

International **CO**nference
on **D**ecision **A**id
and Artificial **I**ntelligence



ICODAI'24

AI for Healthcare and Education

October 31st, 2024



Programme – 31 octobre 2024

08h00-08h30	Inscription
Modérateurs : Judith Kouassi, Georges Votava et Ameni Romdhane	
08h30-10h00	Pr. Mourad Bellassoued, Directeur Général de la Recherche Scientifique Pr. Mohamed Jemni, Directeur du département ICT - ALECSO Pr. Mohammad Sanad Abu-Darwish, Directeur du département des Sciences et de la Recherche Scientifique – ALECSO Pr. Meliane N'dhazt, Directrice Générale - INFAS Pr. Amen Allah Messaadi, Président PAWH Dr. Mondher Ben Ayed, PDG - TMI Pr. Saoussen Krichen, Directrice Générale – CCK Pr. Georges Votava : Remise des diplômes « T to T »
10h00-11h00	- L'IA et la santé, Pr. Issam Nouaouri - La télémédecine : Un outil technologique innovant, Pr. Slah Hallara - Éthique de l'intelligence artificielle : Pr. Basma Nouha Chaouch - Impact de la télémédecine sur la réduction des disparités. Pr. Slah Hallara - Problématiques de la recherche scientifique à l'ère de l'intelligence artificielle : pour un changement radical dans le traitement des connaissances, Pr. Dorra Bassi
Pause café	
Modérateurs: Ameni Romdhane, Chiraz Amrouche et Meriem Jones	
11h30-12h30	- Nutrition, malnutrition et dénutrition : Définition et état des lieux, Pr. Ag. Kamilia Ounaissa - Support nutritionnel à la cicatrisation : du menu unique au choix à la carte, Pr. Anne Françoise Rousseau - Le processus de la cicatrisation et ses facteurs limitants, Pr. Ag. Asmahen Souissi - Une analyse approfondie des enjeux et défis éthiques liés à l'intelligence artificielle dans le domaine de la santé, Pr. Ag. Youssef Ziad Al-Heshemi - Vers une nouvelle loi sur l'intelligence artificielle, Pr. Wafa Chaouch Nouria
Déjeuner	

Chair : Pr. Nahla Ben Amor, University of Tunis (Saoudia Room)		
14h00-15h30	Parallel session 1: Decision Aid and Machine Learning	<p>14h00-14h15 - Towards a Better Prescription: Graph AutoEncoder for Drug Recommendation <i>Mongi Kourchid, Olfa Adouni, Alaa Bessadok and Nacim Yanes</i></p> <p>14h15-14h30 - Prediction of Systemic Lupus Erythematosus using Machine Learning applied to Hair Fluorescence Spectroscopy Data <i>Sarra Ben Brik, Imen Cherni, Mehdi Somai, Hassen Ghalila and Sami Hamzaoui</i></p> <p>14h30-14h45 - Towards a Machine Learning Based Activities Recommendation for Children Cerebral Palsy Treatment <i>Maraim Gorchene, Lilia Cheniti-Belcadhi and Saoussen Layouni</i></p> <p>14h45-15h00 - Adversarial Graph Neural Network for Medication Recommendation (AGMR) <i>Oussama Abdeddaiem, Atta Zaatra, Alaa Bessadok and Nacim Yanes</i></p> <p>15h00-15h15 - Optimizing Football Player Selection Using Random Forest for Criterion Weighting and TOPSIS for Ranking <i>Roukaya Ben Jeddou, Abdessatar Ati and Patrick Bouchet</i></p> <p>15h15-15h30 - An Adapted NSGA-II algorithm for integrated timetabling and bus packing Problems: A case of pilgrims transportation problem <i>Ines Sbai, Saoussen Krichen and Islam Elgammal</i></p>

