



IEEE AMCAI 2023

1st IEEE Afro-Mediterranean Conference on
Artificial Intelligence

December 13-15, 2023
Hammamet, Tunisia



AI Cloud Computing 2023

Special Session on Artificial Intelligence in Cloud Computing applications.

at the 1st IEEE Afro-Mediterranean Conference on Artificial Intelligence (2023 IEEE AMCAI)

Hammamet, Tunisia, December 13-15, 2023

Conference website: <http://amcai.atia.org.tn/>

Special Session Organizers

Prof. Ahmed Hadj Kacem

ReDCAD

University of Sfax, Tunisia

E-mail: ahmed.hadjkacem@fsegs.usf.tn

Dr. Hamdi Kchaou

REGIM-Lab, ENIS

University of Sfax, Tunisia

E-mail: hamdi.kchaou@enis.usf.tn

Dr. Wissem Abbes

REGIM-Lab, ENIS

University of Sfax, Tunisia

E-mail: wissem.abbes@enis.usf.tn

Objectives and topics

With the development of Artificial Intelligence (AI), Cloud Computing has grown in popularity. By integrating these two technologies, businesses can enhance their digital transformation and boost the performance and efficacy of the cloud.

AI capabilities are essential in cloud computing for making business operations more efficient, strategic, and insight-driven. In addition, these capabilities provide increased flexibility, agility, and cost savings.

Thus, AI techniques can be implemented on existing cloud computing platforms.

Today's businesses generate and accumulate enormous amounts of data, making AI tools indispensable to the data processing cycle. By recognizing, ingesting,

categorizing, and managing data over time, cloud AI tools also enhance data management.

AI and cloud computing are altering the business landscape by allowing businesses to make sense of vast quantities of data, accelerate complex processes, and enhance product and service delivery.

The scope of the AI Cloud Computing 2023 includes, but is not limited to the following topics:

CLOUD SERVICES AND APPLICATIONS

- Cloud services models and frameworks
- Service deployment and orchestration in the Cloud
- Cloud service and workflow management
- Systems interactions and machine learning
- Data management applications & services
- Services for compute-intensive applications
- Services for emerging technologies
- Data-provisioning services
- XaaS
- Traffic prediction models and auto-scaling for Cloud services
- Business models and economics of Cloud services
- Scalability, performance, and Cloud elasticity
- Resource provisioning, monitoring, management & maintenance
- Cloud capacity planning
- Operational, economic and business models
- Energy efficiency
- Green data centers
- Computational resources, storage & network virtualization
- Blockchain Cloud services
- Identity management and security as a service

EDGE COMPUTING, IOT, AND DISTRIBUTED CLOUD FOR AI

- Cloudlet-enabled applications
- Software infrastructure for cloudlets
- Distributed Cloud infrastructure
- Foundations and principles of distributed Cloud computing
- Architectural models, prototype implementations and applications
- Inter-cloud architecture models
- Cloud brokers and coordination across multiple resource managers
- Dynamic resource, service, and context management in edge computing
- Fog computing
- IoT cloud architectures and models
- Cloud-based context-aware IoT
- Economics and pricing
- Existing deployments and measurements of public, private, hybrid, and federated environments

Important dates

Paper Submission deadline: September 03, 2023
Authors Notification: September 15, 2023
Camera Ready and Registration: September 15, 2023
Conference date: December 13-15, 2023

Program Committee (to be invited)

Achraf Mtibaa, University of Sfax, Tunisia
Ahmed Hadj Kacem, University of Sfax, Tunisia
Ali Wali, University of Sfax, Tunisia
Boudour Ammar, University of Sfax, Tunisia
Emna Ben Abdallah, University of Sfax, Tunisia
Khouloud Boukadi, University of Sfax, Tunisia
Fairouz Fakhfakh, University of Kairouan, Tunisia
Farah Barika Ktata, ISSATS-University of Sousse, Tunisia
Fateh Seghir, Sétif 1 University, Algeria
Fatma Siala Kallel, ISAMM, LARIA-ENSI, University of Manouba, Tunisia
Hamdi Kchaou, University of Sfax, Tunisia
Maha Charfeddine, University of Sfax, Tunisia
Mahdi Khemakhem, Prince Sattam bin Abdulaziz University, Saudi Arabia
Mohamedade Farouk NANNE, University of Nouakchott, Mauritania
Mohamed Sellami, Telecom SudParis, France
Slim Kallel, University of Sfax, Tunisia
Olfa Bouchaala, University of Sfax, Tunisia
Rachid Boudour, Badji Mokhtar-Annaba University, Algeria
Riadh BEN HALIMA, University of Sfax, Tunisia
Ridha Ejbali, University of Gabes, Tunisia
Ruhi Sarikaya, Amazon Alexa, USA
Taher LABIDI, Prince Sattam bin Abdulaziz University, Saudi Arabia
Walid Gaaloul, Telecom SudParis, France
Wisseem Abbes, University of Sfax, Tunisia
Zied Kechaou, University of Sfax, Tunisia

Submission

All contributions should be original and not published elsewhere or intended to be published during the review period. The contributions should address research questions that relate to one of the topics listed above.

Authors are invited to submit their papers electronically in pdf format, through EasyChair at <https://easychair.org/conferences/?conf=amcai2023>. All the special sessions are centralized as tracks in the same conference management system as the regular papers. Therefore, to submit a paper please activate the following link and select the track: **AI Cloud Computing 2023: Special Session on Artificial Intelligence in Cloud Computing applications.**

Manuscripts should be prepared in 10-point font using the IEEE 8.5" x 11" two-column conference format
<https://www.ieee.org/conferences/publishing/templates.html>

Submitted papers are written in English, between 6 to 8 pages (including all figures, tables, and references).

Submissions not following these guidelines may be rejected without review. Also, submissions received after the due date, exceeding the length limit, or not appropriately structured may also not be considered.

To ensure high quality, all submissions are blind peer-reviewed by at least three reviewers from the ***AI Cloud Computing 2023 Program Committee***.

All accepted papers must be presented by one of the authors who must register for the conference and pay the fee.

All accepted and presented papers will be submitted to IEEE Xplore for inclusion.