

IEEE CIBCB 2026

Conference Program

31 August – 2 September 2026

<https://cibcb2026.dib.uth.gr/>

Rooms in use: Main Auditorium (all three days) • Room #2 (31 August, parallel Technical Sessions) • Room #1 / Lab Room (1–2 September, Tutorials & Virtual Sessions)

Program Overview

August 31

Time	Main Auditorium	Room #2
09:00 - 10:30	TS1: Special Session — AI Agents in Digital Health and Medicine	TS2: Special Session — Governance-Aware and Sustainable Computational Intelligence for Medicine and Digital Health
10:30 - 11:00	Coffee Break	
11:00 - 12:30	TS3: Predictive Modeling in Molecular & Clinical Genomics	TS4: Network Inference, Evolution & Drug Response Modeling
12:30 - 13:30	Keynote Speaker #1: Prof. Dimitrios I. Fotiadis — "Towards Ethical and Trustworthy AI in Healthcare: Principles, Dimensions, and Open Challenges"	
13:30 - 14:30	Lunch Break	
14:30 - 16:00	TS5: Genomics, Sequence & Regulatory Element Modeling	TS6: Gene Regulatory Networks & Systems Modeling
16:00 - 16:30	Coffee Break	
16:30 - 18:00	TS7: Protein & Molecular Modeling	TS8: Omics, Transcriptomics & Molecular Design
19:00 - 21:00	Welcome Dinner	

September 1

Time	Main Auditorium	Room #1 (Lab Room)
09:00 - 10:30	TS9: Special Session — Ethical and Interpretable Representations in Computational Bio-Medicine	Tutorial #1 (part 1): Generating and Refining Synthetic Networks with the Graph Evolution Tool
10:30 - 11:00	Coffee Break	
11:00 - 12:30	TS10: Medical Image Segmentation & Diagnosis	Tutorial #1 (part 2): Generating and Refining Synthetic Networks with the Graph Evolution Tool
12:30 - 13:30	Poster Session	
13:30 - 14:30	Lunch Break	
14:30 - 16:00	TS11: Cardiac, Neurological & Physiological Signal Analysis	
16:00 - 16:30	Coffee Break	
16:30 - 18:00	TS12: Diagnostic Risk Modeling: Imaging, Oncology & Neurology	Virtual Session 1
19:00 - 21:00	Gala Dinner	

September 2

Time	Main Auditorium	Room #1 (Lab Room)
09:00 - 10:30	TS13: Special Session — Precision AI and Technological Healthcare Informatics (PATH-I)	
10:30 - 11:00	Coffee Break	
11:00 - 12:30	TS14: Assistive & Wearable Health Technologies	
12:30 - 13:30	Keynote Speaker #2: Prof. George Magoulas — "Hybrid Computational Intelligence for Early Autism Detection in Infants"	
13:30 - 14:30	Lunch Break	
14:30 - 16:00	TS15: Clinical NLP, Knowledge Retrieval & Federated Learning	Tutorial #2: Assessment of Biomedical Datasets Fairness Using FanFAIR
16:00 - 16:30	Coffee Break	
16:30 - 18:00	TS16: Methodological Foundations, Uncertainty & Emerging Applications	Virtual Session 2

Technical & Special Sessions

Technical Session 1 — Special Session: AI Agents in Digital Health and Medicine

August 31 | 09:00 - 10:30 | Main Auditorium

ID	Time	Paper Title	Authors
168	09:00 - 09:15	Orchestrating Reliable Multi-Agent Pipelines via Deterministic Constraints and Granular Telemetry	Young, Brock; Reza, Jamil Ur; Mamatjan, Yasin*
171	09:15 - 09:30	An Intelligent Digital Assistant for Personalized Smoking Cessation Support and Wellness Enhancement	Theos, Stefanos; Menychtas, Andreas*; Tsanakas, Panayiotis
225	09:30 - 09:45	Transparent AI-Assisted Glioma Classification with Explainability, Guardrails and Structured Physician Oversight	Reza, Jamil Ur; Maimaitijiang, Ehesan; Abulizi, Nijati; Mamatjan, Yasin*
228	09:45 - 10:00	Towards Automated Health Coaching Experience - Can Large Language Models function as a Personalized Health Coach?	Vardhan, Madhurima*; Angeles, Sky; Simini, Filippo
201	10:00 - 10:15	Trustworthy and Hallucination-free Question-Answering Agent via Hybrid Retrieval-Reranking and Safety Guardrails	YUU YUN, MO*; Shiou-Chi, Li; Jen-Wei, Huang
76	10:15 - 10:30	GRIDS: A Gene Regulatory Network Inference and Discovery System for AI-Assisted Collaborative Analysis	Nakulugamuwa Gamage, Hasini*; Buddhika, Thisum; Samarasinghe, Kasun; Chetty, Madhu; Hallinan, Jennifer

