

SADASC'24 PROGRAM:

Thursday 18 April 2024

8:30 – 9:00 : Opening of registration

9:00 – 10:00: Opening remarks :

- Pr. **Housseine AZEDDOUG** President of Hassan II University Casablanca
- Pr. **Abdelmajid BADRI**, Director of ENSAM Casablanca
- Pr. **Mohamed HAMLICH** President of SADASC, ENSAM, UH2C Casablanca

10:00 – 10:45: Coffee Break

10:45 – 11:15: Keynote Speaker, "**Improving maintenance operations with advanced machine learning**", Pr. **Sebastián VENTURA**, University of Córdoba, Spain

11:15 – 12:35 : **Session 1.1 (Designing and modeling 1)**

- Bouthaina SLIKA, "Predicting Lung Infection Severity in Chest X-ray Images through Multi-Score Assessment", University of the Basque Country UPV/EHU, San Sebastian, Spain
- Hanan SABBAR, "Computer vision and artificial intelligent techniques for medical image segmentation: An overview of technical aspects and introduction to state-of-art application", LAROSERI Lab, Chouaib Doukkali University, EL Jadida, Morocco
- Ikhlass BOUKROUH, "Modeling and managing product unavailability risk in inventory through a fuzzy Bayesian network", Faculty of Sciences and Technique of Tangier, Abdelmalek ESSAADI University Tetouan, Morocco.
- Mohammed HAMIM, "A Binary Particle Swarm Optimization based Hybrid Feature Selection Method for Accident Severity Prediction", AICSE Lab, University Hassan II, Casablanca, Morocco

11:15 – 12:35 : **Session 1.2 (Designing and modeling 2)**

- Daniel William VOSKERGIAN, "The integration of NLP and Topic-Modeling-Based Machine Learning Approaches for Arabic Mobile App Review Classification", Al-Quds University, Computer Engineering Department, Jerusalem, Palestine.
- Sara BAALI, "Feature Selection for High-Dimensional Gene Expression Data: A Review", AICSE Lab, University Hassan II, Casablanca, Morocco.
- Youssra AMAZOU, "Legal contract quality and validity assessment Through the Bayesian Networks", Faculty of Sciences and Technologies of Tangier, Abdelmalek Essaadi University of Tetouan, Morocco
- Qamar EL MAAZOUZI, "Optimizing Recommendation Systems in E-learning: Synergistic Integration of Lang Chain, GPT Models, and Retrieval Augmented Generation (RAG)", Mohammadia School of Engineers, Mohammed V University, Rabat, Morocco.

12:35 – 14:30 : Lunch

14:30 – 15:15 : Tutorial : "**Library for statistical testing and comparison of algorithm results**", Pr. **Christian LUNA & José Maria LUNA**, UCO, CORDOBA, SPAIN

15:15 – 16:30 : **Session 1.3 (Network technologies & IoT1)**

- P. TENE, "ML based Control in Precision Agriculture: LED Intensity and CO2 emission case study", University of Southern Denmark, Sønderborg Alsion 2, Denmark
- K. A. COULIBALY, "Industry 4.0: Internet of Things and Cyber-Physical Systems for the implementation of pedagogical factory Digital Twin", Univ. Bordeaux, ESTIA, France
- TAHA HOUDA, "Multi-Robot Interaction with Mixed Reality for Enhanced Perception", College of Computer Engineering and Science, Prince Mohammad Bin Fahd University, Al-Khobar Saudi Arabia

- Ouiam AMENCHAR, "Designing a Firefly Algorithm-Enhanced Protocol for Efficient 3D Heterogeneous Wireless Sensor Networks in Water Quality Monitoring", LabTIC, ENSA de Tangier, Université Abdelmalek Essaâdi, Morocco

15:15 – 16:30 : Session 1.4 (Network technologies & IoT2)

- Loubna MOUJOURD, "Ensemble Learning for Malware Detection", Department of Mathematics Computer Science and Networks INPT Rabat, Morocco
- Zineb BAKRAOUY, "Enhancing Security Through Data Analysis and Visualization with ELK", STRS Lab., INPT, Rabat, Morocco
- Abdelwahed ELMOUTAOUKKIL, "Industry 4.0 Efficiency: Predictive Maintenance with TinyML and an Incremental Model", LCCPS, ENSAM, University Hassan II, Casablanca, Morocco
- Oussama EL ALLAM, "Tiny-ML and IoT based early COVID-19 detection wearable system", LCCPS Lab, ENSAM Casablanca, UH2C, Morocco

16:30 – 17:00 : Coffee Break

17:00 – 18:00 : Tutorial : "**Robotic disassembly for recycling**", Pr. **Adel OLABI**, ENSAM de Lille, France

17:00 – 18:00 : Tutorial : "**Fisher Discriminant Analysis (FDA)**", Pr. **Franck DUFRENOIS**, Université du Littoral Côte d'Opale, France

20:00- 00:00: **Gala Dinner**

Friday 19 April 2024

9:00 -10:00 : keynote speaker , "**Food Recommender System. Bridging Gap Between Health and User Behavior**", Pr. **Mourad OUSSALAH**, University of Oulu, Finland

10:00 –10:30 : Coffee Break

10:30 – 11:30 : Session 2.1 (Data management 1)

