets Workshop)
[Hybrid Session, Room 3](#)

Chair: Asst. Prof Stelios Krinidis

An explainable by-design framework for transparent user-centric AI energy services

Christos Tzouvaras, Asimina Dimara, Christos-Nikolaos Anagnostopoulos, Stelios Krinidis

Mixed Reality and 3D modelling Role in Cultural Heritage Preservation as a Pathway to
Sustainable Heritage and Management

*Asimina Dimara, Doukas Psarros, Alexandros Vrochidis, Alexios Papaioannou, Stelios
Krinidis, Christos-Nikolaos Anagnostopoulos*

Semantic Enrichment and Analysis of Building Energy Consumption Data for the City of Sofia

Teodora Koleva, Lidia Vitanova, Dessislava Petrova-Antonova, Alexander Kostadinov

Tourist Flow Projection in Response to Weather Variability for Sustainable Tourism and
Management

*Georgia Tzitziou, Asimina Dimara, Alike Stefanopoulou, Alexios Papaioannou, Iakovos
Michailidis, Stelios Krinidis, Christos-Nikolaos Anagnostopoulos, Elias Kosmatopoulos,
Dimosthenis Ioannidis, Dimitrios Tzovaras*

10:00 - 11:15

Session 31, EANN/EAAAI: NN / ML (Neural Networks / Machine Learning)

[Remote Session, Room 4](#)

Chair: Assoc. Prof. Sotiris Tasoulis

Graph-Based Fault Localization in Python Projects with Class-Imbalanced Learning

Apoorva Kulkarni, Divya Niranjana, Noel Saju, P Rakshith Shenoy, Arti Arya

HCER: Hierarchical Clustering-Ensemble Regressor

*Petros Barmpas, Panagiotis Anagnostou, Sotirios Tasoulis, Spiros Georgakopoulos,
Vassilis Plagianakos*

Machine Learning-Driven Improvements in HRV Artifact Correction for Psychosis Prediction in
the Schizophrenia Spectrum

Paraskevi Tsakmaki, Sotirios Tasoulis, Spiros Georgakopoulos, Vassilis Plagianakos

Note that all times are in Athens - EEST (Eastern European Summer Time) Zone

Understanding Users' Confidence in Spoken Queries for Conversational Search Systems

Youjing Yu, Zhengxiang Shi, Aldo Lipani

10:00 - 11:15

Session 32, AIAI: GNNML -MA (Graphs / Neural Networks / Machine Learning - Multi Agent / Ontologies/ Robotics)

[Remote Session, Room 5](#)

Chair: Assoc. Prof. Phivos Mylonas

Emerging research topics identification using Temporal Graph Neural Networks

Antonis Charalampous, Constantinos Djouvas, Nicolas Tsapatsoulis, Emily Kouzaridi

Graph Neural Networks In PyTorch For Link Prediction In Industry 4.0 Process Graphs

Eleanna Kafeza, Georgios Drakopoulos, Phivos Mylonas

Integrating LLMs in the engineering of a SAR ontology

Dimitrios Doumanas, Andreas Soularidis, Konstantinos Kotis, George Vouros

Lightweight Inference by Neural Network Pruning: Accuracy, Time and Comparison

Ilias Paralikas, Sotirios Spantideas, Anastasios Giannopoulos, Panagiotis Trakadas

11:45 - 13:00

Session 33, AIAI: ML 2 (Machine Learning)

[Hybrid Session, Room 1](#)

Chair: Prof. Doina Logofatu

Enhancing Predictive Process Monitoring with Conformal Prediction

Fotios Skouvas, Harris Papadopoulos, Andeas Andreou

Improving Agricultural Image Classification by Mining Images

Wei Zhou, Aoyang Liu, Yongqiang Ma

Pollutant concentration prediction by random forest to estimate a contaminant source position