Technical Session 2 — Special Session: Governance-Aware and Sustainable Computational Intelligence for Medicine and Digital Health

August 31 | 09:00 - 10:30 | Room #2

ID	Time	Paper Title	Authors
182	09:00 - 09:15	Weed Emergence Risk Mapping (WERM): A Log-Space Multiplicative Framework for Pre-Emergence Risk Estimation from Field Imagery and Thermal Accumulation	Sethi, Arham; Kumar, Vishal*
212	09:15 - 09:30	A Modular Strategy for National Healthcare AI Integration and Governance	Rennó-Costa, César*; Puttini, Ricardo; Alvarenga, Luana; de Souza, Samuel; da Silva, Inácio; Nunes, Bruno; Rodrigues, eandro; Pinto, Heider; Valentim, Ricardo
215	09:30 - 09:45	Statistical Reliability of LLM-Assisted Feature Extraction in Biomedical Risk Prediction	Ahmad, Amar*; Vallès, Yvonne ; Idaghdour, Youssef
243	09:45 - 10:00	Privacy-Preserving ECG-HRV Emotion Classification for Mood Swing Detection using Federated Learning on Constrained Edge Devices	Jarwar, Muhammad*; Chidike, Vincent; Hasan, Najam Ul; Hirsch, Laurence; Zasada-James, Jonathan; Raj Dadral, Hem
87	10:00 - 10:15	EENet: An Edge-Efficient Deep Learning Network for Glaucoma Detection	Angara , Sandeep ; Tran, Loc; Kim, Jongwoo*
229	10:15 - 10:30	Methodological Pitfalls in OSCC Classification: A Systematic Audit and Reproducible Baseline	Perez, Claudio*; Díaz-Guerra, Christian

Technical Session 3 — Predictive Modeling in Molecular & Clinical Genomics

August 31 | 11:00 - 12:30 | Main Auditorium

ID	Time	Paper Title	Authors
73	11:00 - 11:15	Ensemble Machine Learning for Blood-Based DNA Methylation Age Prediction	Mandal, Rajarshi*; Xie, Ning; Alterovitz, Gil
230	11:15 - 11:30	A Bayesian Hierarchical Framework for Variable Selection With Application in Lung Adenocarcinoma	COK, Ayisha; Mamatjan, Yasin*; Tomal, Jabed
203	11:30 - 11:45	miRSiC: A Regulatory-Integrative Framework for Predicting miRNA Expression	CHEN, GUAN-TING*; Liang, Lei-Chen; Huang, Wei-Chih; Tang, Yun ; Chen, Yu-Chen; Lee, Tzong-Yi

ID	Time	Paper Title	Authors
149	11:45 - 12:00	BiLSTM Advantage and Data-Dependent RNA-FM Utility in RNA Chemical Reactivity Prediction: A Systematic Multi-Architecture Evaluation	Abdikarimova, Elina*
104	12:00 - 12:15	Identifying Key Regulators of NK Cell Dysfunction in Intrahepatic Cholangiocarcinoma Using Machine Learning	Deng, Katelyn; Yu, Austin; Zeng, Tony; Zong, Ziliang*
131	12:15 - 12:30	Trust-Aware Counterfactual Generation for Validating Causal Inference in Clinical Observational Data	Almodóvar, Alejandro*; Elizo, Mar; Garrido, Alba; A. Apellániz, Patricia; Zazo, Santiago; Parras, Juan

