

# TECHANICAL PROGRAMME

	09/12/2024			10/12/2024			11/12/2024			
08:30 - 17:00	Onsite -registration			Onsite - registration			ONLINE			
9:15-9:30				Keynote 2: Prof. Nabil Abdennadher Towards a decentralised Federated Learning based edge-to-edge Continuum Computing framework.			Session 13 SNAMS (ONLINE)      Session 14 GCET (ONLINE)			
9:30-10:00	Opening & Welcome									
10:00-11:00	Keynote 1: Prof. Francesco Falcone: Wireless Systems for Communication and Sensing in Cognitive Cities			Keynote 3: Professor Timothy Jung AI-powered XR: Redefining the Future of Software-Defined Systems			Session 15 GCET (ONLINE)      Session 16 SNAMS (ONLINE)			
11:00-11:20	Coffee Break			Coffee Break						
11:20: - 13:00	Session 1 -- GCET	Session 2 -- SNAMS	Session 3 SDS (ONLINE)	Session 7 GCET	Session 8 SNAMS	Session 9 SDS (ONLINE)	Conference Closing			
13:00-14:00	Lunch			lunch						
14:00: 16:00	Session 4 SNAMS	Session 5 SDS	Session 6 GCET (ONLINE)	Session 10 GCET	Session 11 SDS	Session 12 SNAMS (ONLINE)	Session 17 GCET (ONLINE)      Session 15 GCET (ONLINE)			
16:00-17:00	Coffee Break & Networking			Coffee Break & networking						
				Gala Dinner and Awards - 19:30: to 22:30						

