

July 01- 04, 2024

Valletta, Malta

CALL FOR PAPERS - SPECIAL SESSION "IoT and AI for Smart Agriculture and Smart Farming" For CODIT 2024

July01-04, 2024 • Valletta, Malta

Session Co-Chairs:

- Dr. Mansoor A. Al Ghamdi, University of Tabuk, Saudi Arabia, malghamdi@ut.edu.sa
- Dr. Malek Alrashidi, University of Tabuk, Saudi Arabia, mgalrashidi@ut.edu.sa
- Pr. Salim Chikh, University of Costantine 2, Algeria, salim.chikhi@univ-constantine2.dz
- Pr. Nejah Nasri, University of Gafsa, Tunisia, <u>nejah.nasri@isecs.rnu.tn</u>
- Pr. Nawres Khalifa, University of Tunis El Manar, Tunisia, <u>nawres.khlifa@istmt.utm.tn</u>

Session description:

It is estimated that the global population will reach more than 10 billion by 2050. This presents a real challenge on the agricultural sector and places pressure to increase crop production, maximize yields and enhance productivity. So, this sector cannot rely only on traditional technologies to provide for the increasing world population.

New potential approaches have emerged and they are then adopted to create innovative practices in agriculture and framing: Internet of Thing (IoT) and Artificial Intelligence (AI)

These tools are now considered as promising solutions for the agriculture industry to meet the food challenges in coming years.

Generally, various sensors and cameras (IoT devices) are used to collect multiple information and data on agricultural practices (soil conditions, weather patterns, fertilizers, irrigation, crop health, ect.). Next, AI tools try to understand theses information and then provide appropriate decisions by deeply analyzing the data.

These data-driven decisions can enhance productivity and optimize agricultural practices.

The purpose of this Special Section is to bring together researchers working on all the topics involved in smart agriculture, discuss the available techniques and look for practical solutions that can meet the challenges posed by the world's growing population.

This session include but is not limited to the following topics:

- crop selection,
- crop yield prediction,
- soil monitoring,
- crop diseases detection,

- plant nutrient analysis,
- water management,
- computer vision in agriculture,
- autonomous agricultural robots.
- nutrient deficiencies prediction,

SUBMISSION

Papers must be submitted electronically for peer review through PaperCept by March 04, 2024: <u>http://controls.papercept.net/conferences/scripts/start.pl</u>.InPaperCept, click on the CoDIT2024 link "Submit a Contribution to CoDIT 2024" and follow the steps.

IMPORTANT: 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). **DEADLINES**

Marsh 03, 2024: deadline for paper submission April 14, 2024: notification of acceptance/reject May10, 2024: deadline for final paper and registration