Technical Session 4 — Network Inference, Evolution & Drug Response Modeling

August 31 | 11:00 - 12:30 | Room #2

ID	Time	Paper Title	Authors
194	11:00 - 11:15	PathDRP: An Interpretable Deep Learning Framework Combining Gene and Pathway Expression Patterns for Drug Response Prediction	Paik, You Sheng*; Chen, Yu-Ruo; Ho, Yann-Jen; Tang, Yun; Chow, Chi-Nga; Lee, Tzong-Yi
157	11:15 - 11:30	Enformer-Based Phylogenetic Tree Reconstruction	Capitanio, Alessandra; Stranieri, Nicolò; Enderti, Alessio; Riva, Simone*; Hughes, Jim
147	11:30 - 11:45	Graph-GANGS: a hybrid framework for generation of synthetic biological network data	Sargent, James; Razavi, Seyedeh Ava Razi; Dividino, Renata; Houghten, Sheridan*
186	11:45 - 12:00	Exploring the Functional Implications of Alpha Thalassemia Mutations: An Unsupervised Learning Approach	Orjuela-Cañón, Alvaro*; Jaramillo Toro, Carolina; Barón Malaver, Jorge; Buitrago Ricaurte, Natalia; Rodríguez López, Alexander
61	12:00 - 12:15	Unsupervised analysis reveals mutation-driven redistribution of conformational states in LILRB2–SHP2 complexes	de Araujo Pereira, Laura Maria; Bueno Alves, Levy; de Almeida Vasquez, Felipe James; Faria Junior, Milton; Giuliatti, Silvana*
80	12:15 - 12:30	Gut Microbiome-Based Classification of Parkinson's Disease Using Ensemble Learning and Graph-Theoretic Network Analysis	Bharadwaj, Amogh*; Govindraj, Sandeep

Technical Session 5 — Genomics, Sequence & Regulatory Element Modeling

August 31 | 14:30 - 16:00 | Main Auditorium

ID	Time	Paper Title	Authors
160	14:30 - 14:45	Machine learning-guided discovery of SLC25A47 substrates from metabolite genome-wide association studies	Quadrotta, Virginia; Hadjidimitriou, Natalia Selini; Incremona, Alessandro; Polticelli, Fabio; Toti, Daniele*
125	14:45 - 15:00	CREP: Cis-Regulatory Element Predictor Based on Fine-Tuned Enformer	Stranieri, Nicolò; Riva, Simone*; Hughes, Jim
124	15:00 - 15:15	Learning quality scores for chromatin accessibility bigWig tracks using Machine Learning	Sanders, Edward; Riva, Simone*; Hughes, Jim
240	15:15 - 15:30	Evolutionary Optimization for the Identification of Biologically Relevant CpG Sites in DNA Methylation Arrays	Lazaros, Konstantinos*
82	15:30 - 15:45	Latent Differential Graphical model for Multi-Tissue and Multi-Omics integration to identify molecular interaction networks under multiple radiation exposure groups	Nouira, Asma*; Jouannet, Charline; Souidi, Maâmar; Ory, Catherine; Benadjoud, Mohamed Amine
126	15:45 - 16:00	Expert-Guided Supervised Annotation of Erythroid Differentiation in Single-Cell RNA-seq	Enderti, Alessio; Stranieri, Nicolò; Riva, Simone*; Hughes, Jim

Technical Session 6 — Gene Regulatory Networks & Systems Modeling

August 31 | 14:30 - 16:00 | Room #2

ID	Time	Paper Title	Authors
123	14:30 - 14:45	FlowGRN+: Improving Gene Regulatory Network Inference by Spline Fitting and Manifold Projection in Conditional Flow Matching	Tong, Tsz Pan*; Pang, Jun
172	14:45 - 15:00	Continuous surrogates versus threshold Boolean networks for modeling Arabidopsis ISR gene regulation	Ruz, Gonzalo*
191	15:00 - 15:15	Parameter Estimation for Biochemical Reaction Networks via EvoGrad and Neural Surrogates	Papetti, Daniele M.; Dimitri, Giovanna Maria; Buffa, Francesca M.; Tangherloni, Andrea*
200	15:15 - 15:30	A Genetic Algorithm Framework for Fitting a Single-Compartment Hodgkin-Huxley CA1 Pyramidal Cell to a Detailed Reference Model	Hamdi Cherif, Sarah*; Ranta, Radu; Gaidamour, Jérémie; Buhry, Laure
14	15:30 - 15:45	QR-VineCopula: A Dual-Layer Framework for Robust Genetic Network Inference	Nakulugamuwa Gamage, Hasini*; Buddhika, Thisum; Chetty, Madhu; Hallinan, Jennifer
210	15:45 - 16:00	A comparison of link prediction methods in complex networks for identifying disease-disease associations	Kalpaki, Alexia; Kontou, Panagiota*; Bagos, Pantelis

