

\*\*\* FUZZ-IEEE 2023 SPECIAL SESSION ON ASC-PA - CALL FOR CONTRIBUTIONS \*\*\*

Dear colleagues,

we are pleased to invite you to submit a paper for presentation in the special session on the "Application of soft Computing-based systems on Precision Agriculture (ASC-PA)" that will be part of the 32<sup>nd</sup> IEEE International Conference on Fuzzy Systems (FUZZ-IEEE 2023, Songdo, Incheon, 13-17 August 2023).

CONFERENCE INFORMATION:

Core Ranking: B ( <http://portal.core.edu.au/conf-ranks/649/> )

Indexing: IEEE, DBLP, SCOPUS...

H-Index: 61

SJR 2021: 0.35

Homepage : <https://ieeexplore.ieee.org/xpl/conhome/1000302/all-proceedings>

AIMS AND SCOPE:

The all set of management strategies currently known as precision agriculture (PA) come from gathering temporal, spatial and individual data and combining it with other information to support management decisions according to estimated variability for improved resource use efficiency, productivity, quality, profitability, and sustainability of agricultural production. A key role in the development of such methodologies is played by optimization techniques and algorithms. This special issue focuses on contributions dealing with several topics related to the use of soft-computing techniques for the PA-data analysis and acquisition by means of both proximity and remote sensors.

TOPICS OF INTERESTS:

The methods and tools applied in Precision Agriculture include, but are not limited to, the following:

- Genetic algorithms,
- Fuzzy Logic
- Neural Networks
- Ant colony optimization,
- Artificial bee colony algorithm,
- Particle swarm optimization,
- Differential evolution,
- Memetic algorithms,
- Hybridization of evolutionary and/or swarm optimization techniques,
- Hybridization with exact and/or heuristic methods.

The potential applications include, but are not limited to, the following:

- Computer Vision applied to Precision Agriculture,
- Crop/Yiel Prediction using Machine Learning Techniques,
- Leaf/Plant disease detection and classification,
- Sampling techniques and methods,
- Nutrient and crop protection chemicals recommendation and crop quality,
- Geomatics techniques for multi-sensor-data integration,
- Positioning and navigation tools for the control of farm operations,
- Computational techniques,
- Positioning systems and control systems,
- Adoption and economics of precision agriculture management and environmental coverage including sediments, leaching, runoff and drainage related to within-field spatial variability.

SUBMISSION PROCESS & INFORMATION:

FUZZ-IEEE 2023 Website: <https://fuzz-ieee.org/>

Author instructions: <https://fuzz-ieee.org/author-instructions>

Paper Submission Deadline: February, 15, 2023

Notification of Acceptance: April, 15, 2023

SPECIAL SESSION WEBSITE:

<https://sites.google.com/enicar.ucar.tn/fuzz-ieee2023asc-pa>

Please feel free to forward this announcement to any colleagues who may be interested in this special session.

We are looking forward to your contributions and welcome questions and comments.

The organizing committee:

Haythem GHAZOUANI, Ecole Nationale d'Ingénieurs de Carthage, Université de Carthage, Tunisia  
Gwanggil JEON, College of Information and Technology, Incheon National University, Korea  
Walid BARHOUMI, Ecole Nationale d'Ingénieurs de Carthage, Université de Carthage, Tunisia  
Ezzeddine ZAGROUBA, Institut Supérieur d'Informatique, Université de Tunis El Manar, Tunisia