University of Science and Technology Houari Boumediene
Faculty of Computer Science
Department of Artificial Intelligence and Data Science
Laboratory of Research in Artificial Intelligence

PROGRAM

QCAI'2026

6th International Conference on Quantum Computing and Artificial Intelligence

October 11-12, 2026
Auditorium, USTHB, Algiers, Algeria

Our sponsors:

QCAI'2026

Day 1: October 11, 2026

08:30 - 09:15 **Registration**
09:15 - 09:45 **Opening session**
09:45 - 10:00 **Welcome Speech**

Coffee Break

Keynote speaker: *Prof.* Faicel HNAIEN

Session Chair: *Prof. Emerit.* Habiba DRIAS

10:30 - 11:30 **Quantum Meets Classical: A Hybrid Genetic Algorithm for Flowshop Scheduling**
Prof. Faicel HNAIEN, University of Technology of Troyes, Troyes, France.

Session 1: Quantum Optimization

Session Chairs: *Prof.* Faicel HNAIEN and *Prof. Emerit.* Habiba DRIAS

11:30 - 11:45 **A Hybrid Quantum–Classical State-Space Framework for Cyber-Defense Optimization: LQR-to-QUBO Formulation and IBM Quantum Validation**
Ibrahim Hadji, Elhoussine Souala, Mohamed Guerroumi, and Abdelouahid Derhab.

11:45 - 12:00 **AI-Driven and Adaptive Post-Quantum Cryptography in Networked Environments: A Survey**
Youcef Merzoug, Somia Sahraoui, and Ilyes Naidji.

12:00 - 12:15 **Q-DBPM: Quantum-Inspired Search for Domain-Based Policy Mining**
Islem Guesbaya, Salmi Cheikh, and Hamadouche Samiya.

12:15 - 12:30 **Towards a NISQ-Compatible Quantum k-Medoids Algorithm**
Yassine Drias, Habiba Drias, and Tuna Çakar

Lunch Break

Keynote speaker: *Prof.* Houari SAHRAOUI

Session Chair: *Prof.* Hamid AZZOUNE

14:00 - 15:00 **It Passes the Tests. But Is It Good? Rethinking Generative AI in Software Engineering**
Prof. Houari SAHRAOUI, University of Montréal, Montréal, Canada.

Session 2: Generative AI

Session Chairs: *Prof.* Houari SAHRAOUI and *Prof.* Hamid AZZOUNE

15:00 - 15:15 **Scale Beats Refinement: A Verifiable Benchmark for Model Scale versus Multi-Agent Self-Correction in Network Configuration**
Imane Ameur, Habiba Drias, Nasreddine Lagraa, Mohamed El Amine Ameur, and Mazene Ameur.

15:15 - 15:30 **Plag-Detect: A Multilingual Plagiarism Detection Framework Combining Semantic Analysis, Structural Fusion, and Explainable Decision Making**
Fouzia Bouraï, Hassina Aliane, and Hamid Azzoune

15:30 - 15:45 **Small Language Models for Green Network Management: A Chunk-Infer-Merge Pipeline for Energy-Accountable Network Intent Translation**
Rachid Abdelghafour Kalache, Imane Ameur, and Habiba Drias

Coffee Break

Session 3: Computer Vision

Session Chairs: *Prof.* Slimane LARABI and *Dr.* Djamila DAHMANI

16:30 - 16:45 **Hybrid CNN–Transformer Architecture with Semi-Supervised Cross-Teaching for Wildfire Segmentation from UAV Imagery**
Abderrahmane Hani Bedj Bedj and Adel Kermi

16:45 - 17:00 **3D Reconstruction using Azimuth Maps and a Parametric BRDF Model**
Aimen Said Mezabiat, Lyes Abada, Tarek Gacem, and Saad Allah Bourzam

17:00 - 17:15 **An Explainable Multimodal Framework for Alzheimer's Disease Diagnosis Using MRI and Structured Clinical Data**
Anfal Bellal and Ayoub Laouarem

17:15 - 17:30 **HybridCropNet: Integrating Multi-Source Satellite Imagery and Environmental Covariates for Enhanced Pixel-Based Crop Mapping**
El Hadi Rabah Seghir, Mohamed Samy Mahi, and Naila Aziza Houacine

Day 2: October 12, 2026

08:30 - 09:30 **Late Registration & Welcome Speech**

Keynote speaker: *Prof.* Sadok BEN YAHIA

Session Chair: *Prof.* Dalila BOUGHACI and *Dr.* Naila Aziza HOUACINE

09:30 - 10:30 **Quantum-Enhanced AI Without the Hype: Hybrid Learning for Calibration, Uncertainty and Trust**
Prof. Sadok BEN YAHIA, University of Southern Denmark, Denmark.