Technical Session 7 — Protein & Molecular Modeling

August 31 | 16:30 - 18:00 | Main Auditorium

ID	Time	Paper Title	Authors
214	16:30 - 16:45	Coevolution Detection in Protein Sequences using Protein Language Model Embeddings	Kyprianidi, Theodora*; Gouridis, Giorgos; Pavlidis, Pavlos; Pantazis, Yannis
137	16:45 - 17:00	Bridging Protein Language Models and Adaptive Laboratory Evolution through LoRA Fine-Tuning	Dowell, Silba*; Brace, Alexander; Sheshappanavar, Shivanand; Zhou, Zejian; Chia, Nicholas; Ramanathan, Arvind; Henry, Christopher
119	17:00 - 17:15	Evolutionary Landscapes of Amylases and Their Carbohydrate Binding Modules	Wipat, Anil*; Quinlan, Theodore; Buldum, Gizem; Stenkjær Fletcher, Charlotte; Lelenaite, Ieva; Willats, William; Hallinan, Jennifer
55	17:15 - 17:30	Solo-SIMARD: Simulated Annealing for RNA Design with RNAsolo Data	McBride, Ryan*; Tsang, Herbert
85	17:30 - 17:45	CycPerm: Modification-Aware Deep Learning for Cyclic Peptide Permeability Prediction and Interpretable N-Methylation Design	Chen, Yu Hsin*; Lee, Tzong Yi
15	17:45 - 18:00	Disentangling Interaction Quality from Contact Quantity for Drug-Target Affinity Prediction	Wu, Cunxi*; Jin, Liwei; Dong, Shangxin ; xiao, qingqing

Technical Session 8 — Omics, Transcriptomics & Molecular Design

August 31 | 16:30 - 18:00 | Room #2

ID	Time	Paper Title	Authors
219	16:30 - 16:45	OmicSieve: A General Omics Framework for Compact Component Embeddings	Ebrahimi, Amirhosein*; Afiz, Raiyan; Mer, Arvind
161	16:45 - 17:00	DiSTILL: A Hybrid Cloud-HPC Workflow System for Reproducible Spatial Transcriptomics Analysis	Tan, Myles Joshua*; Hinojosa Fuentes, Vasco Gerardo; Yerra, Nikhil; Kapetanaki, Maria; Rashidi, Parisa; Huang, Kejun; Benos, Panayiotis
192	17:00 - 17:15	Scaling Laws in Transcriptomics Foundation Models and Virtual Cells	Borra, Federico; Cirò, Giacomo; Tangherloni, Andrea*; Buffa, Francesca M.
143	17:15 - 17:30	NanoDS: Accurate simulation of nanopore sequencing data with distribution approximations	Koski, Yrjö*
183	17:30 - 17:45	Application of EVOMOL-FLOW for De Novo Design of Staphyloxanthin's Biosynthesis Inhibitors	Multari, Silvia*; Grazioso, Matteo; Bacciu, Leone; Papetti, Daniele Maria; Cazzanig, Paolo; Gentile, Sara; Bernola, Riccardo; Secci, Daniela; Zhu, Wenliang; Besozzi, Daniela; Giacometti, Achille;

ID	Time	Paper Title	Authors
			Pezzotti, Giuseppe; Nobile, Marco Salvatore
199	17:45 - 18:00	SmartABCPeptide: Anti-Breast Cancer Peptide Designing and Prediction Tool	Tripathi, Prabhat*; Tarannum, Sana; Somvanshi, Devesh; Arya, Ankish ; Sen, Nirmalya; Varadwaj, Pritish Kumar

Technical Session 9 — Special Session: Ethical and Interpretable Representations in Computational Bio-Medicine

