

SETN 2022 - DETAILED PROGRAM

EEST			Day 1: Wednesday, September 7th, 2022
08:00 -- 08:30			Registration
08:30 -- 09:15	SETN 2022 Opening	Phivos Mylonas, General Chair of SETN 2022 - Welcome Greeting	
		Manolis Koubarakis, President of Hellenic Artificial Intelligence Society, University of Athens, Greece, Conference Co-Chair of SETN 2022 - Welcome Greeting	
		George Vouros, Vice-President of Hellenic Artificial Intelligence Society, University of Piraeus, Greece - Welcome Greeting	
		Ilias Maglogiannis, University of Piraeus, Greece, Program Committee Chair of SETN 2022 - Welcome Greeting	
		Katia-Lida Kermanidis, Program Committee Co-Chair of SETN 2022 - Welcome Greeting	
09:15 -- 10:15	Session 1: Biomedical AI	Vasileios Stavropoulos, Evangelos Michelioudakis, Charilaos Akasiadis and Alexander Artikis - Resource-effective exploration of tumor treatments with multi-scale simulations	
		Michail Chatzianastasis, Gianni Nikolentzos and Michalis Vazirgiannis - Mass Enhanced Node Embeddings for Drug Repurposing	
		Eleni Koutsoni, Vasileios Konstantakos, Anastasios Nentidis, Anastasia Krithara and Georgios Paliouras - Modeling the off-target effects of CRISPR-Cas9 experiments for the treatment of Duchenne Muscular Dystrophy	
		Zoi Lygizou and Dimitris Kalles - A Biologically Inspired Computational Trust Model based on the Perspective of the Trustee	
10:15-- 11:45	Session 2: NLP & Text Mining	Dimitris Papadopoulos, Katerina Metropoulou, Nikolaos Papadakis and Nikolaos Matsatsinis - FarFetched: Entity-centric Reasoning and Claim Validation for the Greek Language based on Textually Represented Environments	
		Rizos-Theodoros Chadoulis, Andreas Nikolaou and Constantine Kotropoulos - Authorship Attribution in Greek Literature Using Word Adjacencies	
		Despoina Mouratidis, Eirini Mathe, Yorghos Voutos, Klio Stamou, Katia Kermanidis, Phivos Mylonas and Andreas Kanavos - Domain-Specific Term Extraction: A Case Study on Greek Maritime Legal Texts	
		Spyros Zoupanos, Stratis Kolovos, Athanasios Kanavos, Orestis Papadimitriou and Manolis Maragoudakis - Efficient comparison of sentence embeddings	
		Dimitrios Zaikis, Stylianos Kokkas and Ioannis Vlahavas - Transforming Drug-Drug Interaction Extraction from Biomedical Literature	
		Christos Zonios, John Pavlopoulos and Aristidis Likas - Transformer-Based Music Language Modelling and Transcription	
11:45 -- 12:00			15 min Coffee Break
12:00 -- 13:00	Plenary Keynote	Antal van den Bosch, Meertens Institute & University of Amsterdam - Words matter: Case studies in Cultural AI	
13:00 -- 14:00			Lunch
14:00 -- 15:00	Session 3: Mixed AI Topics	Merkouris Papamichail, Constantinos Varsos and Giorgos Flouris - Implementing the Adaptation Procedure in Misinformation Games	
		Charalampos M. Liapis and Sotiris Kotsiantis - Energy Balance Forecasting: An Extensive Multivariate Regression Models Comparison	
		Eleftherios Kouloumpri, Athina Konstantinou, Stamatis Karlos, Grigorios Tsumakakis and Ioannis Vlahavas - Short-term Load Forecasting With Clustered Hybrid Models Based On Hour Granularity	
		Antonis Pardos, Melina Tziomaka, Andreas Menychtas and Ilias Maglogiannis - Automated Posture Analysis for the Assessment of Sports Exercises	
15:00 -- 16:00	Session 4: Classification and Prediction	Nicolas Tsapatsoulis - Classification of Instagram photos - topic modelling vs. transfer learning	
		Stratos Xenouleas, Alexia Tsoukara, Giannis Panagiotakis, Ilias Chalkidis and Ion Androutopoulos - Realistic Zero-Shot Cross-Lingual Transfer in Legal Topic Classification	