Coffee Break

Session 4: Machine & Deep Learning

Session Chairs: *Prof.* Sadok BEN YAHIA and *Dr.* Nacéra LAICHE

11:00 - 11:15 **When Should I Trust You? An XAI Framework for Prescriptive Decision Support in Rare Event Classification**
Abdelhamid Iskender Yahiaoui

11:15 - 11:30 **Energy-Aware Perching and Relay Placement in UAV Networks Using Q-Learning-Guided Swarm Optimization**
Mohamed el Amine Ameur, Bouziane Brik, Mazene Ameur, Imane Ameur, and Habiba Drias

11:30 - 11:45 **HIER-GNN: A Hierarchical Graph Neural Network for Personalized Educational Activity Recommendation**
Asma Sraouia, Lamia Berkani, and Maria Bouguerra

11:45 - 12:00 **Early HPC I/O Behavior Prediction: A Comparative Study of ML and Deep Learning**
Lynda Hammache, Mohamed Aymen Lardjane, Fatma Zohra Mekahlia, and Nesrine Benadjal

Lunch Break

Session 5: Quantum Machine & Deep Learning

Session Chairs: *Prof.* Samir KECHID and *Dr.* Lamia BERKANI

13:30 - 13:45 **Transpilation-Free Quantum Task Placement**
Anissa Imen Amrous, Imene El-Taani, Doua Boutehra, and Imane Rahim.

13:45 - 14:00 **Classical, Hybrid, and Fully Quantum CNNs: A Review and Benchmarking Study for Fire Detection**
Mohamed Anes Mihoubi, Abderahmane Aitidir, Naila Aziza Houacine, and Widad Hassina Belkadi

14:00 - 14:15 **HQNN5: Hybrid Quantum Neural Network for Forest Fire Classification**
Naoual El Djouher Mebtouche, Younes Dehloum, and Maya Gribi

14:15 - 14:30 **Hybrid Classical-Quantum Machine Learning Based Image Classification Using Autoencoders And QCNNS**
Iheb Bounab, Abd El Hakim Guessas, and Hacene Belhadef

Coffee Break & Poster Session

Empirical Benchmarking of Quantum Data Encodings: Boundary Geometry as Primary Driver of Kernel Selection
Abdelhamid Iskender Yahiaoui

Transforming Crop Analysis with Generative AI: A Review and Comparative Study
Maya Houacine, Habiba Drias, and Nadjet Kamel

Deep Learning–Based Sequential Recommendation for IoT Services: A Comparative Experimental Study
Rachid Boudour, Youcef Aklouf, and Elhadj Benkhelifa

Wind-Adaptive Generative Waypoint Optimization for UAV Wildfire Surveillance
Mohammed Lamine Mira, Ilyes Khennak, and Maria Djadi

Edge-Aware Hybrid Loss Optimization for Precise Volumetric Radiotherapy Dose Prediction
Guermache Amira, Kidar Halima Saadia, and Azizi Hacene

Compression-Aware Quantum Kernel SVM for TREC-6 Question Classification: A Matched Study on Low-Dimensional Sentence Embeddings
Hadjer Belhenniche, Fatima Kabli, and Amal Boumedjout

Deepfake Video Detection Using ResNet-LSTM Enhanced with Facial Landmarks
Nihad Djenane and Djamila Dahmani

A Hybrid Machine Learning Framework for Enhancing Snort-Based Intrusion Prevention Systems in Banking Environments
Islem Teboub and Youcef Khennine

A Multilingual Agentic RAG Framework with Faithfulness Verification for Legal Advisory
Yanes Dahmane, Mohamed Aimen Bettayeb, and Lamia Berkani

The Deep Learning Paradigm Shift in Link Prediction: A Taxonomy
Chaima Lakehal , Kada Baghdad Bey, and Imad Eddine Hosni Adil

Connect to the Industry

Session Chair: *TBA*

15:30 - 17:00
Tassili Travail Aérien - TTA: Mr. KHENNICHE
CaptureDoc: Mrs. KADDOUR
National People's Assembly - APN: Mr. AMALOU, Mr. MOUMEN & Mrs. NOUR
DigiRoots XR: Mr. NOURREDDINE & Mr. CHELBI

17:00 - 17:30 **Closing Ceremony**