- Mohamad ABOU ALI, "Revolutionizing Skin Cancer Diagnosis: Unleashing AI Precision through Deep Learning", University of the Basque Country (UPV/EHU), San Sebastian, Spain
- Soulaïmane IDIRI, "Fuzzy Bayesian Network applied to modeling vehicles cooling systems failure risk", FST of Tangier, Abdelmalek ESSAADI University Tetouan, Morocco
- Maria ED-DARHRI, "Utilization of FMEA to Optimize Predictive Maintenance", ENSAM University of Hassan II, Casablanca, Morocco
- Ibtissam YOUB, "Comprehensive Study on Sentiment Analysis: Insights into Data Preprocessing, Feature Extraction, and Deep Learning Model Selection", LCCPS, ENSAM, UH2C, Morocco

10:30 – 11:30 : Session 2.2 (Data management 2)

- Loubna BOUHSAIEN, "A Combined AHP-TOPSIS Model for the Selection of Employees for Promotion", FST of Tangier, Abdelmalek Essaadi University, Tetouan, Morocco
- Nissrine BAJJA, "TOWARDS EXPLAINABLE MODELS: EXPLAINING BLACK-BOX MODELS", LCCPS, ENSAM, UH2C, Morocco
- Oussama NDAMA, "Advanced NLP and N-Gram Techniques in Financial News Sentiment Analysis: Diverse Machine Learning Approaches", DSAI2S Research Team, C3S Laboratory, FST of Tangier, Abdelmalek Essaâdi University, Tetouan, Morocco
- Mohammed Marouane SAIM, "Comparative Study of Feature Selection Algorithms for Cardiovascular Disease Prediction with Artificial Neural Networks", ERSC, E3S Research Center, Mohammed V University of Rabat, Morocco.

11:30 – 12:30 : Tutorial, "**Computational costs of injection molding simulations**", Pr. **Gilles REGNIER**, Arts et Métiers, CNRS, CNAM, France. Arts et Métiers Rabat campus, France

11:30 – 12:30 : Tutorial, "**Utilization of Cyber-Physical Systems (CPS) and Artificial Intelligence (AI) in building energy management**", Pr. *Octavian CUREA, ESTIA, Bayonne, France*

12:30 – 14:30 : Lunch

14:30 – 15:30 : session 2.3 (Control, dynamic systems and optimisation 1)

- Zakaria KOURAB, "Integrating Novel Circuit Design with Optimization Algorithms for Advanced Parameter Identification in PEM Fuel Cells", LCCPS, ENSAM, Hassan II University, Morocco
- Soufiane AMEUR, "Human-Robot Collaboration in Remanufacturing: An Application for Computer Disassembly", LCCPS, ENSAM, University of Hassan II, Casablanca, Morocco.
- Hala MELLOULI, "Applied Artificial Neural Networks for industrial decision-making optimization", AICSE, ENSAM, University Hassan II, Morocco
- Manal KOUHI, "Genetic Algorithm-Driven Optimization for Standalone PV/Wind Hybrid Energy Systems Design", LCCPS, ENSAM, University Hassan II, Morocco

14:30 – 15:30 : session 2.4 (Control, dynamic systems and optimisation 2)

- ASMAE CHAKIR, "Machine learning algorithms based for demand-side energy forecasting of an office building loads", LPRI, EMSI of Casablanca, Casablanca, Morocco
- Sara BOUSKOUR, "Deciphering the Interplay of Precipitation, NDVI, and Modeling for Enhanced Wheat Production Strategies", Hassan II University, Mohammedia, Morocco
- Youness HILLALI, "Balancing assembly line based on lean management tools", LCCPS, ENSAM, Casablanca, Morocco
- Sofia LEMSSADDAK, "A novel asymmetrical multilevel inverter with reduced number of switches Regulated by PD-PWM Method", LCCPS, ENSAM, UH2C, Morocco

15:30 – 16:30 : Session 2.5 (Exploitation and Exploration 1)

- Houda MOUTTALIB, "Exploring the Horizon: Challenges and Solutions in Integrating Extended Reality (XR) into STEM Education", 2IACS Lab, ENSET, University Hassan II, Morocco
- Abdelghani AZRI, "Improving Explainable Matrix Factorization with User-Item Features for Recommender Systems", Hassan First University, FST, LAVETE Lab, Settat, Morocco
- Hasnae BRIOUYA, "Surveying Lightweight Neural Network Architectures for Enhanced Mobile Performance", Computer Sciences Lab, Faculty of Sciences, Ibn Tofail University, Morocco
- Rahma ELKAMOUCI, "Multi-Agents System in Healthcare: A systematic literature review", Laboratory 2IACS, ENSET, University Hassan II Casablanca Morocco

15:30 – 16:30 : Session 2.6 (Exploitation and Exploration 2)

- Ilyasse MELLAL, "Advances in the Security of SDNs: Exploration of Recent ML-based Approaches", Faculty of Sciences, Mohammed V University in Rabat, Morocco
- Feras ALOBEIDAT, "Toward an Intelligent Decision Support System for Environmental Application Using Earth Digital Twin", Zayed University, Abu Dhabi, UAE
- Adnane EL ALAMI, "Operation and Control of a Five-Level ANPC Inverter", LCCPS, ENSAM, UH2C, Morocco
- Said HOUMAIRI, "Kinematic Modeling, Optimal Sizing, and Accuracy Analysis of a Compact Delta Robot", IMII Lab, FST, Hassan 1st University, Settat, Morocco

16:30 – 17:00 : Coffee Break

17:00 – 18:00 : Closing of the conference