Monday 9 <sup>th</sup> December 2024		
08:00 - 17:00	Onsite registration	
09:30-10:00	Opening & Welcome	
10:00 – 10:45	<b>Keynote Speaker:</b> Prof. Francesco Falcone: Wireless Systems for Communication and Sensing in Cognitive Cities <b>Chair:</b> Sandra Sendra	
10:45-11:15	Coffee break	
11:15 - 13:00	Session 1	<b>Chair: Sandra Sendra</b> <ul style="list-style-type: none"> <li>7432: Disturbance-Storm Time Index Forecasting: A Comparative Analysis of Time Distributed CNN and Bi-LSTM Models in Geomagnetic Storm Prediction</li> <li>6825 Edge-based IoT Image Processing System for Detecting Changes in Leaves</li> <li>3187: The Relevance of Cyber Diplomacy to Arguments about National Cyber Power</li> <li>9404: Blockchain-AI Integration for Resilient Real-time Cyber Security Artificial Intelligence and Machine Learning</li> <li>1753: Refining and generalising ethical guidelines for digital Extended Reality (XR) and Artificial Intelligence (AI): a participatory approach including experts' and publics' views</li> </ul>
		<b>Chair: Elhadj Benkhelifa</b> <ul style="list-style-type: none"> <li>0750: Modeling the influence of social networks on Crowdfunding projects</li> <li>3121: Social Media Bot Policies: Evaluating Passive and Active Enforcement</li> <li>6226: An Interpretable Fine-Tuned BERT Approach for Phishing URLs Detection: A Superior Alternative to Feature Engineering</li> <li>6325: A Pipeline for the Analysis of User Interactions in YouTube Comments: a Hybridization of LLMs and Rule-based Methods</li> <li>7698: Exposure and Adoption of Social Dimensions During the Ukraine War</li> </ul>
11:15 - 13:00	Session 2	<b>Chair: Tamara Zhukabayeva: --</b> <ul style="list-style-type: none"> <li>1851: ANALYZING AUTOMATIC CODE GENERATION FOR LEARNING MODELS IN GENERATIVE AI</li> <li>3869: Balancing Usability and Protection in AI and Data Security: A Human-Centric Approach</li> <li>0532: A Novel Model for Digital Twins in Mental Health: The Biopsychosocial AI-Driven Digital Twin (BADT) Framework</li> <li>1694: Mitigating Security Vulnerabilities in Offline USSD Payments in non-Smartphones</li> <li>3878: Integrating Digital Twins in Supply Chain Management Education</li> <li>2951: Architecting a SDS for Microservices-based Distributed Edge Computing Systems</li> <li>4361: A Robust Federated Deep Learning-Based Framework to Mitigate Routing Attacks in Flying Ad Hoc Networks</li> </ul>
		<b>Chair: Tamara Zhukabayeva: --</b> <ul style="list-style-type: none"> <li>1851: ANALYZING AUTOMATIC CODE GENERATION FOR LEARNING MODELS IN GENERATIVE AI</li> <li>3869: Balancing Usability and Protection in AI and Data Security: A Human-Centric Approach</li> <li>0532: A Novel Model for Digital Twins in Mental Health: The Biopsychosocial AI-Driven Digital Twin (BADT) Framework</li> <li>1694: Mitigating Security Vulnerabilities in Offline USSD Payments in non-Smartphones</li> <li>3878: Integrating Digital Twins in Supply Chain Management Education</li> <li>2951: Architecting a SDS for Microservices-based Distributed Edge Computing Systems</li> <li>4361: A Robust Federated Deep Learning-Based Framework to Mitigate Routing Attacks in Flying Ad Hoc Networks</li> </ul>
13:00 - 14:00	LUNCH (Onsite)	
14:00 - 16:00	Session 4	<b>Chair: Abdelkader Berrouachedi</b> <ul style="list-style-type: none"> <li>6944: A Novel Approach to Person-Job Fit Using Outlier Detection</li> <li>9409: Towards Supporting Penetration Testing Education with Large Language Models: an Evaluation and Comparison</li> <li>1634: Promoting security and trust on social networks: Explainable cyberbullying detection using Large Language Models in a stream-based Machine Learning framework</li> <li>0070: The Limits of Influence Maximisation in Online Social Networks</li> </ul>
		<b>Chair: Jaime Lloret</b> <ul style="list-style-type: none"> <li>1410 Unsupervised DDoS Detection Using Entropy Features and f-AnoGAN in SDN</li> <li>6891: Towards a Real Vehicular Data Cloud</li> <li>9962: Security Authentication on the Edge: A Step Further to Defense in Depth for IoBT</li> <li>6351: Towards a Resilient Multi-Agent Controller: Securing and Mitigating Overhead in Tactical SDN</li> <li>9896: Resilient Software Defined Satellite Networks: Combining Clustering Techniques with Efficient Routing Protocols</li> <li>8641: Towards a Metamorphic Testing Architecture for Software-Defined Drone Systems.</li> </ul>
14:00 - 16:00	Session 5	<b>Chair: Jaime Lloret</b> <ul style="list-style-type: none"> <li>1410 Unsupervised DDoS Detection Using Entropy Features and f-AnoGAN in SDN</li> <li>6891: Towards a Real Vehicular Data Cloud</li> <li>9962: Security Authentication on the Edge: A Step Further to Defense in Depth for IoBT</li> <li>6351: Towards a Resilient Multi-Agent Controller: Securing and Mitigating Overhead in Tactical SDN</li> <li>9896: Resilient Software Defined Satellite Networks: Combining Clustering Techniques with Efficient Routing Protocols</li> <li>8641: Towards a Metamorphic Testing Architecture for Software-Defined Drone Systems.</li> </ul>