15:00 -- 16:00	Session 4: Classification and Prediction	Apostolos Glenis and George Vouros - SCALE-BOSS: A framework for scalable time-series classification using symbolic representations Ioannis Mollas, Nick Bassiliades and Grigorios Tsoumakas - Altruist: Argumentative Explanations through Local Interpretations of Predictive Models			
16:00 -- 16:15	15 min Coffee Break				
16:15 -- 18:00	Industrial Session 1: Cultural heritage preservation tools and applications - the TRUMPET case - Senate Hall	Andreas Floros , Rector, Ionian University - Welcome Greeting, TBC Rodi Kratsa-Tsagkaropoulou , Governor, Region of Ionian Islands - Welcome Greeting, TBC Joseph Papadatos , Dean of the Faculty of Economics, Ionian University - Welcome Greeting Panagiotis Kourouthanassis - the TRUMPET Project, Objectives and Aims Konstantinos Kardamis - Highlighting the music of Corfu through musical paths Maria Aslanidi - The digital repository TRUMPET - Collection and digitisation of music documents Yorghos Voutos - TRUMPET digital applications - Public and permanent access to music documents The impact of TRUMPET project on the musical cultural heritage of Corfu - Round table discussion	16:15 -- 18:00	Tutorial: Explainable Deep Reinforcement Learning: One framework, three paradigms and many challenges	George Vouros , Department of Digital Systems, University of Piraeus, Greece
18:00 -- 20:30	Industrial Session 2: Modern technologies for biodiversity sustainability - the ERMIS paradigm	Maria Aslanidi - Techniques and methods to promote biodiversity in the Ionian Islands Region through multi-level information infrastructures Yorghos Voutos - Digital applications of the ERMIS project - Easy public access to biodiversity elements Michael Xanthakis - The use of innovative technological tools for the collection of biodiversity data in the protected areas of Kefalonia-Ithaca Efstratios Floudas - Evaluation of the implementation of the citizen science programme to citizens and the management of the protected area of Amvrakikos Gulf - Lefkada Aristotle Martinis - Technology as an aid in the study, protection and promotion of selected "Monumental Forests" Panagiotis Kourouthanassis - Impact of the pilot web platform for biodiversity content promotion on tourism and the researchers of the Ionian University			
20:30	Welcome Reception				

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EEST			Day 2: Thursday, September 8th, 2022
08:30 -- 09:00		Registration	
09:00 -- 10:00	Session 5: AI and IoT for urban problems	Eleni Karagianni, Emmanouil Rigas and Nick Bassiliades - Scheduling drones to recharge electric vehicles	
		Gerasimos Vonitsanos, Theodor Panagiotakopoulos, Andreas Kanavos and Achilles Kameas - An Apache Spark Framework for IoT-enabled Waste Management in Smart Cities	
		Panagiota Masa, Georgios Meditskos, Spyridon Kintzios, Stefanos Vrochidis and Ioannis Kompatsiaris - Ontology-based Modelling and Reasoning for Forest Fire Emergencies in Resilient Societies	
		Emmanouil Salas and Demetre Argialas - Automatic Identification of Marine Geomorphologic Features Using Convolutional Neural Networks in seafloor Digital Elevation Models	
10:00 -- 11:30	Session 6: Graph Analysis and Mining, Recommendations, Retrieval and Dimensionality Reduction	Christos Karras, Aristeidis Karras, Georgios Drakopoulos, Dimitrios Tsolis, Phivos Mylonas and Spyros Sioutas - Reservoir Sampling Over Evolving Streams: A Framework For Constructing Probabilistic Stream State Graphs	
		Georgios Drakopoulos, Aristeidis Karras, Christos Karras, Konstantinos Giotopoulos, Phivos Mylonas and Spyros Sioutas - Decomposing Twitter Graphs Based On Hashtag Trajectories: Mining And Clustering Paths Over MongoDB	
		Ioannis Konstantinidis, Manolis Maragoudakis, Ioannis Magnisalis, Christos Berberidis and Vassilios Peristeras - Knowledge-driven Unsupervised Skills Extraction for Graph-based Talent Matching	
		Avraam Bardos, Ioannis Mollas, Nick Bassiliades and Grigorios Tsoumakas - Local Explanation of Dimensionality Reduction	
		Eleni Partalidou, Despina Christou and Grigorios Tsoumakas - Improving Zero-Shot Entity Retrieval through Effective Dense Representations	
Ioannis Panagiotis Ziogas, Errikos Streviniotis, Harris Papadakis and Georgios Chalkiadakis - Content-based Recommendations Using Similarity Distance Measures with Application in the Tourism Domain			
11:30 -- 12:00		30 min Coffee Break	
12:00 -- 13:00	Plenary Keynote	Gianluca Bontempi, Université Libre de Bruxelles - Machine learning for time series: from forecasting to causal inference	
13:00 -- 14:00		Lunch	
14:00 -- 15:00	EETN Best Dissertation Award	Maria Tzelepi, Deep learning techniques in digital media Ilias Chalkidis, Law in the era of Deep Learning: Advances and challenges in legal text processing	
15:00 -- 16:45	Workshop AI4Fashion	Workshop Keynotes: Audrey Golub, Co-Founder Else Corp, Theodoros Stouraitis, MIT, Jim Downing, CEO Metall	
		Anastasios Papazoglou Chalikias - Novel paradigms of human-fashion interaction	
		Evangelia Kampakaki, Evridiki Papahristou, Theodore Tarnanidis and Nikolaos Bilalis - What are the most important digital qualifications of the employees in the clothing and fashion companies?	
		Michail Kaseris, Apostolos Boumpakis, Paschalis Charalampous, Ioannis Kostavelis, Sotiris Malassiotis and Dimitrios Tzovaras - i-Mannequin – A complete solution for Rapid Garment Prototyping	
Fatma Baytar, Yoon Yang and Mona Maher - The importance of Deciphering Tacit Knowledge in Apparel Product Development for Explainable AI			

