



People's Democratic Republic of Algeria
Minister of Higher Education and Scientific Research
University KASDI Merbah – Ouargla
Faculty of New Technologies of Information and
Communication



The 1 st National Conference on Artificial Intelligence and Digital Transition (CAIDT'2025)

April 29, 2025
Ouargla, Algeria

SPONSORED BY:



SARL Technologie Avancée
Université Kasdi Merbah Ouargla

CAIDT'2025

8:00AM - 8:30AM

REGISTRATION

8:30AM - 9:00AM

OPENING SESSION

9:00AM - 10:50AM

PLENARY SESSIONS

10:50AM - 12:00AM

COFFEE BREAK + POSTER SESSION

1:30PM - 17:35PM

ORAL + ONLINE SESSION

18:00PM - 18:30PM

CLOSING CERAMONY AND
CERTIFICATE AWARDING

PLENARY SESSIONS



AUDITORIUM HALL , UNIVERSITY RECTORATE

Plenary session 1	09.00–09.30	Title : National Strategy on Digital Transition M. Sofiane Bouzid , Representative of the High Commission for Digitalization
Plenary session 2	09.30–10.10	Title: Embedded AI for critical robotics: Origins and perspectives Pr. Riad Challali , Nanjing university of science and technology, China
Plenary Session 3	10.10–10.50	Title: Vers l'industrie 4.0 : de la recherche à la robotique industrielle appliquée Pr. Bazid Khelifa , Italian Institute of Technology, Italy

10:50 AM

COFFEE BREAK





IMPORTANT

FOR PARTICIPANTS IN THE CONFERENCE WHO ARE AFFILIATED WITH THE UNIVERSITY OF OUARGLA, THEIR PARTICIPATION MUST MANDATORILY BE IN PERSON. AS FOR PARTICIPANTS FROM OUTSIDE THE UNIVERSITY OF OUARGLA, THEY HAVE THE OPTION TO CHOOSE BETWEEN PARTICIPATING IN PERSON OR ONLINE.”

POSTER SESSION

TIME: 10:50 AM - 12:00 AM

SISSION CHAIRS : DR. BOUZIDI MANSOUR + DR. BENDAUD MOHEMDD LAMINE -
DR. TOUMI CHAHRAZED



AUDITORIUM HALL , UNIVERSITY RECTORATE

Pattern Recognition and Diagnosis of Open Circuit Faults with Inverter Reconfiguration in DTC- SVM of Induction Motor Drive Using Fuzzy Logic	Younes Tamissa ; Farid Kadri
Detection and Diagnosis of Open Circuit Faults in DTC-SVM Induction Motor Drives Using Neural Networks and Inverter Reconfiguration	Younes Tamissa ; Farid Kadri
LIMITATIONS AND CHALLENGES OF AI APPLICATIONS IN CIVIL ENGINEERING.	Zahira SADOON ; Riadh Bennai ; hassene ait atmane
Toward Algeria Digital Governance: The Role of Artificial Intelligence	OULD RABAH Mohamed Amine; Azzaoui Nadjet
LSTM-DRIVEN ANOMALY DETECTION FOR MITIGATING DROP ATTACKS IN UAV NETWORKS	NECIRI Said ; Noureddine CHAIB; Mohamed Ben Bezziane ; Abderrahmane Boussaid
REINFORCEMENT LEARNING FOR CAPACITATED VEHICLE ROUTING PROBLEM	Chaima Ayachi Amar; Oussama Aiadi ; Khaoula Drid ; Khadra Bouanane

<p>Un system intelligent pour la surveillance et contrôle d'un moteur à induction en utilisant l'IA</p>	<p>Amani Ababsa</p>
<p>Direct Power Control of Three-Level Grid-Connected Converters Using Fuzzy Logic Controller</p>	<p>abdelhak ouali; mohammed messaoud zioud; Azeddine Mehaouchi; Farid Kadri; mansour bouzidi</p>
<p>Enhancing Perception in Self-Driving Vehicles with An Efficient 2D YOLO-Based Object Detector</p>	<p>Chahira Kezzal ; Selsabil Benderradji ; Azeddine Benlamoudi ; Salah Eddine Bekhouche ; Abdelmalik Taleb-Ahmed</p>
<p>Accurate Classification of Wheat Leaf Diseases Using Deep Learning and Genetic-Algorithm Tuning</p>	<p>Abdelatif Hamdi</p>
<p>Artificial Intelligence and Advanced Control for Renewable Energy Systems</p>	<p>miloudi khaled ; Bouguettaya Tarek</p>

01

ORAL+ ONLINE SESSION 01:

ADVANCED MEDICAL IMAGE AND DIAGNOSTICS AI



GOOGLE MEET JOINING INFO VIDEO CALL LINK:
[HTTPS://MEET.GOOGLE.COM/UOZ-HYAF-TXY](https://meet.google.com/UOZ-HYAF-TXY)

