

https://events.isae-supaero.fr/e/ICCAS

# The International Conference on Cognitive Aircraft Systems ICCAS 2024 - May 16-17, 2024, ISAE-SUPAERO, Toulouse, France

## Call for contributions and participation

Following the great success of ICCAS 2022, we are pleased to organize the ICCAS 2024 conference. The aim is to promote the dissemination and exchange of scientific information on the next generation of civil and military aircraft. It provides an excellent forum for combining academic research and industrial works to examine how we can develop intelligent aircraft systems owning more freedom of choice, sensitivity to the context, learning capabilities, and able to interact naturally with the crew or the operators while saving their mental and physical resources. Recent trends in this field address several major aspects such as the online monitoring of the flight performances based on behavioral, physiological, and neurological measurements, the design of more ecological human-machine interfaces providing intuitive information about the flight or mission status to support decision process, and architecture rules that guarantee a high level of operation safety. The conference addresses a wide spectrum of theoretical and practical topics related to neuroergonomics and human factors, or artificial intelligence. It is mainly focused on aeronautics but contributions from a wide range of domains such as automotive, robots, drones, or artificial agents are welcome.

Authors are invited to submit an abstract up to 300 words using the <u>Word</u> or <u>Latex</u> conference template. Abstracts will be reviewed by the program committee and may be accepted for an oral or a poster presentation.

If the abstract is accepted, participants may optionally submit a full paper (8 pages references included), also using the conference template. Full paper will be also reviewed by the program committee.

Online abstracts compilation will be published as open access. Submission guidelines and information are available at <a href="https://events.isae-supaero.fr/event/32/page/145-contributions">https://events.isae-supaero.fr/event/32/page/145-contributions</a>

Abstract submission is optional: academic, industrial, and student participants can attend the conference with a simple registration.

## Topics of interest include, but are not limited to:

## Neuroergonomics and human factors

- o Eye tracking, EEG, fNIRS, other measurement methods
- Brain computer interfaces
- o Mental workload, acute stress, emotion, fatigue
- Simulation, virtual reality
- o Training, safety analysis, accident analysis

## • Artificial intelligence

- o Transparent AI, natural human-machine interaction
- o Cooperative techniques, mixed-initiative interaction/planning
- o Automation, Human Al teaming

#### Human-Machine Interaction

- o Multimodal interaction, Innovative warning systems
- o Ecological interface design, augmented reality
- o Intelligent assistants, virtual assistants
- Sensors and adaptive systems

#### Autonomous vehicles and Automation

- Single pilot operations, Extended Minimum Crew Operations
- o Remote control of automated vehicles, Unmanned vehicles
- Man-machine cooperative techniques
- Ethical aspects

## Important dates

•	February 16, 2024	Abstracts due
•	March 15, 2024	Notification of abstract review results
•	April 19, 2024	Optional full paper due
•	May 10 2024	Notification of optional full paper review results
•	May 12, 2024	Registration deadline (for presenters & attendees)
•	May 16-17, 2024	ICCAS 2024 conference

#### Conference location

The conference will be held at ISAE-SUPAERO, 10 Avenue Edouard Belin, 31055 Toulouse, France



#### Conference fees

Regular fees 120 Euros

Partners fees
110 Euros (see website for partners)

• Student fees 50 Euros

## The Conference registration fee includes:

Participation in all oral sessions

- Entrance to the exhibition/poster session area
- Access and publication of conference paper proceedings
- Refreshment breaks
- Two tickets for the midday meals
- One ticket for the reception dinner held at Hôtel Dieu-Saint Jacques by the river



## Scientific Program Chair

- Mickaël Causse
- Caroline Chanel

## Keynote speakers

- Fabien Lotte, Research director (INRIA)
- Randy Mumaw, Researcher (NASA)

#### Scientific Committee

- Bruno Berberian, ONERA, France
- Bertille Somon, ONERA, France
- Rachid Alami, LAAS-CNRS, France
- Frédéric Dehais, ISAE-SUPAERO, France
- Nicolas Drougard, ISAE-SUPAERO, France
- Jean-Paul Imbert, ENAC, France,
- Vincent Thomas, Université de Lorraine, France
- Raphaëlle Roy, ISAE-SUPAERO, France
- Jérémie Garcia, ENAC, France
- Cyril Camachon, CREA, France
- Christophe Lounis, ISAE-SUPAERO, France
- Quentin Ventrepotte, CREA, France
- Adam Henrique M. Pinto, ISAE-SUPAERO, France
- Jonathan Deniel, ISAE-SUPAERO, France
- Vsevolod Peysakhovich, ISAE-SUPAERO, France
- Sébastien Scannella, ISAE-SUPAERO, France
- Thibault Gateau, ISAE-SUPAERO, France
- Wen-Chen Li, Cranfield University, United Kindgdom
- André Tricot, Université Paul Valéry, France

- Randall Mumaw, NASA, United States of America
- · Gianluca Borghini, Sapienza University of Rome, Italia
- Anke Brock, ENAC, France
- Aurélie Clodic, LAAS-CNRS, France
- Don Harris, Coventry University, United Kingdom
- Frédéric Vanderhaegen, Université Polyhtenique Hauts-de-France, France
- Gilles Coppin, IMT Atlantique / Lab-STICC, France
- Franck Mars, LS2N, France
- Benoît Leblanc, ENSC Bordeaux INP, Laboratoire IMS, France
- Jean Jane Kiam, Universität der Bundeswehr München, Germany
- Simon Schwerd, Universität des Bundeswehr München, Germany
- Ludovic Fabre, CREA, France
- Olivier Bartheye, CREA, France
- Andreas Haslbeck, Yanfeng, Germany

## Organizing committee

- Corinne Chabanne, ISAE-SUPAERO, France
- Jonathan Deniel, ISAE-SUPAERO, Fance
- Adam Henrique M. Pinto, ISAE-SUPAERO, France
- Christophe Lounis, ISAE-SUPAERO, France
- Bruno Patin, Dassault Aviation, France
- Aurore Moskwa, ISAE-SUPAERO, France
- Agnès Trincal, Fondation ISAE-SUPAERO, France
- Gilles Tuduri, Dassault Aviation, France

#### **Partners**





Contact: iccas.conf@isae.fr