14:00 - 16:00	Session 6 (Online)	<b>Chair: Susana Cláudia Nicola de Araújo</b>
		<ul style="list-style-type: none"> <li>• 7467 Challenges in Logistics within the Medical 4.0 Environment: A DEMETAL Approach</li> <li>• 8947 Energy-Efficient Prediction of Hourly Energy Consumption in Fog/Edge Computing Using Optimized Artificial Neural Networks</li> <li>• 4045 Exploring the Impact of Robotic Process Automation and Artificial Intelligence Technologies on the Auditing Profession</li> <li>• 3755 Multi-criteria based virtual SaaS Selection in Cloud Environment</li> <li>• 6828 An Enhanced Toponymic Distance for Semantic Analysis in Geographic Information Network</li> <li>• 6355 AI Governance: A General Perspective</li> <li>• 0328: Training needs assessment for the design of healthcare digital transformation courses in EU</li> </ul>
16:00-17:00	<b>Coffee break &amp; Networking</b>	
<b>Tuesday 10<sup>th</sup> December 2024</b>		
09:15 – 10:00	<b>Keynote Speaker 2:</b> Prof. Nabil Abdennadher Towards a decentralised Federated Learning based edge-to-edge Continuum Computing framework. <b>Chair:</b> Jaime Lloret	
10:00-10:45	<b>Keynote Speaker 3:</b> Professor Timothy Jung AI-powered XR: Redefining the Future of Software-Defined Systems <b>Chair:</b> Elhadj Benkhelifa	
10:45-11:05	Coffee Break	
11:05 - 13:00	Session 7	<b>Chair: Sandra Sendra</b>
		<ul style="list-style-type: none"> <li>• 1869: A Smart Train Seat Recommendation Mobile Platform based on Personal Interests and Social Preferences using Data Science and Artificial Intelligence</li> <li>• 0287: Insight generation and complex datasets analysis with LLMs in AdTech</li> <li>• 4460: An OLAP Internal/External Cube Recommendation Approach based on Artificial Intelligence Techniques</li> <li>• 3233: Arabic fake news detection using CNN and fuzzy logic Artificial Intelligence and Machine Learning</li> <li>• 1308 Multi-Objective Reinforcement Learning for QoS-Aware Optimization of Multi-Cloud IoT Service Selection</li> </ul>
11:05-13:00	Session 8	<b>Chair: Elhadj Benkhelifa</b>
		<ul style="list-style-type: none"> <li>• 0454: Mapping Twitter Activity in the 2019 Ukrainian Political Landscape</li> <li>• 7636: Real-time personalized detection of cyberbullying and online harassment in social networks using Jetson Nano</li> <li>• 9383: Applying Social Networks to Snowball Sampling of a 'Hard-to-Reach' Population and to Illustrate Qualitative Findings</li> <li>• 9115: Artificial Intelligence in Mental Health Care: The T5 Chatbot Project</li> <li>• 9826: Disentangling Disparate Communication Streams and Recovering Underlying Structure</li> <li>• 5450: Understanding Trust in Authentication Methods for Icelandic Digital Public Services</li> </ul>
11:05-13:00	Session 9 (ONLINE)	<b>Chair: Haythem Bany Salameh</b>
		<ul style="list-style-type: none"> <li>• 5849: Enhancing Domain Name System Security: An Approach Inspired by RAID Technology</li> <li>• 3318: Optimizing Microservices Architecture: A Comprehensive Study on Resolving Complexity in Billing Systems</li> <li>• 6390: A Decision Tree-based Spectrum Sensing Approach in IoT-based Software-Defined Networks</li> <li>• 5685: Advancing IoT Security: A Review of Intrusion Detection Systems Challenges and Emerging Solutions</li> <li>• 7107: A Review on the Overall Performance of SDN Controllers</li> <li>• 8443: An Optimized SDN Framework for the Internet of Things</li> <li>• 0840: A discovery portal for smart health-related data exploration and management based on a hybrid Service-and-Data-Oriented Architecture</li> <li>• 5475: Navigating the Newscape: Long Short-Term Memory Models for Misinformation Detection</li> </ul>