September 1 | 09:00 - 10:30 | Main Auditorium

ID	Time	Paper Title	Authors
88	09:00 - 09:15	Enhancing Explainability in Biomedical Imaging: Direct Importance Maximization with H-BiPASE	Kallipolitis, Athanasios*; Maglogiannis, Ilias
142	09:15 - 09:30	Opening the “Black Box” of DrugCLIP with Atom-Level Explanations	Multari, Silvia*; Grazioso, Matteo; Bacciu, Leone; Papetti, Daniele Maria; Cazzaniga, Paolo; Nobile, Marco Salvatore
179	09:30 - 09:45	Ex Ante and Ex Post Datasets and Model Fairness Analysis	Grazioso, Matteo*; Inverardi, Nicole; Manzoni, Luca; Nobile, Marco S.; Gallese, Chiara
190	09:45 - 10:00	Fair Biomedical Classification via Selective Routing among Neural Experts	Latskou, Afroditi; Spanos, Dimitrios*; Passalis, Nikolaos; Tefas, Anastasios
140	10:00 - 10:15	Fair and Interpretable Multi-Marker AI for Heart Failure Risk Detection from Chest X-Rays	Martin, David; Udechukwu, Victoria; Rahman, Hridoy; Ogbuokiri, Blessing*
148	10:15 - 10:30	Evaluating Cross-Hospital Fairness in Self-Supervised Chest X-ray Representations	Henriquez, Jose; Corbett, Cole; Ombuki-Berman, Beatrice; Ogbuokiri, Blessing*

Technical Session 10 — Medical Image Segmentation & Diagnosis

September 1 | 11:00 - 12:30 | Main Auditorium

ID	Time	Paper Title	Authors
178	11:00 - 11:15	Ensemble Deep Learning for High-Fidelity Segmentation of Diffuse Glioma Subregions on Preoperative MRI	Siddique Tannee, Khadiza; Reza, Jamil Ur; Maimaitijiang, Ehesan; Mamatjan, Yasin*
220	11:15 - 11:30	RMS-VAE: Residual Multiscale Variational Autoencoder for One Class Anomaly Detection in Medical Images	Diamantis, Dimitrios; Cholopoulou, Eirini; Iakovidis, Dimitris*
224	11:30 - 11:45	Attention Residual U-Net for Enhanced Cross-Dataset Polyp Localization in Endoscopy	Imtiaz, Romil; Iakovidis, Dimitris*
103	11:45 - 12:00	Automated Cervical Vertebrae Segmentation In Lateral Cephalograms Using Transfer Learning And Region-Based Deep Learning Networks	Chavoshian, Shaghayegh*; Dabidiyan, Sharmin; Unsal, Gurkan; Roshan Fekr, Atena
144	12:00 - 12:15	Reducing Annotation Effort in Early Stroke Diagnosis: An Adversarial Framework Guided by Diversity-aware Active Learning for NCCT Image Segmentation	Louspa, Chrysoula; Savelonas, Michalis*; Thoma, Maria; Iakovidis, Dimitris
122	12:15 - 12:30	Beyond Average Dice: Influence-Aware Reliability Evaluation of Medical Image Segmentation	Dathiya, Darshan*; Pal, Rahul; Kumar, Ajit

Technical Session 11 — Cardiac, Neurological & Physiological Signal Analysis

September 1 | 14:30 - 16:00 | Main Auditorium

ID	Time	Paper Title	Authors
238	14:30 - 14:45	Subject-Independent ECG Reconstruction from SCG Using Dual-Domain Adversarial ODE Regularization	Buchupalli, Ritika; Vyshali, V. V. Lakshmi; B H V S P, Subrahmanyam*;

ID	Time	Paper Title	Authors
			Pamu, Sreeja; Alla, Sathwika; Kushal, Kushal; Choudhary, Neeraj
84	14:45 - 15:00	Robust Arrhythmia Classification from ECG Signals Addressing Data Leakage and Minority Class Management	Andris, Konstantinos*; Zarpouni, Maria-Eleni; Kolomvatsos, Konstantinos
218	15:00 - 15:15	Sleep Disturbances and Cardiovascular Risk: An Explainable AI Approach	Vouzis, Eleftherios*; Lialiou, Paschalina; Maglogiannis, Ilias
163	15:15 - 15:30	A Target-to-SAR Ratio for Electrode Size Optimization in Hippocampal Temporal Interference Stimulation	Ahmed, Sulafa; Chakraborty, Ashim*; Cirstea, Silvia
175	15:30 - 15:45	Topology-Based Persistence Images for Minimal Stress Detection Using Electrodermal Activity	Zott, Larissa*; Hofmann, Marko; Meyer-Nieberg, Silja
38	15:45 - 16:00	Topological Features from Sustained Vowel Phonation for Parkinson's Disease Detection	Caballero, Alfonso*; Aspe Ruiz, Esteban; Moreno Díaz, Arminda ; Pérez Sánchez, Carlos Javier

