

ICAITC'2024

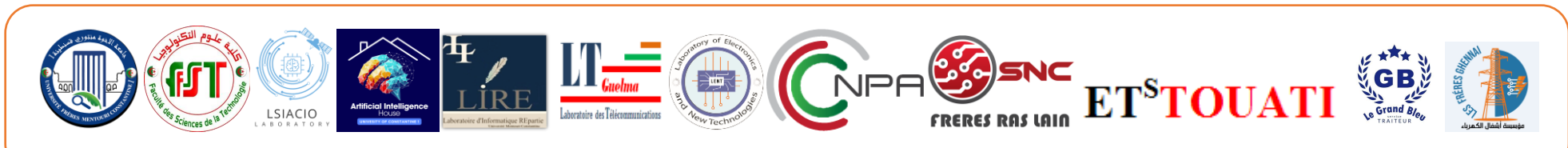
*THE INTERNATIONAL CONFERENCE ON
ARTIFICIAL INTELLIGENCE &
TELECOMMUNICATION*

October 28 and 29, 2024,
Constantine, Algeria
(Conferences center 500 places)

PROGRAM



Organised by
University of frères Mentouri - Constantine 1
Faculty of Science and technology
Laboratory LSIACIO



ICAITC'2024

THE INTERNATIONAL CONFERENCE ON ARTIFICIAL INTELLIGENCE & TELECOMMUNICATION

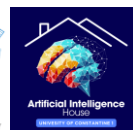


October 28 and 29, 2024, Constantine, Algeria

The International Conference on Artificial Intelligence & Telecommunication (ICAITC'2024) will be held on October 28 and 29, 2024. The conference is organized by the Faculty of Technology Sciences, Constantine 1 - Frères Mentouri University and the Satellites, Artificial Intelligence, Cryptography, Internet of Things Laboratory (LSIACIO). The main objectives of the conference are to bring together researchers, academics, and industry professionals working in the fields of artificial intelligence, wireless networks, satellite IoT and cryptography, to exchange ideas, discuss recent advances, and identify new research directions. The conference aims to provide a platform for participants to present their research findings, share their experiences and challenges, and network with other experts in the field.

The conference will cover a wide range of topics related to wireless networks and satellite IoT, including emerging technologies and protocols, security and privacy issues, and applications in various domains such as healthcare, transportation, and agriculture. The role of cryptography and artificial intelligence in securing and optimizing wireless networks and IoT systems will also be discussed. Authors are invited to contribute to the conference by submitting articles that showcase their research results, projects, and survey work. The topics of interest will be related to one or more of the conference tracks, but are not limited to:

- Track 1 : Artificial Intelligence**
- Track 2 : Telecommunications**
- Track 3 : Internet of Things**
- Track 4 : Cryptography**



Invited Keynote Speakers



Pr Saad Harous

Professor, College of Computing
and Informatics, University of
Sharjah



Pr Tayeb A. Denidni

Professor at INRS-EMT, University of
Quebec



Dr Moufida Maimour

Associate Professor at Lorraine
University in Nancy, France.



MONDAY, OCTOBER 28

REGISTRATION (08:00 – 09:00)

PLENARY SESSIONS

Opening CEROMONY

08:30

Welcoming speech of **Pr Ahmed Bouras** the honorary president of the conference
Welcoming speech of **Pr Abderraouf Messai** the president of the conference

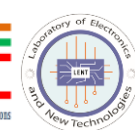
09:30

Invited keynote speaker
“Supporting the Selection of Digital Resources for Classroom-based Teaching Activities”
Pr Saad Harous

COFFEE BREAK (10 :00 – 10:30)

PAPER PRESENTATION (10 :30 – 13:00) (PARALLEL SESSIONS)