16:45 -- 17:00	15 min Coffee Break	
17:00 -- 21:00	Workshop AI in Natural Sciences and Technology (AINST)	Workshop Keynote: Prof. Alexandros Sopasakis , Mathematics, Lund University. Title: "Real time pattern analysis and modelling of complex networks from images"
		Dimitris Nasikas, Eleonora Ricci, George Giannakopoulos, Vangelis Karkaletsis, Doros N. Theodorou, Niki Vergadou - Investigation of Machine Learning-based Coarse-Grained Mapping Schemes for Organic Molecules
		Eleonora Ricci, George Giannakopoulos, Vangelis Karkaletsis, Doros N. Theodorou, Niki Vergadou - Developing Machine-Learned Potentials for Coarse-Grained Molecular Simulations: Challenges and Pitfalls
		Vasilis Sioros, George Giannakopoulos, Vassileios Constantoudis - Generating Realistic Nanorough Surfaces Using an N-Gram-Graph Augmented Deep Convolutional Generative Adversarial Network
		Evgenios Vlachos, Aris Salapatas Gkinis, Vasileios Papastergiou, Christos Tsitsipanis, George Giannakopoulos - Machine Learning to Develop a Model that Predicts Early Impending Sepsis in Neurosurgical Patients
		Vasileios Theiou, Athanasios Theofanopoulos, George Giannakopoulos, Christos Tsitsipanis - Using machine learning to predict mortality and morbidity after Traumatic Brain Injury
		Rediona Kane, Iraklis Varlamis, Mary Yiannakoulia, Nikolaos Scarmeas - Use of AI methods for handling multi-dimensionality and missing values in biomedical data
		Dimitrios Dimopoulos, Vasiliki Danilatou, Theodoros Kostoulas - Mortality Prediction in ICU Patients Suffering from Stroke
		Alkiviadis Mertzios, Konstantinos Papavasileiou, Loukas Peristeras, George Giannakopoulos - Aggregate: A machine learning approach for classifying micelles' shape
		Manolis Chatzigeorgiou, Michalis Vrigkas, Nikos Boukos, Margarita Beazi-Katsioti, Marios Katsiotis, Vassilios Constantoudis - Machine Learning evaluation of microscopy image segmentation methods: The case of Gaussian Mixture Models
		Alexandros Troupiotis-Kapeliaris, Giannis Spiliopoulos, Marios Vodas, Dimitris Zissis - Navigating through dense waters: a toolbox for creating maritime density maps
		Filippos Sofos, Konstantinos Papastaniou and Theodoros E. Karakasidis - Calculating material properties with purely data-driven methods: From clusters to symbolic expressions
		Panagiotis Krokidas, Stelios Karozis, Salvador Moncho, Edward Brothers, Ioannis Economou, Michael Kainourgiakis, Theodore Steriotis, George Giannakopoulos - Towards the Design of Functionalized Materials with Separation Properties on Demand
		Antonios Stellas, Vassilios Constantoudis, Evangelos Almpanis and Nikolaos Papanikolaou - Forward and inverse scatterometry enabled by Deep learning models
Athanasios Dimulas, Nikitas Siannas and Polychronis Tsipas - Ferroelectric artificial synapses for low power in-memory computing		
Vasilis Zafeiropoulos and Dimitris Kalles - Human-Computer Learning Interaction in a Virtual Lab		
21:00	Conference Dinner	