SESSION CHAIRS : DR. BACHIR SAID - DR. CHERGUI ABDELHAKIM -
 DR. KHADIDJA AMEUR



AUDITORIUM HALL , UNIVERSITY RECTORATE

13.30-13.45	A New Take on Medical Segmentation: Lightweight UNet with Enhanced Loss	Mohamed Ben bezziane ; Anouar Khaldi ; Adel Zga ; Said Neciri ; Saida Baguigui ; Hamza beggui
13.50-14.05	Feature Optimization for Parkinson's Detection Using BGWO and Rime on VGG19-Extracted Representations	Benchabane Abderrazak ; Charif Fella
14.10-14.25	Feature Selection Using Slime Mould Algorithm on Vision Transformer Features for Parkinson's Disease Detection	Abderrazak Benchabane; Fella Charif ; Hedifa Dida ; Souad Ouled Salem ; MarouaMerizig
14.30-14.45	Block-Level Feature Extraction in EfficientNetv2b3 for Skin Cancer Detection Using Cloud-Supported Classification	Maroua Cheknane Sarrah Saida BOUDOUH Tahar BENDOUMA
14.50-15.05	Transforming Breast Cancer Diagnosis: Deep Learning-Based CAD Systems for Detection, Segmentation, and Classification	Hama Soltani ; KHAOULA DRID; Mohamed Yassine Haouam ; Issam Bendib; Mohamed Amroune

15.10-15.25	Five-Stage Alzheimer's Disease Classification Using DenseNet201 for Feature Fusion of T2-Weighted and PD-Weighted MRI Brain Images	zoulikha bebboukha
15.30-15.45	Skin Cancer Segmentation Using U-Net	MERIEM CHIBANI

02

ORAL+ ONLINE SESSION 02:**SECURITY, IOT, AND AUTONOMOUS SYSTEMS**

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**SISSION CHAIRS :DR. EUSHI SALAH - DR. MECHALIKH
CHAREDDINE - DR. NEDJLA BETTAYEB**



VIDEOCONFERENCE ROOM , UNIVERSITY RECTORATE

13.30-13.45	Optimization of Cluster Head Selection to Enhance the Efficiency of Wireless Sensor Networks	Abdessalam Messiaid; Souhila Kettouch; Benraghda Ahmed yasser; Berguia Sara
13.50-14.05	A Comparative Evaluation of DIO Replay Attack in RPL- Based IoT	Tahar Guerbouz ; Akram Zine Eddine Boukhamla
14.10-14.25	Attacks Against RPL Routing Protocol: A Novel Propagation-Based Classification Approach	Tahar Guerbouz ; Akram Zine Eddine Boukhamla
14.30-14.45	A Lightweight AI-Based Obstacle Avoidance System for Low-Cost UAVs	Mohamed El Amine Fekair Nadjet Azzaoui Messaoud Benguenane

14.50-15.05	Siamese Network-Assisted Standard Deviation Watermarking	Ferik Brahim; Laimeche Lakhdar ; Meraoumia Abdallah ; Laouid Abdelkader
15.10-15.25	A Novel Chaos-Based Encryption Scheme for Securing Medical Images	Hadjer Bourekouche Hassina Madjour Ouidade laouamen
15.30-15.45	Hybrid Computing Approaches for Efficient Data Management GPU-Accelerated Skyline Queries for Energy-Efficient Smart Home Device Selection	walid khames;
15.30-15.45	IOT-BASED WEB APPLICATION FOR MONITORING IRRIGATION	Hanane Ouarr

03

ORAL+ ONLINE SESSION 03:

AI FOR SUSTAINABLE INFRASTRUCTURE & PUBLIC SYSTEMS



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[HTTPS://MEET.GOOGLE.COM/YGR-ZQOD-CAV](https://meet.google.com/ygr-zqod-cav)



SISSION CHAIRS: DR.HOCINE MERABTI - PR. OUSSAMA AIADI
- DR. AICHA KORICHI



DEFENSE ROOM ,FSNV FACULTY

13.30-13.45	Lithology Classification in Subsurface Geology	Cherif Mesroua ; Ibrahim Lahouel ; Basma Hamrouni ; Khadra Bouanane ; Faiza Zidouni ; Wafa Kafi
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13.50–14.05	A Machine Learning Framework to Predict Dynamic Young's Modulus from Non-Conventional Reservoir (Rhourde Nouss field, Algeria)	Hanane Kermia; Ouafi Ameur-Zaimeche ; Mohamed Salah Belksier; Lamamra Sami ; Mohamed Amine Hacini ; Ayoub Boutaghane
14.10–14.25	Optimizing Dropout Prediction for Personalized Prevention in MOOCs: A Comparative Study of Feature Selection Techniques for Machine Learning Models	Houssam Eddine Aouarib ; Fatima Zohra Laallam; Salah Eddine Henouda; Mohamed Fouzi Djouhri
14.30–14.45	A Comparative Analysis of Fractional and Standard PINNs for SIR Modeling of COVID-19 in Algeria: Performance, Accuracy, and Implications	Islam Boubellouta ; Abdallah Bensayah
14.50–15.05	PyCaret Machine Learning For Predicting Water Potability	Nadia Hoggas ; Ouassila Hioual; Amel Hebboul
15.10–15.25	Artificial Intelligence Techniques in Civil Engineering	Zahira SADOON ; Riadh Bennai; hassene ait atmane