Sidi mohammed ALAOU, Khalifa Djemal, Amirali Feiz, Pierre Ngae

Unlocking User Privacy: A Systematic Survey of Factors and Methods in Predicting App Permission Decisions

Rena Lavranou, Aggeliki Tsohou

Note that all times are in Athens - EEST (Eastern European Summer Time) Zone

11:45 - 13:00

Session 34, AIAI: CSAD (Cyber Security / Anomaly Detection)

[Hybrid Session, Room 2](#)

Chair: Prof. Vassilios S. Verykios

A Network-based Intrusion Detection System based on widely used Cybersecurity Datasets and State of the Art ML techniques

Chondrogiannis Efthymios, Efstathios Karanastasis, Vassiliki Andronikou, Theodora Varvarigou

Enhancing Malware Detection through Machine Learning using XAI with SHAP Framework

Nihala Basheer, Bernardi Pranggono, Shareeful Islam, Spyridon Papastergiou, Haralambos Mouratidis

Exploration of Ensemble Methods for Cyber Attack Detection in Cyber-Physical Systems

Yaa T. Acquah, Roy Kaushik

Synthetic Data Generation and Impact Analysis of Machine Learning Models for Enhanced Credit Card Fraud Detection

Ahmed Abdullah Khaled, Md Mahmudul Hasan, Shareeful Islam, Spyridon Papastergiou, Haralambos Mouratidis

11:45 - 13:00

Session 35, AIAI: AI4GD 3 (AI Applications for Achieving the Green Deal Targets Workshop)

[Remote Session, Room 3](#)

Chair: Asimina Dimara

Advancing Agricultural Sustainability through Classification of Plant Pests and Diseases

Hadi Hasan, Razan Al Kakoun, Gaby Massaad, Mariette Awad

Data collection & wrangling towards Machine Learning in LoD2+ urban models generation

Vasilis Naserentin, George Spaias, Anestis Kaimakamidis, Sanjay Somanath, Anders Logg, Radostin Mitkov, Mariya Pantusheva, Asimina Dimara, Stelios Krinidis, Christos-Nikolaos Anagnostopoulos, Dessislava Petrova-Antonova

Non-Intrusive Weather Analysis for Sustainable Preservation in Cultural Heritage Buildings

Asimina Dimara, Mariya Pantusheva, Radostin Mitkov, Vasilis Naserentin, George Spaias, Orfeas Eleftheriou, Stelios Krinidis, Christos-Nikolaos Anagnostopoulos, Dessislava Petrova-Antonova, Anders Logg

Note that all times are in Athens - EEST (Eastern European Summer Time) Zone

11:45 - 13:00

Session 36, EANN/EAAAI: DL 2 (Deep Learning)

[Remote Session, Room 4](#)

Chair: Gerasimos Vonitsanos

Binary Black Hole Parameter Estimation from Gravitational Waves with Deep Learning Methods

Panagiotis Sakellariou, Spiros Georgakopoulos

Comparative study between Q-NAS and traditional CNNs for Brain Tumor classification

Fabio Cardoso, Marley Maria Bernardes Vellasco, Karla Figueiredo

Exploiting LMM-based knowledge for image classification tasks

Maria Tzelepi, Vasileios Mezaris

Neural SDE-based Epistemic Uncertainty Quantification in Deep Neural Networks

Aabila Tharzeen, Shweta Dahale, Balasubramaniam Natarajan

11:45 - 13:00

Session 37, AIAI: GNNML (Graphs / Neural Networks / Machine Learning)

[Remote Session, Room 5](#)

Chair: Prof. Elias Pimenidis

Artificial Intelligence Modeling of the Efficiency of a Biological Treatment Installation

Nichat Kiourt, Lazaros Iliadis, Christos Akratos, Antonios Papaleonidas

Explanations for Core Decomposition

Christos Konstantopoulos, KONSTANTINOS TSICHLAS

Knowledge Graph Completion using Structural and Textual Embeddings

Sakher Khalil Alqaaidi, Krzysztof Kochut

Parameterization of the Victor-Purpura distance for matching temporal neural activity patterns in real-time