Technical Session 12 — Diagnostic Risk Modeling: Imaging, Oncology & Neurology

September 1 | 16:30 - 18:00 | Main Auditorium

ID	Time	Paper Title	Authors
25	16:30 - 16:45	An Explainable Reinforcement Learning and Network Neuroscience Framework for Identifying Critical Ages in Human Brain Development	Alam, Mohammad*
241	16:45 - 17:00	Deep Learning Architecture Comparison for Traumatic Brain Injury Lesion Segmentation on Non-Contrast Head CT Scans	Rathi, Sakshi; Cheong, Scarlett; Sham, Yuk*
16	17:00 - 17:15	FISNet: Physics-Informed Siamese Neural Network with Fourier Constraints for Invariant Microscopy Image Classification under Data Scarcity	Osagie, Efosa*; Ji, Wei ; Balasundaram, Rebecca ; Bolarinwa , Obasanjo
205	17:15 - 17:30	Feature Contribution and Model Agreement Analysis for Breast Cancer Diagnosis Using Machine Learning	Barad, Ayush; Trivedi, Yug; Pithadiya, Krupa; Bavarva, Arjav; Shah, Sejal*
207	17:30 - 17:45	Comparative Analysis of Imputation Strategies for Robust Cervical Cancer Risk Prediction Using Ensemble Machine Learning	Trivedi, Yug; Bavarva, Arjav; Shah, Sejal*
208	17:45 - 18:00	From Continuous Risk to Structural Profiles: A Clustering-Based Extension of Multivariate Breast Cancer Risk Index Modeling in Mexico	OVANDO, ERICKA*; Calvo, Hiram ; Morales, Oswaldo

Technical Session 13 — Special Session: Precision AI and Technological Healthcare Informatics (PATH-I)

September 2 | 09:00 - 10:30 | Main Auditorium

ID	Time	Paper Title	Authors
237	09:00 - 09:15	Anatomical Slot Attention for Cephalometric Landmark Detection	Chigurupati, Vijaya Sai*; Mudhana, Vedha Srilaxmi; Kushal, Kushal; Subrahmanyam, BHVSP; Choudhary, Neeraj
206	09:15 - 09:30	IoT-Driven Maternal Health Risk Stratification Using Stacked Ensemble Learning with SHAP-Based Clinical Interpretability	Trivedi, Yug; Bavarva, Arjav; Shah, Sejal*
217	09:30 - 09:45	Translating Financial Explainability Standards to Medical AI	Alvarenga, Luana; Moreira, André; Fernandes, Igor; Oliveira, Luana; Araujo, Anna; Farias, Marcos; Moioi, Renan; Rennó-Costa, César*
105	09:45 - 10:00	Pathway-Informed Genetic Subtyping of Parkinson's Disease From Targeted Sequencing	Li, Ethan; Zong, Ziliang*
222	10:00 - 10:15	Interpretable Machine Learning for Discordant Mortality Prediction in Luminal A Breast Cancer: Benchmarking on the METABRIC Dataset	Lantouri, Athanasia*; Demiris, Stefanos Panagiotis; Miteloudis , Alexandros; Diamantis , Theodosis ; Karlos , Stamatis
130	10:15 - 10:30	Interpretable Causal Survival Analysis with Kolmogorov-Arnold Networks	Almodóvar, Alejandro*; Garrido, Alba; Elizo, Mar; A. Apellániz, Patricia; Zazo, Santiago; Parras, Juan

Technical Session 14 — Assistive & Wearable Health Technologies

September 2 | 11:00 - 12:30 | Main Auditorium

ID	Time	Paper Title	Authors
166	11:00 - 11:15	AEye: A Context-Aware Assistive Vision System for Visually Impaired Users	Thaker, Himani ; Chakraborty, Ashim*; Cirstea, Silvia
245	11:15 - 11:30	Assistive Navigation in Complex Healthcare Environments for Visually Impaired Users: A Computational Intelligence Framework for Reducing Cognitive Load	Theodorou, Paraskevi*
165	11:30 - 11:45	A Novel Quantized Convolutional Neural Network for Real-Time Fall Detection on Embedded Platforms	Mukhamejanov, Noel ; Cirstea, Silvia ; Chakraborty, Ashim*
159	11:45 - 12:00	StepSmart: A Proof of Concept Mobile App for Assessing Shoe Traction	Chavoshian, Shaghayegh*; Zaheer, Hissan Bin ; Dabidiyan, Sharmin; Gauvin, Chantal; Roshan Fekr, Atena
101	12:00 - 12:15	Machine Learning-Based Analysis for Rehabilitation Exercise Recognition Using Novel Features Extracted from mmWave Radar	Chavoshian, Shaghayegh*; Roshan Fekr, Atena
109	12:15 - 12:30	A Comparative Study of Deep Learning Architectures for Multi-Horizon Behavioural Forecasting for Mobile Health	Nicolaou, Pavlos*; Malialis, Kleanthis; Kontou, Artemis; Kolios, Panayiotis