15.30–16.00	COFFEE BREAK
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04

ORAL+ ONLINE SESSION 04:

AI APPLICATIONS IN TEXT, SPEECH, AND DIGITAL
TRANSITION

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**SISSION CHAIRS : DR.FAROUQ ZITOUNI - PR. CHEBARA FOAD -
 DR. DAHRAOUI NADIA**



AUDITORIUM HALL , UNIVERSITY RECTORATE

16.00-16.15	A Hybrid Deep Learning Approach for Arabic Speech Emotion Recognition Using Acoustic and Spectrogram Features	Dalal Djeridi; Bachir Said ; Mourad Belhadj
16.20-16.35	Leveraging Multibranch Architectures for Multimodal Document Image Classification	Abdeldjalil Hammouya ; Taher Rezzag Bedida ; Mohamed Lamine Ben Habirech; Mohammed Abdelhadi Sellami ; Oussama seyf elislam Hamzi ; Abdeldjalil Tedjini
16.40-16.55	Harnessing Transformer Models for Clinical Text Classification in Radiation Oncology: BERT, DistilBERT, RoBERTa, XLNet, and ALBERT.	Ines Aouria ; Bilal Benarabi ; Houari Toubakh ; Messaoud Mezati; Noureddine Zerhouni
17.00-17.15	Mobile Platform For Purchasing Tickets "Setram Tickets Ouargla"	Nadjet Azzaoui ; Zakaria Bessedik ; Mohamed Lazhar Tohami ; Souhil Koudia ; Youcef Osmani ; Mohamed El Amine Fekair
17.20-17.35	Movie Recommendation through Synopsis Analysis: A Content-Based Approach	Nawal SAD HOUARI ; Maissa Khadidja MORALENT ; Haféda ALIOUA

17.40-17.55	Transforming Algerian Industry Through Intelligence: Academic Insights on AI and Digital Transition	BENALI Abdelkrim ; BENALI Somia
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05

ORAL+ ONLINE SESSION 05:

ADVANCED TECHNIQUES IN SENSING, CONTROL, AND SIGNAL PROCESSING



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VIDEOCONFERENCE ROOM , UNIVERSITY RECTORATE

**SISSION CHAIRS : PR. BELAL KHALDI - DR. MOHAMMED SAYAH MOAD -
DR. GAMOUH SAMIA**

16.00-16.15	LSTM-Based Estimation of Attitude Sensor RUL	Hicham Henna; Aissa Boutte ; Boubakeur Rouabah; Mohamed Redouane Kafi ; Narimene Mimoun
16.20-16.35	Enhancement of GPS signals acquisition in non- homogeneous environment using the OS-CFAR detector and FA optimization technique	OURFELLA Elbahdja
16.40-16.55	RFID Reader Antenna for UHF/SHF Applications	Amira Hamidi ; B. Mekimah ; A. Limam ; S. Bekkoucha ; A. Belhedri ; Mohammed Boulesbaa
17.00-17.15	Miniaturization of an RFID Tag Antenna for UHF Band Applications Use	Amira Hamidi ; B. Mekimah ; A. Limam ; S. Bekkoucha ; A. Belhedri ; Mohammed Boulesbaa

17.20-17.35	Direct Power Control of Two-Level Grid-Connected Converters Using Fuzzy Logic Controller	M. M Zioud ; A. Ouali ; A. Mehaouchi ; F. Kadri ; M. Bouzidi
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06

ORAL+ ONLINE SESSION 06:

BIOMETRICS AND AMBIGUOUS DATA ANALYSIS

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DEFENSE ROOM ,FSNV FACULTY

SISSION CHAIRS : DR. MOHAMMED KAMEL BENKADDOU- DR. YACINE KHALDI - DR. SABRA BENKRINAH

16.00-16.15	Prediction of Human Age and Gender from Facial Images Using Deep Learning Algorithms : Comparative Study	Marouane Dida
16.20-16.35	Revisiting Deep Clustering: The Role of Fuzziness vs. Soft Assignments in Representation Learning	Chaima Derouiche; Khadra Bouanane; Oussama Aiadi; Mohammed Lamine Kherfi
16.40-16.55	Facial expression recognition system using LTP and GLTP descriptors	Chebah Ouafa ; Chebah Anissa
17.00-17.15	Rice Panicle Detection in Drone Images Using Object Detection Technique for Precision Agriculture	Meroua Belmir; Wafa Difallah
17.20-17.35	Enhancing Workplace Safety Compliance Using YOLOv8: Real-Time Detection of Safety Gear and Equipment	Chergui Abdelhakim

CLOSING CERAMONY

AND CERTIFICATE AWARDING



TIME: 18:00 PM – 18:30 PM

