



# 8<sup>TH</sup> International Conference on Control, Automation, and Diagnosis



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May 15-17, 2024  
Paris, France

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## CALL FOR PAPERS SPECIAL SESSION ON

**Application of New Technologies, IoT and Artificial Intelligence for Smart and Sustainable  
Agriculture**

**for ICCAD'24**

**May 15-17, 2024, Paris-France**

### Session Co-Chairs:

- Pr Imen Harbaoui, University of Carthage, National Institute of Applied Sciences and Technology, imen.harbaoui@insat.ucar.tn
- Pr Naceur M'Hamdi, University of Carthage, National Institute of Agronomy of Tunisia, naceur.mhamdi@inat.ucar.tn
- Pr Vimal Shanmuganathan, Department of Artificial Intelligence and Data Science, Ramco Institute of Technology Road, Rajapalayam, Tamil Nadu, India, vimal@ritrjpm.ac.in

### Session description:

In recent years, the development of Internet connectivity and the introduction of mobile telephony have progressed rapidly, giving rise to more innovations. Therefore, the agricultural sector must exploit this opportunity and enter this dynamic of transformation where the democratization of connected objects (IoT) can ensure that the agricultural sector contributes to sustainable development.

The challenges are numerous: climate change and its impact on the environment affecting agricultural production, increased demand for quality food products, and the preservation of local genetic resources.

Effective disease detection means that early and appropriate treatment protocols can be implemented, avoiding excessive use of antibiotics and improving the economic benefits for farmers.

Consequently, farmers need to adopt effective technical methods for monitoring agricultural production in order to increase productivity. The latest information technologies, combined with precision agronomic approaches, are being used to track, monitor and make decisions about agricultural production.

The aim of this session is to present the application of new technologies, IoT and AI to optimize agricultural processes, analyse data, monitor crops, detect disease, predict yields, automate machinery, etc. This aims to improve the sustainability, resilience and efficiency of agricultural systems.

The topics of interest include, but are not limited to:

- Smart farming
- Innovation for agriculture
- Automated agricultural production monitoring system

- Precision breeding
- Modelling and optimisation of agricultural systems
- Artificial intelligence for the agricultural sector
- IoT animal health monitoring system
- Disease prediction in dairy cows
- Optimisation of inputs and sustainable development
- Plant growth monitoring and control
- Smart greenhouse

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## **SUBMISSION**

Papers must be submitted electronically for peer review by: **December 15, 2023**

<https://www.iccad-conf.com/submission/>

All papers must be written in English and should describe original work. The length of the paper is limited to a maximum of 6 pages (in the standard IEEE conference double column format).