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EEST		Day 3: Friday, September 9th, 2022			
08:30 -- 09:00	Registration				
09:00 -- 10:00	Plenary Keynote	Georgios N. Yannakakis, Institute of Digital Games, University of Malta - AI and Games: The Virtuous Cycle			
10:00 -- 11:00	Session 7: Intelligent Techniques, Learning Analytics and Inference Models	Andreas Kallinteris, Stavros Orfanoudakis and Georgios Chalkiadakis - The Performance Impact of Combining Agent Factorization with Different Learning Algorithms for Multiagent Coordination			
		Rozita Tsoni, Dimitris Kalles and Vassilios Verykios - A Data Pipeline Approach for Building Learning Analytics Dashboards			
		Niki Kiriakidou and Christos Diou - An evaluation framework for comparing causal inference models			
		Evangelos Karampotsis, Konstantinos S. Boulas, Georgios D. Dounias and Chrissoleon T. Papadopoulos - Use of Intelligent Techniques for Throughput Estimation of Unreliable two-machine Production Lines with Random Processing Times: Preliminary Results			
11:00 -- 12:00	Session 8: AI for Image Analysis & Classification	Nikos Kostagiolas, Mihalis Nicolaou and Yannis Panagakis - Unsupervised Discovery of Semantic Concepts in Satellite Imagery with Style-based Wavelet-driven Generative Models			
		Nikolaos Trigkas and Georgios Chalkiadakis - Coalitions of UAVs for Victims Localization in Post-Avalanche Events using Advanced Image Processing Techniques			
		Eugenia Papadaki, Themis Exarchos, Panagiotis Vlamos and Aristidis Vrahatis - A Hybrid Deep Learning model for predicting the early Alzheimer's Disease stages using MRI			
		Aristotelis Ballas and Christos Diou - Multi-layer Representation Learning for Robust OOD Image Classification			
12:00 -- 12:30	30 min Coffee Break				
12:30 -- 13:30	Session 9: Ethics, Social Anthropology and Planning for AI	Elsa Papadopoulou and Themis Exarchos - An Ethics Impact Assessment (EIA) for AI uses in Health & Care			
		Alexios Kaponis and Manolis Maragoudakis - Data Analysis in Digital Marketing using Machine learning and Artificial Intelligence Techniques, Ethical and Legal Dimensions, State of the Art			
		Emmanouil Rigas, Charilaos Akasiadis, Elia Vardaki and Georgios Chalkiadakis - AI and Social Anthropology for Large-Scale Vehicle-to-Grid Schemes			
		Dimitrios Chatzis and Ergina Kavallieratou - Planning a Robotic Competition			
13:30 -- 14:30	Lunch				
14:30 -- 17:00	Tutorial: Hybrid AI Systems Grounded on Qualitative Spatio-Temporal Reasoning - Senate Hall	Michael Sioutis, University of Bamberg, Germany and Zhiguo Long , Southwest Jiaotong University, Chengdu, China	14:30 -- 17:00	Special Session: AI in mobility and logistics – unlocking new green transport capabilities	Stavros Karkanis, Georgia Aifadopoulou, Afroditi Stamelou and Michalis Fouteris - Development of an electric car sharing system in a tourist area by using data driven tools: The idea of Erica project
					Zisis Maleas, Sofoklis Dais, Georgia Aifadopoulou and Josep Maria Salanova Grau - Online policies and multimodal data processing for the same day delivery problem: A case study in last mile delivery market of Thessaloniki
					Dimitrios Gerekos, Nikolaos Lampiris, Pantelis Kopelias, Athanasios Theofilatos and Stavros Karkanis - Attitudes and perceptions of Greek drivers towards Autonomous and Connected Vehicles
					Athanasia Tsakiri, Nikolaos Lampiris, John Prantalos, Phivos Mylonas and Georgia Ayfantopoulou - Versatile Car Sharing Modelling for Sustainable Mobility with Embedded Intelligent Modules
17:00 -- 18:00	Session 10: Human Activity & Speech Recognition	Iason-Ioannis Panagos, Giorgos Sfikas and Christophoros Nikou - Compressing Audio Visual Speech Recognition Models With Parameterized Hypercomplex Layers			
		Ioannis Vernikos, Dimitrios Koutrintzes, Eirini Mathe, Evaggelos Spyrou and Phivos Mylonas - Early Fusion of Visual Representations of Skeletal Data for Human Activity Recognition			
		Vangel Kazlarof and Sotiris Kotsiantis - Human Activity Recognition using Time Series Feature Extraction and Active Learning			

18:00 -- 18:15	15 min Coffee Break - Atrium at the University Campus				
18:15 -- 20:00	PhD Event - Poster Session - Atrium at the University Campus	Open public poster session, Posters presented by Ph.D. Candidates of the Department of Informatics	18:15 -- 20:00	Special Session: World AI Competition for Youth – WAICY - Atrium at the University Campus	7 remote team presentations
20:00	Conference Closing				