Alberto Ayala Valencia, Ángel Lareo, Pablo Varona, Francisco de Borja Rodriguez

14:00-15:30

Session 38, Keynote 3: "AI & ETHICS Workshop"

[Hybrid Session, Room 1 – Keynote 3](#)

Chair: Prof. Lazaros Iliadis

Keynote Speaker: Professor John MacIntyre

Note that all times are in Athens - EEST (Eastern European Summer Time) Zone

16:00 - 17:45

Session 39, AIAI: ML-MA (Machine Learning - Multi Agent / Ontologies/ Robotics)

[Hybrid Session, Room 1](#)

Chair: Assoc. Prof. Katia Lida Kermanidis

A MARL-based Approach for Easing MAS Organization Engineering

Julien Soulé, Jean-Paul Jamont, Michel Occello, Louis-Marie Traonouez, Paul Théron

Benign Paroxysmal Positional Vertigo disorders classification using eye tracking data

Thang-Anh-Quan Nguyen, Ehtesham Hashmi, Muhammad Mudassar Yamin, Azeddine Beghdadi, Faouzi Alaya Cheikh, Mohib Ullah

Incremental Conflict-based Search for Multi-agent Path Finding in Dynamic Environment

Yu Wang, Yuhong shi, Jianyi Liu, Xihu Zheng

Simulation Study for evaluating efficiency of McPhail traps in olive groves

Nikolaos Avgoustis, Evangelos Alvanitopoulos, Nikolaos Marios Polymenakos, Ioannis Karydis, Markos Avlonitis

SMT: Self-supervised approach for Multiple Animal Detection & Tracking

Muhammad Moosa, Muhammad Mudassar Yamin, Ehtesham Hashmi, Azeddine Beghdadi, Ali Shariq Imran, Faouzi Alaya Cheikh, Mohib Ullah

The Impact of Augmentation Techniques on Icon Detection using Machine Learning Techniques

Madalina Dicu, Camelia Chira

16:00 - 17:45

Session 40, EANN/EAAAI: DL 3 (Deep Learning)

[Hybrid Session, Room 2](#)

Chair: Prof. Manuel Dominguez

Enhancing Bandwidth Efficiency for Video Motion Transfer Applications using Deep Learning Based Keypoint Prediction

Xue Bai, Tasmiah Haque, Sumit Mohan, Yuliang Cai, Byungheon Jeong, Adam Halasz, Srinjoy Das

Intelligent framework for monitoring student emotions during online learning

Ayoub Sassi, Safa Cherif, Wael Jafer

Support Vector Based Anomaly Detection in Federated Learning

Note that all times are in Athens - EEST (Eastern European Summer Time) Zone

Massimo Frasson, Dario Malchiodi

Towards Digitisation of Technical Drawings in Architecture: Evaluation of CNN Classification on the Perdaw Dataset

Alexandru Filip, Stella Grasshof

16:00 - 17:45

Session 41, AIAI: DM-MA (Data Mining / Modeling - Multi Agent / Ontologies/ Robotics)

[Hybrid Session, Room 3](#)

Chair: Assoc. Prof. Christos Makris

A Constraint-Based Greedy-Local-Global Search for the Warehouse Location Problem

Sven Löffler, Petra Hofstedt

A Second-Order Adaptive Network Model for Political Opinion Dynamics

Micha den Heijer, Sien Jansen, Mathijs Pellemans, Jan Treur

EVO: An Ontology for the Field of Electric Vehicles

Ioannis Kivrakidis, Emmanouil Rigas, Nick Bassiliades

LFENav: LLM-based frontiers exploration for visual semantic navigation

Yuhong Shi, Jianyi Liu, Xihu Zheng

Statistical Modeling of Univariate Unimodal Data using Π -sigmoid Mixture Models

Paraskevi Chasani, Aristidis Likas

Test Case Features as Hyper-heuristics for Inductive Programming

Edward McDaid, Sarah McDaid

16:00 - 17:30

Session 42, AIAI: RNL 2 (Reinforcement / Natural Language)