13:00 - 14:00	<b>LUNCH (ONSITE)</b>	
14:00 - 16:00	Session 10	<b>Chair: Abdelkader Berrouachdi</b>
		<ul style="list-style-type: none"> <li>• 2472: Optimal Portfolio and Trading Strategy Using Machine Learning techniques</li> <li>• 5378: Quantitative Review of Conversational Agents in E-Health Using NLP and AI</li> <li>• 6385: An Integrated Edge Computing Framework for Enhancing Cyber-Physical System Security through Network Traffic Anomaly Detection in Industrial IoT</li> <li>• 4216: Formal Analysis of E-Payment System based on 3-D Secure in Social Payment Environment</li> <li>• 8407: Penetration Testing-Aware IDS for Wireless Networks in Urban Digital Ecosystems Integrated with Edge Computing and Machine Learning</li> </ul>
14:00 - 16:00	Session 11	<b>Chair: Jaime Lloret</b>
		<ul style="list-style-type: none"> <li>• 6795: Software-defined Support for the Execution of Task-graph-based Applications on Cloud Environments</li> <li>• 2458: Integrating AEAD Ciphers into Software-Defined-Storage Systems</li> <li>• 0873: Toward Automating Cooja Experiment Workflows for Dataset Generation</li> <li>• 4935: Holon Programming Model: A Software-Defined Approach for System of Systems</li> <li>• 1103 Explainable AI Feature Selection in Generative Adversarial Networks System aiming to detect DDoS Attacks</li> </ul>
14:00 - 16:20	<b>Session 12 (ONLINE)</b>	<b>Chair: Leonidas Boutsikaris</b>
		<ul style="list-style-type: none"> <li>• 5008: Bridging the Gap: Enhancing Entrepreneurship Education in Jordanian Universities</li> <li>• 2901: A Personalised Adaptive Intervention Framework to Tackle Misinformation and Disinformation on Social Media</li> <li>• 3522: AI-Based Working Memory Training to Reduce Reading Disabilities in Primary Students</li> <li>• 4771: Beyond Binary Opinions: A Multidimensional Approach for Quantifying Opinion Diversity in Communities</li> <li>• 2452: LEARNING BASED ON GENERATIVE AI WITH IMAGE SYNTHESIS AND DATA AUGMENTATION TECHNIQUES</li> <li>• 2774: Postgraduate Students' Perceptions of the Benefits and Challenges of Utilizing Artificial Intelligence to Promote Academic Success</li> <li>• 7195: Privacy and Data Protection on Social Network Sites as Driver of Social Integration</li> </ul>
16:00 - 16:45	<b>Coffee break/Networking</b>	
19:30- 22:30	<b>Gala Dinner &amp; and Awards</b>	
<b>Wednesday 11<sup>th</sup> December 2024 (ONLINE)</b>		
09:00- 11:00	Session 13 <b>(ONLINE)</b>	<b>Chair: Payiri Gregoire Wenceslas ZOMBRE</b> <a href="https://us06web.zoom.us/j/81549826186?pwd=wOluWgmwRTtzDhux18C8fMbTbV8tsP.1">https://us06web.zoom.us/j/81549826186?pwd=wOluWgmwRTtzDhux18C8fMbTbV8tsP.1</a>
		<ul style="list-style-type: none"> <li>• 9987: Cross-analysis of opinions on social media in the context of high security challenge</li> <li>• 6655 Social Media Use in Journalism and Education Mediated by Personal Integrative Needs</li> <li>• 9870: Enhancing Selective Attention of Students with Learning Disabilities Through an AI-Based Strategy</li> <li>• 6023: Generational Responses to Athlete Activism: The Role of Digital Identity and Consumer Purchase Intent</li> <li>• 9688: Education Students' Attitudes Towards Social Media Networks</li> </ul>

