



<b>Day 1: Thursday, May 26, 2022</b>	
09:00	<b>Registration and Reception-</b> <span style="float: right;"><u>Conference room hall</u></span>
10:00	<b>Opening &amp; Welcome from discussion Panel members-</b> <span style="float: right;"><u>Conference room</u></span>
10:30	<b>Plenary session 1: "Foundation Models: Is the Attention-powered Transformers Approach the Holy Grail of AI?"</b> Hamza Zidoum <span style="float: right;"><u>Conference room</u></span>
11:15	<b>Morning Coffee Break -</b> <span style="float: right;"><u>Conference room hall</u></span>
11:45	<b>Session_01: Decision Support and Artificial Intelligence</b> <span style="float: right;"><u>Conference room</u></span>
13:30	<b>Lunch Break</b>
15:30	<b>Plenary session 2: "Machine Learning and its Application"</b> Youness El Hamzaoui <span style="float: right;"><u>Conference room</u></span>
16:15	<b>Session_02: Business Intelligence and Database</b> <span style="float: right;"><u>Conference room</u></span>
18:00	<b>Afternoon Coffee break</b> <span style="float: right;"><u>Conference room hall</u></span>
<b>Day 2: Friday, May 27, 2022</b>	
9:00	<b>Registration and Reception</b> <span style="float: right;"><u>Conference room hall</u></span>
10:00	<b>Plenary session 3: "Beyond data-driven approaches in digitalized decision making"</b> Harald Kitzmann <span style="float: right;"><u>Conference room</u></span>
10:45	<b>Plenary session 4: "Artificial Intelligence and Humans"</b> Mohamed Quafafou <span style="float: right;"><u>Conference room</u></span>
11:30	<b>Morning Coffee Break</b> <span style="float: right;"><u>Conference room hall;</u></span>
12:00	<b>Session_03: Optimization and Dynamic programming</b> <span style="float: right;"><u>Conference room</u></span>
13:45	<b>Lunch Break</b>
15:45	<b>Session_04: Decision Support and Artificial Intelligence</b> <span style="float: right;"><u>Conference room</u></span>
17:30	<b>Afternoon Coffee break</b> <span style="float: right;"><u>Conference room hall</u></span>
18:00	<b>Best Papers Award and Closing</b>
<b>Day 3: Saturday, May 28, 2022</b>	
9:00 - 12:00	<b>Social Event, Excursion</b>

## Keynote Speeches

<b>Keynote Speech 1</b>	Title: Foundation Models: Is the Attention-powered Transformers Approach the Holy Grail of AI? Author: Professor Hamza Zidoum
<b>Keynote Speech 2</b>	Title: Machine Learning and its Application Author: Professor Youness El Hamzaoui
<b>Keynote Speech 3</b>	Title: Beyond data-driven approaches in digitalized decision making Author: Professor Harald Kitzmann
<b>Keynote Speech 4</b>	Title: Artificial Intelligence and Humans Author: Professor Mohamed Quafafou

## Oral Sessions

### SESSION 01: DECISION SUPPORT AND ARTIFICIAL INTELLIGENCE

**Chair: M. NACHAOUI/Y. EL MOURABIT**

F. Es-sabery	Optimization Focused On Parallel Fuzzy Deep Belief Neural Network For Opinion Mining	p6
K.El moutaouakil	A Convolutional Neural Networks-Based Approach For Potato Disease Classification	p7
S. Zitan	Performance Investigation of a Proposed CBIR Search Engine Using Deep Convolutional Neural Networks	p7
M. Ouriha	Decision Boundary to improve the sensitivity of deep neural networks models	p8
R. BOUSAID	Facial Expression Recognition Using a Hybrid ViT-CNN Aggregator	p9

### SESSION 02: BUSINESS INTELLIGENCE AND DATABASE

**Chair: C DAQUI/ R. EL AYACHI**

Y. BACHIRI	Increasing Student Engagement in Lessons and Assessing MOOC Participants Through Artificial Intelligence	p13
Y. FAKIR	Mining frequents itemset and association rules in diabetic dataset	p14
K. Gaanoun	Automatic text summarization for Moroccan Arabic dialect using an artificial intelligence approach	p14
A. Maarir	Automatic Change Detection based on the Independent Component Analysis and Fuzzy C-means Methods	p15
M. Lydiri	Sentiment analysis decision system for tracking climate change opinion in Twitter	p16
Y. FAKIR	Analysis of Decision Tree Algorithms for Diabetes Prediction	p17
M. BOUZHAR	How far can Deep Learning improve Arabic Part of Speech Tagging?	p17



### **SESSION 03: OPTIMIZATION AND DYNAMIC PROGRAMMING**

#### **Chair: A. MAHMOUDI/M. FAKIR**

H. Ougraz	Analysis of Several Algorithms for DOA Estimation in Two Different Communication Models by a Comparative Study	p18
M; Badiy	A Novel hybrid Approach for improving the accuracy of the Supervised Link Prediction based on Graph Structure Features in Social Networks	p19
O. Mansouri	Intelligent system based on GAN model for decision support in brain Tumor segmentation	p19
A. El bazzazi	Hospital room management for Covid-19 patients using Petri nets	p20
M. RIYAD	Dimensionality reduction of MI-EEG data via convolutional autoencoders with a low size dataset	p21
A. AZI	Car tracking technique for DLES Project	p21

### **SESSION 04: DECISION SUPPORT AND ARTIFICIAL INTELLIGENCE**

#### **Chair: M. BINIZ/D. AIT OMAR**

Y. Wadiai	Machine Learning Approach to Automate Decision Support on Information System Attacks	p9
B. El Akraoui	Deep Reinforcement Learning for Bitcoin Trading	p10
A. IBOURK	An exploration of student grade retention prediction using machine learning algorithms	p11
A. Grotta	DEEP LEARNING MODEL FOR EDUCATIONAL RECOMMENDER SYSTEMS	p12
L. EL Mouna	Comparative Study of Deep Learning Models for detection and classification of intracranial hemorrhage	p12