TIME	Room 1 (Telecom et Crypto) Moderators: Dr Denidni and Dr Fortaki	Room 2 (Artificial Intelligence - 1) Moderators: Dr Sadouni and Dr Chama
10:30	<i>Sybil Attack Management in Wireless Ad-hoc Networks: A PRISMA-driven Systematic Mapping Stud</i> Ahlem Nasri	<i>Artificial Intelligence in Algorithmic Trading: Evolution and Impact on Trading Strategies</i> Ouissal SADOUNI
11:00	<i>Broadband High-Gain SIW-Fed Cavity-Backed RDRA Antenna Surrounded by Split Ring Resonators for the 60 GHz Applications</i> BOUBAKER KERBOUB	<i>Deep Learning-Based Prediction of RNA Splicing Vari-ants Using a State-Space Model: Insights from Saturation Genome Editing and ClinVar Data</i> Fadia Boukhalfa
11:30	<i>Enhanced Performance Analysis of C-Shaped Microstrip Antennas using GRU Modeling: A Deep-Learning Approach</i> Sami BEDRA	<i>Creating a population census application in Algeria using artificial intelligence</i> Oumaima R Benhammou



12:00	<i>Circularly polarized RFID tag antenna based on FSS reflector for UHF band applications</i> Boualem Mekimah	<i>Exploring the Use of AI Applications in English Language Teaching: Perspectives from Teachers and Students</i> Maroua BENHAMLAOUI
12:30	<i>Selective encryption method for satellite image security</i> Amel BOULEMNADJEL	<i>Enhancing virtual object interaction with hand gesture recognition</i> Adhikari Durga Venkata Madhav
LUNCH BREAK (13 :00 – 14:00)		
PAPER PRESENTATION (14 :00 – 16:30) (PARALLEL SESSIONS)		
TIME	Room 1 (Internet of Things) Moderators: Pr Maimour and Pr Belhani	Room 2 (Artificial Intelligence - 2) Moderators: Pr Harous and Dr Zelti
14:00	<i>Enhancing the RPL Protocol for IoT Networks: A Solution for Improved Link Reliability and Energy Efficiency</i> Ammour Chaima	<i>Health monitoring of the fuel cell :A review of existing technologies based on the neural networks</i> Hichem Kahia
14:30	<i>Pioneering Approaches to Mitigating DoS Attacks in IoT Systems</i> Megouache Leila	<i>AI-based approach for minimizing energy consumption in CPS: A survey</i> Ramla BOUCHAMI
15:00	<i>UAVs Deployment in Internet of Flying Things Scenarios: A Systematic Review</i> sabrina zerrougui	<i>Optimizing Power Generation and Reducing CO2 Emissions with Machine Learning Models</i> Rania Farah
15:30	<i>Supervision and monitoring of the agricultural lands using AIoT</i> Nabila Aissani	<i>A Deep Learning Based Approach for Electrical Energy Consumption Forecasting</i> Zakaria LAKHDARA
16: 00	<i>Leveraging Internet of Medical Things (IoMT) For Real-Time Patient Monitoring In Emergency Ambulance Services: A Framework for Optimized Critical Care in Africa</i> David Dodo Ishaya	<i>Artificial Intelligence Models Dedicated to Earthquake Engineering: a Review</i> Freha MEZZOUDJ
CITY TOUR AND SOCIAL DINNER		



TUESDAY, OCTOBER 29

REGISTRATION (08:00 – 09:00)

PLENARY SESSIONS

08:30	<p>Invited keynote speaker</p> <p><i>“Smart Antennas with engineered electromagnetic materials for Wireless Communication Systems”</i></p> <p>Pr Tayeb A. Denidni</p>
08:45	<p>Invited keynote speaker</p> <p><i>“Digital Twins for Sustainable Development Building a Sustainable Future : Energy Sobriety & Biodiversity Protection”</i></p> <p>Dr Maimour Moufida</p>

POSTER SESSION
AND COFFEE BREAK (10:00 – 10:30)
PAPER PRESENTATION (10 :30 – 13:00)
(PARALLEL SESSIONS)