[Remote Session, Room 4](#)

Chair: Dr. Georgios Drakopoulos

AI-Driven Sentiment Trend Analysis: Enhancing Topic Modeling Interpretation with ChatGPT

Abdulrahman Alharbi, Ameen Abdel Hai, Rafea Aljurbua, Zoran Obradovic

An algorithmic data pipeline architecture for the production of personalized telecom product offers

Charis Stylianakis, Dimitrios Bouras, Konstantinos Alexakis, Spyros Oikonomopoulos, Vassilis Spitadakis, Yorgos Panagiotakis

Enhancing Financial Market Prediction with Reinforcement Learning and Ensemble Learning

Note that all times are in Athens - EEST (Eastern European Summer Time) Zone

Diep Tran, Quyen Tran, Quy Tran, Vu Nguyen, Minh-Triet Tran
Generating Profiles of News Commentators with Language Models

William Power, Zoran Obradovic

LLM Prompting versus Fine-Tuning PLMs: A Comparative Study on Keyword Generation from Customer Feedback

Aleyna Er, Banu Diri, Meltem Turhan Yöndem

16:00 - 17:30

Session 43, EANN/EAAAI: DL 4 (Deep Learning)

[Remote Session, Room 5](#)

Chair: Dr. Lakshmi Babu Saheer

An EANN-Based Recommender System for Drug Recommendation

Hadi Al Mubasher, Mariette Awad

Comparative Analysis of Large Language Models in Structured Information Extraction from Job Postings

Kyriaki Sioziou, Panagiotis Zervas, Kostas Giotopoulos, Giannis Tzimas

Empirical Insights into Deep Learning Models for Misinformation Classification within Constrained Data Environment

Jayendra Ganesh Devisetti, Sanjana S, Shubhankar Kuranagatti, Abhishek Hiremath, Arti Arya

Robust Traffic Prediction using Probabilistic Spatio-temporal Graph Convolutional Network

Atkia Akila Karim, Naushin Nower

19:45 - 21:45 Social Activity

Gala dinner / Party:

Restaurant: Sailing Clubs Restaurant <https://corfu-sailing-restaurant.com/>

Address: Old Fortress (Fortezza) Corfu

GPS coordinates: 39.62433, 19.9289

Starting time: 19:45 (entrance 19:30)

* Expected duration: about 2 hours

Description of the activity: The Gala dinner / Party includes a traditional buffet with several Greek dishes and drinks (wine, beer, soft drinks). A Greek dancing group will accompany and teach you how to dance.

Note that all times are in Athens - EEST (Eastern European Summer Time) Zone

The above social activity is complimentary and free for all registered conference participants. Please be sure to have your name badge/ QR code with you.

A ticket is required for Accompanying persons.

More info can be found at the conference registration desk.

Note that all times are in Athens - EEST (Eastern European Summer Time) Zone

Sunday 30/6/2024

9:30–13:15 Registration

10:00-11:15

Session 44, Keynote 4: “AI and cybersecurity: Friend or Foe?”

[Hybrid Session, Room 1 – Keynote 4](#)

Chair: Prof. Andreas Andreou

Keynote Speaker: Professor Haris Mouratidis

Director of Institute for Analytics and Data Science – IADS, Professor of Data Science and Statistics, School of Computer Science and Electronic Engineering, University of Essex, UK

11:45 - 13:15

Session 45, AIAI: GNNML-L (Graphs / Neural Networks / Machine Learning - Learning)

[Hybrid Session, Room 1](#)

Chair: Prof. Lazaros Iliadis

A Multi-Scale Parallel Unsupervised Model For Multivariate Time Series Anomaly Detection

