expat'23 Special Session

'Smart Farming (*SF'23*)'

Agriculture has been evolving in a remarkable way since the agricultural revolution around 10,000 years ago, being increasingly technological together with the presence of great impact intelligent methodologies with applications in different areas such as the prediction of diseases and pests, the forecast of the best phase for harvesting or forecasting its volume.

However, agricultural technology is under immense challenges due to diseases and pests spread by globalization and aggravated by climate change. Portugal is one of the European countries that has been experiencing the impact of climate change, namely the increase in temperature, which increases the arrival and installation of new pests. Integrated protection is an area where the application of technologically advanced solutions is of evident interest.

This Special Session seeks to bring together a set of papers regarding how machine learning applied to smart farming can contribute to problem solving. Researchers can find in this Special Session a venue for presenting both theoretical and practical approaches allowing the presentation and discussion of innovative solutions by addressing open challenges in the above-mentioned fields.

Topics of Interest:

- Artificial intelligence for smart farming
- IoT for smart farming
- Robotics and autonomous systems for smart farming
- Blockchain for smart farming
- Edge computing for smart farming
- Plant Disease Recognition and Prediction in Smart Agriculture
- Plant health monitoring and control of weeds in digital twin
- Architecture, protocols, and frameworks of IoT in Smart Agriculture
- New optimization methods for AI Algorithms in Smart Agriculture
- Agricultural Digitalization, Digital Twins of Smart Agriculture
- Big Data Technology in Smart Agriculture
- Security and privacy in Smart Agriculture
- Smart farming applications
- Combining robot vision for Smart Agriculture application
- Image processing, communications, and signal processing for Smart Agriculture
- Citizen science in Smart Farming

Chairs of the Program Committee of (SS SF'23):

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Important dates:

Submission Deadline	February 27, 2023
Notification of Acceptance	March 27, 2023
Camera-Ready Due	April 28, 2023
Early Author Registration	April 28, 2023
Conference Dates	June 05-07, 2023
Technical Activities	June 08, 2023

Language, Review Process, and Publications (following the main Conference)

English is the official language of the Conference.

The articles and extended abstracts (demos) will be under a double-blind peer review process.

Submission Articles (full papers with 4-6 pages) and extended abstracts (demos with 2 pages) submitted to expat'23 (according to IEEE Template) will follow the EasyChair platform.

Accepted and presented papers and demos will be published in electronic format and will be submitted for acceptance into the IEEE Xplore® paper database.

The conference will promote the organization of special issues in internationally indexed journals (e.g., Information, https://www.mdpi.com/journal/information) for extended versions of selected papers, with APC discount for publication in Open Access format.