Chair : Pr. Boutheina Ben Yaghlane, University of Carthage (Carthage Room)		
14h00-15h30	Parallel Session 2: AI Applications in Medicine and Healthcare	<p>14h00-14h15 - Volumetric Quantification of Stroke Lesions Using DW-MRI and 3D U-Net Approach <i>Barreh Wanis, Ben Alaya Ines, Ben Amor Rayhane, Riahi Iyadh and Ben Salah Ridha</i></p> <p>14h15-14h30 - Optimizing ANN Hyperparameters with Metaheuristic Algorithms for 3-DOF Manipulator Inverse Kinematics <i>Rania Bouzid, Hassène Gritli and Jyotindra Narayan</i></p> <p>14h30-14h45 - Feature Selection for GDM Prediction Using XAI-based AutoML Approach <i>Alia Maaloul, Meriam Jemel and Nadia Ben Azzouna</i></p> <p>14h45-15h00 - Deep Learning Approaches for the Detection of Retinopathy of Prematurity <i>Maatoug Tarak, Salih Nazar, Hussein Nebras and Mohamed Ksantini</i></p> <p>15h00-15h15 - Bi-objective Hospital Bed Assignment Problem in Emergencies <i>Hela Jedidi, Hajer Ben Romdhane, Issam Nouaouri and Saoussen Krichen</i></p> <p>15h15-15h30 - SAFE'ME: An Augmented Reality Application to Support Harm Awareness for the Safety Promotion of Children with Autism Disorders <i>Safa Elkefi, Sana Layeb, Safa Bhar Layeb and Maryem Benslimene</i></p>
Chair : Pr. Najet Boussaa, University of Artois and Dr. Lilia Rejeb, University of Tunis (Saoudia Room)		
15h30-16h30	Parallel Session 3: Optimization and AI in Healthcare Planning	<p>15h30-15h45 - Human-Centered Scheduling with a Heterogeneous Workforce in the Context of Industry 5.0: A Proof of Concept from a Learning Factory <i>Hajer Hamdaoui, Safa Bhar Layeb, Amel Jaoua and Elisa Negri</i></p> <p>15h45-16h00 - Tailoring Reinforcement Learning for the Online Surgery-Planning and Scheduling Problem <i>Khouloud Bennour, Imen Ghazouani, Asma Ouled Bedhief, Najla Aissaoui Omrane and Safa Bhar Layeb</i></p> <p>16h00-16h15 - Combining Unsupervised Learning with the Genetic Algorithm for the Blood Delivery Problem <i>Abdelmalek Belhadj and Hajer Ben-Romdhane</i></p> <p>16h15-16h30 - Supply Chain Optimization and Working Capital Requirement Management: Literature Review <i>Meriem Chairat, Najet Boussaa, Fahima Alili, Lilia Rejeb, Issam Nouaouri and Hamid Allaoui</i></p>
Chair : Pr. Sonia Ghanouchi, University of Sousse (Carthage Room)		
15h30-16h30	Parallel session 4: Artificial Intelligence in Education	<p>15h30-15h45 - Fuzzy Ontology-based Algorithm for Recommendation of Learning Strategy in a Ubiquitous Learning System <i>Walid Bayounes, Ines Bayouadh Saadi and Haithem Chaabani</i></p> <p>15h45-16h00 - OULAD MOOC Student Performance Prediction Using Machine Learning and Deep Learning Techniques <i>Wala Torkhani and Kalthoum Rezgui</i></p> <p>16h00-16h15 - Integrating Digital Tools in Education: An Analysis Using Engeström's Activity Theory <i>Sonia Gannar and Chiraz Kilani</i></p> <p>16h15-16h30 - A Decision Support System based on Intelligent optimisation algorithms for solving the Postal Transportation Problem <i>Ines Sbai, Saoussen Krichen, Hashem Abuseneh and Amira Sebai</i></p>
Closing session	Pr. Amen Allah Messadi, Pr. Mohamed Jemni and Pr. Saoussen Krichen	
Coffee break		