Junpeng Bao, Han Gao, Chengpu Zhang, Wentao Jia, Junzhe Gao, Tongzhi Yang

Assist of AI in a Smart Learning Environment

Konstantinos Sofianos, Michael Stefanidakis, Alexios Kaponis, Linas Bukauskas

Carbon-Aware Machine Learning: A case study on cellular traffic forecasting with Spiking Neural Networks

Theodoros Tsiolakis, Nikolaos Pavlidis, Vasileios Perifanis, Pavlos S. Efraimidis

Multi-Adaptive Neural Modelling of the Interplay of Changing Organisational Contexts, Epigenetics, and Personality Traits in the Development of Burnout

Debby Bouma, Jan Treur

Using Boosting and Neural Networks Methods to Detect Healthcare Fraud

Konstantinos Panagiotis Fourkiotis, Athanasios Tsadiras

11:45 - 13:15

Session 46, AIAI: ML 3 (Machine Learning)

Note that all times are in Athens - EEST (Eastern European Summer Time) Zone

[Hybrid Session, Room 2](#)

Chair: Assoc. Prof. Ioannis Karydis

An AI-based Approach to Identify Financial Risks in Transportation Infrastructure Construction Projects

Marina Ivanova, Michael Grims, Daniel Karas, Gerhard Höfingger, Marco Xaver Bornschlegl, Matthias L. Hemmje

Learning-based Short-Term Energy Consumption Forecasting

Hatem Haddad, Feres Jerbi, Issam Smaali

Machine learning models for electricity generation forecasting from a PV farm

Maria Krechowicz, Adam Krechowicz, Artur Pawelec

Toward Unsupervised Energy Consumption Anomaly Detection

Hatem Haddad, Feres Jerbi, Issam Smaali

11:45 - 13:15

Session 47, EANN/EAAAI: NN /DL (Neural Networks / Deep Learning)

[Hybrid Session, Room 3](#)

Chair: Dr. Daniel Stamate

Automation of the error-prone PAM-4 sequence discovery for the purpose of high-speed serial receiver testing using reinforcement learning methods

Manav Madan, Christoph Reich, Anton Unakafov, Valentina Unakafova, Alexander Schmitt

Deep Echo State Networks for modelling of industrial systems

José Ramón Rodríguez-Ossorio, Claudio Gallicchio, Antonio Morán, Ignacio Díaz, Juan J. Fuertes, Manuel Domínguez

Ensembles of bidirectional LSTM and GRU neural nets for predicting mother-infant synchrony in videos

Daniel Stamate, Pradyumna Davuloori, Doina Logofatu, Evelyne Mercure, Caspar Addyman, Mark Tomlinson

Machine Learning modeling to provide assistance to basketball coaches

Eduardo Véras Argento, Marley Maria Bernardes Vellasco, José Franco Amaral, Meyer Nigri, Karla Figueiredo

Note that all times are in Athens - EEST (Eastern European Summer Time) Zone

11:45 - 13:15

Session 48, EANN/EAAAI: DL 5 (Deep Learning)

[Remote Session, Room 4](#)

Chair: Dr. Anastasios Panagiotis Psathas

An Approach to Predict Optimal Configurations for LDA-based Topic Modeling

Mou Saha, Doina Logofatu

Enhancing Natural Language Query to SQL Query Generation through Classification-Based Table Selection

Raiful Azam, Ankush Chopra

HEDL-IDS2: An Innovative Hybrid Ensemble Deep Learning Prototype for Cyber Intrusion Detection

Anastasios Panagiotis Psathas, Lazaros Iliadis, Antonios Papaleonidas, Elias Pimenidis

Machine Learning-Based Detection and Classification of Neurodevelopmental Disorders from Speech Patterns

MOUAD EL OMARI, HANAE BELMAJDOUB, KHALID MINAOUI

YOLOv5 and Residual Network for Intelligent Text Recognition on Degraded Serial Number Plates