TIME	Room 1 (Internet of Things) Moderators: Pr Maimour and Pr Belhani	Room 2 (Artificial Intelligence - 2) Moderators: Pr Harous and Dr Zeltni
10:30	<p><i>Advancements in LoRa Technology: Applications, Challenges, and Proposed Architectures for Future Research</i></p> <p>TOUMI Soumya Soundous</p>	<p><i>Enhancing Business Process Efficiency with Artificial In-telligence: A Pathway to Operational Optimization</i></p> <p>Mohammed Nassim Lacheheub</p>
11:00	<p><i>An IoT-based Audible Guidance System for Safe Navigation of Visually Impaired Individuals in Urban Environments</i></p> <p>Kamal Hamaz</p>	<p><i>Toward Creating Adaptive and Personalized Business Processes with Artificial Intelligence</i></p> <p>Mohammed Nassim Lacheheub</p>
11:30	<p><i>Edge Computing-Based Reference Architecture for Transportation</i></p> <p>Zakaria Benzadri</p>	<p><i>Data Clustering Using Duck Swarm Algorithm</i></p> <p>Ibrahim Zebiri</p>



12:00	<i>Design and Development of an Intelligent Irrigation System Based on an Internet of Things Solution</i> Salheddine Sadouni	<i>Task scheduling in cloud computing “from traditional methods to advanced AI solutions” : A Survey</i> Billel BOUSBA
12:30	<i>Intelligent Electronic Monitoring System for Predictive Analysis and Anticipation of Climate Trends</i> Aya BOUCHAAR	<i>A modified machine learning algorithm coupled with a novel ant colony approach for DDoS attack detection in SDN</i> Hamza Belkhiri
LUNCH BREAK (13 :00 – 14:00)		
PAPER PRESENTATION (14 :00 – 16:30) (PARALLEL SESSIONS)		
TIME	Room 1 (Telecom et Crypto) Moderators: Pr Denidni and Dr Fortaki	Room 2 (Artificial Intelligence - 1) Moderators: Dr Sadouni and Dr Chama
14:00	<i>FSS reflector-based RFID reader antenna for UHF/SHF applications</i> Boualem Mekimah	<i>Kidney Disease Classification: The Role of Pre-trained Models and Transfer Learning</i> Benbakreti Samir
14:30	<i>Neurocomputational model of annular-ring microstrip antenna</i> Ahmed MAHAMDI	<i>Presentation Title: Digitalization of the Agricultural Sector in Monitoring Agricultural Crops in Algeria Using Artificial Intelligence and Geographic Information Systems Track 1: Artificial Intelligence.</i> Hadil mohamed zeroal
15:00	<i>Crypto-Compression of Grayscale Images with XOR and BTC*</i> Fatma F Hireche	<i>SPECKLE NOISE REDUCTION IN ULTRASOUND IMAGES USING AN ARTIFICIAL INTELLIGENCE BASED HYBRID APPROCH:ADAPTATIVE FOURIER FILTER,CNN, AND WAVELET INTEGRATION</i> Khaled Djama
15:30	<i>Language Identification from Speech Signal Using Databases in Different Languages: German, Persian and Algerian dialect</i> Horkous Houari	<i>Constrained loss function for Plant Disease Image Classification</i> Ahmed Roumane
16: 00	<i>Usage, advantages, and disadvantages of AI for Smart Cities and Urban Planning in developing countries</i> Raed Awashreh	<i>Machine Learning-Driven Approaches to Photonic Crystal Design and Optimization</i> Rayene Gourmat
CLOSING CEROMONY (16:30 – 17:00)		



List of posters

The Number of Satellite Repeaters required for Low Earth Orbit Constellation using Quantum Communications Proto-col

Zehani Asma

Elaboration of Software approach to Calculate the Error Rate of Quantum Optical Transmission Systems

Kaouther Boumalek

Photonic Crystals in IoT Medical Devices: Optimizing Health Monitoring Through Photonics

ABDEDAIM ALIMA

Applying a Deep Learning Approach for Detecting Buildings in High-Resolution Satellite Imagery

Ibtissem Messadi

Using Deep Learning for Algorithm Selection in Black Box optimization problem

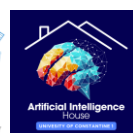
AFRI Faiza

A Microservices Platform for IoT-based System-of-Systems

Aymen Abdelmoumen

Artificial Intelligence in Text Summarization: Innovations in Neural Network Architectures

Zakaria Benzadri





ETS TOUATI