		<ul style="list-style-type: none"> <li>3847 Leveraging Sentiment and Emotion Analysis to Enhance Cyberbullying Detection</li> <li>6557: A Systematic Literature Review of Security and Privacy Solutions for the Metaverse</li> </ul>
09:00-11:00	Session 14 <b>(ONLINE)</b>	<p><b>Chair: Majed ElSaleh</b> <a href="#">Join the meeting now</a></p> <ul style="list-style-type: none"> <li>0991 A Systematic Review of the Transformative Role of Virtual Reality in Physics Education</li> <li>2170 An Insight into Uses, Benefits and Challenges of Integrating AI in Early Childhood Education</li> <li>8683: A WYSIWYG Document Editor to Solve the Issue of Writing Documents with Math Elements and Avoid the Steep Learning Curve of a Plain LaTeX Editor</li> <li>3336 The Influence of Participatory Video in Enhancing Arabic Speaking Skills: A Case Study of Students in the United Arab Emirates</li> <li>8638 The impact of utilizing the SKLZ Cam application for real-time feedback on the speed at beginners in judo Ukemi techniques</li> <li>9276 Teachers' Perspective on the Role of the Internet of Things (IoT) in Education</li> <li>6985 Exploring the Students' Perceptions of the Effectiveness of Using E-Learning Platforms on Learning Programming Languages (LPL) Related to Student Attitude, Performance, and Satisfaction During and Post-Covid-19 Global Crisis</li> </ul>
11:00 - 13:00	Session 15 <b>(ONLINE)</b>	<p><b>Chair: Mohamed Heydari</b> <a href="#">Join the meeting now</a></p> <ul style="list-style-type: none"> <li>0417 Designing Novel Trust Models: Merging Psychological Insights with Machine Learning to Enhance AI User Trust</li> <li>7148 ENHANCING METAVERSE CYBERSECURITY WITH FEDERATED LEARNING</li> <li>8899: Evaluating Large Language Models Versus Traditional Tools in SQL Injection Exploit Generation</li> <li>2200 Enhancing Business Performance Through Data-Driven Digital Marketing and Big Data Capabilities</li> <li>4178 Perceptions on Digital Transformation: Leadership Position versus Organizational Size</li> <li>0761: Evaluating Large Language Models Versus Traditional Tools in OS Command Injection Exploit Generation</li> <li>6655: Analysis of Industry 4.0 adoption challenges in medium size brewery from engineering complex systems perspective</li> </ul>
11:00 - 13:00	Session 16 <b>(ONLINE)</b>	<p><b>Chair: Haythem Bany Salameh</b> <a href="#">Join the meeting now</a></p> <ul style="list-style-type: none"> <li>8150: The Status of Individual and Group Identities in Networked Societies</li> <li>6901 Optimizing Transfer Learning Techniques for Sentiment Polarity Detection in Retail Reviews</li> <li>5112: A Critical Review of Digital Marketing for Organization: Challenges and Opportunities</li> <li>5925: Multilingual Hate Speech Detection Using Transformer-Based Deep Learning Approaches</li> <li>4390: Using Digital Surveillance to Improve PR Strategies: Strengthening Trust, Media Relations, and Crisis Communication in the UAE</li> <li>2426: A Novel Reinforcement Learning Model for Post-Incident Malware Investigations</li> <li>2472: Optimal Portfolio and Trading Strategy Using Machine Learning techniques</li> </ul>
13:00-14:00	Break	
14:00-16:00	Session 17 <b>Online</b>	<p><b>Chair: Haroon Mahmood</b> <a href="#">Join the meeting now</a></p> <ul style="list-style-type: none"> <li>1217 Quantum Computing and Password Security: Applying Grover's Algorithm and QRNG with Qiskit7</li> <li>2639 Optimized Charging Station Deployment for Enhanced Detection Efficiency in RL-based UAV Target Tracking Systems</li> <li>9439 Influence of infill density on the mechanical behaviour of additively manufactured thermoplastic polyurethane</li> <li>5852 On The Minsum Decoding Algorithm For The 5G NR LDPC Codes</li> <li>6255 Integrating Flying Taxis: Dubai's Pioneering Efforts</li> <li>6797 Optimized Coverage of Urban Territory for Traffic Surveillance using Multiple UAVs</li> </ul>

		<ul style="list-style-type: none"> <li>1775: A Machine Learning-assisted Game Theoretical Service Selection Strategy in UAV Networks</li> </ul>
14:00-16:00	<p>Session 18</p> <p>Online</p>	<p><b>Chair: Khalaf Tahat</b></p> <p><a href="#">Join the meeting now</a></p> <ul style="list-style-type: none"> <li>5751 IT Readiness and Blockchain Analytics as Mediators in the Relationship between Business Intelligence and Market Performance of SMEs in the UAE</li> <li>8166: Real-Time Sign Language to Speech Recognition System for BSL</li> <li>6666 THE IMPACT OF AI ON ACCOUNTING TECHNOLOGY ADOPTION THE MEDIATE ROLE OF BUSINESS PERFORMANCE</li> <li>7609 Leveraging K-Means Clustering for Analysis of Arabic Hate Speech Tweets</li> <li>8162: Mindful Eating and Impact of Physical Activity on Weight Management using Mobile Application</li> <li>5162 A Strategic Localisation Model for India</li> <li>6048: Preventing Facebook from Being Used for Defamation, Doxing, Impersonation, Threats of Violence, and Intimate Images</li> </ul>
<b>Conference ENDS</b>		

## KEYNOTE SPEAKERS

1. **Prof. Francisco Falcone, Universidad Publica de Navarra, UPNA, Spain**
2. **Prof. Nabil Abdennadher, University of Applied Sciences, Western Switzerland**
3. **Prof. Timothy Jung, Manchester Metropolitan University, UK -**