Amos Yu Xuan Tham, Cheng Siong Chin

11:45 - 13:15

Session 49, AIAI: BC 4 (Biomedical / Classification)

[Remote Session, Room 5](#)

Chair: Asst. Prof Georgios Meditskos

A Novel Signature for Distinguishing Non-Lesional from Lesional Skin of Atopic Dermatitis Based on a Machine Learning Approach

Ana Duarte, Orlando Belo

Hybrid Explanatory Interactive Machine Learning for Medical Diagnosis

Emanuel Slany, Stephan Scheele, Ute Schmid

Image-Based Human Action Recognition with Transfer Learning using Grad-CAM for Visualization

Md Tasnim Alam, Yaa Takyiwaa Acquah, Kaushik Roy

Semantic Modelling for Representation and Integration of Health Data from Wearable Devices

Note that all times are in Athens - EEST (Eastern European Summer Time) Zone

Theodora Tasia, Christoniki Maga-Nteve, Nikos Tsolakis, Georgios Meditskos, Thanassis Mavropoulos, Stefanos Vrochidis

13:15-13:45 Closing Ceremony

Note that all times are in Athens - EEST (Eastern European Summer Time) Zone

Webex Events Platform Access Links

Main Rooms:

25th EANN / EAAAI – 20th AIAI 2024 Room 1 & Plenary

Session: 1, 2, 7, 12, 13, 18, 23, 28, 33, 38, 39, 44, 45

<https://eann-aiai.webex.com/eann-aiai/j.php?MTID=maababe3c87176c8865148418bb524393>

25th EANN / EAAAI – 20th AIAI 2024 Room 2

Session: 3, 8, 14, 19, 24, 29, 34, 40, 46

<https://eann-aiai.webex.com/eann-aiai/j.php?MTID=m05f62467555a77981f9378ce8b1258b0>

25th EANN / EAAAI – 20th AIAI 2024 Room 3

Session: 4, 9, 15, 20, 25, 30, 35, 41, 47

<https://eann-aiai.webex.com/eann-aiai/j.php?MTID=ma292d95c668ab88300fcb44bafa94b70>

25th EANN / EAAAI – 20th AIAI 2024 Room 4

Session: 5, 10, 16, 21, 26, 31, 36, 42, 48

<https://eann-aiai.webex.com/eann-aiai/j.php?MTID=m64537d485f1d734b38a9667b75b0e476>

25th EANN / EAAAI – 20th AIAI 2024 Room 5

Session: 6, 11, 17, 22, 27, 32, 37, 43, 49

<https://eann-aiai.webex.com/eann-aiai/j.php?MTID=mc7b55723c6d319ec895b2c39208d2bd3>

Note that all times are in Athens - EEST (Eastern European Summer Time) Zone

Support Rooms:

25th EANN / EAAAI – 20th AIAI 2024 Registration, Demo & Support Room

<https://eann-aii.webex.com/eann-aii/j.php?MTID=mc1c9f37829a6aa9c32a4cf8c62dfc5d9>

During conference days our EANN / EAAAI – AIAI 2024 Registration Demo & Support Room will be available as follows:

- Thursday 27th of June 2024, 10:00 to 16:30 EEST
- Friday 28th of June 2024, 09:30 to 18:00 EEST
- Saturday 29th of June 2024, 09:30 to 17:45 EEST
- Sunday 30th of June 2024, 09:30 to 13:15 EEST

During the above timeslots all participants can reach our team by:

- Using the Registration, Demo & Support Room
- Messenger chat using the messenger plugin at the conference website
- Viber Text or call at: +30 6986 432 769
- WhatsApp Text or call at: +30 6986 432 769
- Direct call at: +30 6986 432 769

More info can be found under the **“Live Event”** menu on the conference website.

Note that all times are in Athens - EEST (Eastern European Summer Time) Zone