Technical Session 15 — Clinical NLP, Knowledge Retrieval & Federated Learning

September 2 | 14:30 - 16:00 | Main Auditorium

ID	Time	Paper Title	Authors
173	14:30 - 14:45	Hybrid Medical RAG with Graph Expansion Search for Transparent and Evidence-Grounded Generation	Reza, Jamil Ur; Riaz, Shalina; Mamatjan, Yasin*
99	14:45 - 15:00	Retrieval-Augmented Annotation Workflow for VTE Risk-Factor Literature Screening	Portokallidis, Nick*; Chaikalis, Nikolaos; Kalampokas, Iasonas; Efthymiou, Gavriil; Fregkos, Konstantinos; Papadopoulos, Vasileios; Fiska, Alik; Didaskalou, Stylianos; Yu, Harry (Hongqing); Kaldoudi, Eleni
92	15:00 - 15:15	Towards On-Device Speech Emotion Recognition with Local Adaptation for Privacy-Preserving Healthcare	Mazura, Florian*; Köder, Julian; Beyer, Dominik; Gerdes, Marius; Stork, Wilhelm
81	15:15 - 15:30	FedXJTLU: Federated Learning for Biomedical Images via Server-Side Nesterov-Style Aggregation and Cosine Decay	Guo, Yuxuan*
121	15:30 - 15:45	Network-Based Gene Prioritization for Major Depressive Disorder	Sarvi, Atieh; Houghten, Sheridan*
185	15:45 - 16:00	BioConceptum: an Artificial Intelligence-based pipeline for the analysis of radiology reports of colorectal cancer	Tramonti, Luca; Tirrito, Gabriele; Incremona, Alessandro; Hadjidimitriou, Natalia Selini; Monteleone, Emanuele; Nacci, Ilaria; Toti, Daniele*

Technical Session 16 — Methodological Foundations, Uncertainty & Emerging Applications

September 2 | 16:30 - 18:00 | Main Auditorium

ID	Time	Paper Title	Authors
188	16:30 - 16:45	UA-KAN: Uncertainty-Aware Kolmogorov-Arnold Networks for Reliable Medical Diagnosis	Konstantinidis, Konstantinos; Spanos, Dimitrios*; Passalis, Nikolaos; Tefas, Anastasios
180	16:45 - 17:00	A Robust Shape-Adaptive Validity Index for Fuzzy Clustering of Hyper-Spherical and Hyper-Elliptical Data	Dinavahi, Sri Venkata Surya Phani Teja*; Bharill, Neha ; Pilli, Sachethan; Donta, Chaitanya Goud
244	17:00 - 17:15	Summarization of Biomedical Texts using Keyword Extraction, Pretrained Models and Ontological Evaluation	Koutsomitropoulos, Dimitrios*; Pyrgas, Athanasios; Andriopoulos, Andreas
156	17:15 - 17:30	Trade-offs in Evolved Epidemic Networks: A Multi-Objective Approach	Dube, Michael*; Nura, Muhamet; Mostaghim, Sanaz

ID	Time	Paper Title	Authors
197	17:30 - 17:45	HostShift: Quantifying Cross-Host Transferability and the Limits of Generalisation in Linear B-Cell Epitope Prediction	Gautam, Purnima*; Mitra, Pralay; Sinha, Ishaan

17:45 - 18:00: unallocated / discussion time

Poster Session

September 1, 12:30 - 13:30, Main Auditorium

ID	Paper Title	Authors
249	PathwayScore: Rank-Portable Pathway-Level Prognostic Scoring from Targeted-Panel Sequencing	Ho, Shinn-Ying*; Kao, Kai-Ling
255	InterpretableSELFFormer: Interpretable Spatial Transcriptomics Reconstruction	Dhiman, Arnav*
258	Spectral Attribution of a Temporal Convolutional Network for Intrapartum Fetal Acidemia Detection	Corns, Steven*; Adhikari, Anusha
127	Human-in-the-Loop Refined Circulating Tumor Cells Detection in Metastatic Breast Cancer	Husseini-Wüsthoff, Hümeysra*
281	Why Do Single-Cell Foundation Models Lose to the Mean? A Diagnostic Study of Perturbation Prediction Failure Modes	Dhiman, Arnav*
283	Clique-Aware Genetic Algorithms for Graph Compression	Ghosh, Aritra ; Brown, Joseph*; Houghten, Sheridan

Virtual Sessions

Virtual Session 1

September 1 | 16:30 - 18:00 | Room #1 (Lab Room)

ID	Time	Paper Title	Authors
12	16:30 - 16:45	A Deep Learning Pipeline for Epilepsy Genomic Analysis Using GPT-2 XL and NVIDIA H100	Latif, Muhammad Omer *; Shafique, Muhammad Ali; Ullah, Hayat; Dong, Zhihua
18	16:45 - 17:00	Computational Design and Evaluation of Blood-Brain Barrier-Penetrant Peptide Therapeutics Targeting EGFRvIII in Glioblastoma: A Fully In Silico Pipeline Study	Dhedhi, Aly*; Raichura, Pranil
118	17:00 - 17:15	An Edge Unlearning Framework for Bipartite Drug-Target Interaction Graphs Using Domain Aware Sharding	Madisetty, Akash*; Rao, Shraddha ; Padarthi, Neha Sai; Satish, Priyanka ; Das, Bhaskarjyoti
136	17:15 - 17:30	TRIAD: Framework for Interpretable Alzheimer's Progression Prediction Using Tensor Factorisation and Deep Sequence Modeling	K C, Sameeksha*; Shirwaicar, Sanat; Shah, Saaj; Achyuthan, Namita; Das, Bhaskarjyoti
146	17:30 - 17:45	Model Agnostic Explainable Artificial Intelligence in Clinical Decision-Support Systems for Oncology	Onicescu, Oriana-Maria*
170	17:45 - 18:00	Unsupervised Cluster-Augmented Mortality Prediction in MIMIC-IV Using Tabular ICU Time-Series Aggregation and Gradient Boosted Learning	Bui, Quang*; Dhedhi, Aly

Virtual Session 2

September 2 | 16:30 - 18:00 | Room #1 (Lab Room)

ID	Time	Paper Title	Authors
195	16:30 - 16:45	mitoMatch: A Machine Learning Approach to Identify Human Relatedness Using Mitochondrial DNA Hypervariable Regions I and II	Ziyad, Saliha*; Weerasinghe, Ruwan; Wijesinghe, Rupika
196	16:45 - 17:00	COLMAR-T : Context-Oriented LLM-enhanced Medication Recommendation with Attention and Recurrence over Time	kilani, Mayssa*; YANES, Nacim ; Dardour, Sondes
216	17:00 - 17:15	KG-TRACE: A Neuro-Symbolic Framework for Mechanistic Grounding in Antimicrobial Resistance Prediction	Garg, Naman; Jain, Sarika*; Yadav, Sourav; Bhargava, Bharat; Singh, Ghanapriya; Srivastava, Abhishek; Kar, Parimal
231	17:15 - 17:30	Investigating Eye Movement and Driving Behaviors During Turning Maneuvers as Candidate Biomarkers of Alzheimer's Risk Using the NEST-MB Biomarker Discovery Framework	Kumar, Anu*; Murphey, Yi Lu; Maher, Amanda Cook; Persad, Carol; Koeppe, Robert; Giordani, Bruno
234	17:30 - 17:45	SAM-HQ Assisted Tooth Instance Segmentation, ADA Numbering, and Anatomical Classification in Panoramic Dental Radiographs Using Mask R-CNN	Acchugatla, Sravanthi*; Chodhary, Neeraj; Lakkireddy, Bhuvana
236	17:45 - 18:00	Measuring Without Segmenting: A Hybrid YOLOv8–Keypoint R-CNN Approach for Tooth Root Length Estimation	Acchugatla, Sravanthi*; Choudhary, Neeraj; Krishna Rao, Appaana Saketh; Kushal, Kushal