



<https://events.isae-superaero.fr/e/ICCAS-2020>

The first International Conference on Cognitive Aircraft Systems ICCAS 2020 - March 18-19, 2020, ISAE-SUPAERO, Toulouse, France

Call for abstracts and participation

The ICCAS 2020 conference aims 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 aeronautical systems owning more freedom of choice, sensitivity to the context, learning capabilities, and able to interact naturally with the crew while saving its 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 man-machine interfaces providing intuitive information about the flight to support decision process, and architecture rules that guarantee a high level of flight safety. The conference addresses a wide spectrum of theoretical and practical topics related to neuroergonomics and human factors, artificial intelligence or systems engineering. It is mainly focused on aeronautics but contributions from a wide range of domains such as automotive, robots, drones, or artificial agents are welcome.

Abstract submission is optional: academic, industrial, and students participants can attend the conference even without presentation or poster.

Topics of interest include, but are not limited to:

- **Neuroergonomics and human factors**
 - Eye tracking, EEG, fNIRS, other measurement methods
 - Brain computer interfaces
 - Mental workload, acute stress, emotion, fatigue
 - Simulation, virtual reality
 - Training
- **Human-Machine Interaction**
 - Multimodal interaction
 - Innovative warning systems, countermeasures
 - Ecological interface design, augmented reality
 - Intelligent assistants, virtual assistants
 - Sensors and adaptive systems

- **Autonomous vehicles and Automation**
 - Single pilot operations
 - Remote control of automated vehicles
 - Unmanned vehicles
 - Man-machine cooperative techniques
 - Ethical aspects

- **Artificial intelligence**
 - Transparent AI, natural human-machine interaction
 - Mixed-initiative planning
 - Task scheduling
 - Fault tolerant distributed algorithms

- **Systems Engineering**
 - Safety analysis
 - Model-based architecture design
 - Cooperative techniques
 - Modeling and simulation

Authors are invited to submit an abstract of maximum 500 words. Abstracts will be reviewed by the program committee and may be accepted for oral or poster presentation. Online abstracts compilation will be published as open access on OATAO (Open Archive Toulouse Archive Ouverte). Submission guidelines and information are available at <https://events.isae-superaero.fr/e/ICCAS-2020>

Important dates

- | | |
|---------------------|--|
| • December 31, 2019 | Abstracts due |
| • January 15, 2020 | Notification of results |
| • March 15, 2020 | Registration deadline (for presenters & attendees) |
| • March 18-19, 2020 | ICCAS 2020 conference |

Conference location

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



Registration fees

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|----------------|----------|
| • Regular fees | 90 Euros |
| • Partner fees | 85 Euros |
| • Student fees | 35 Euros |

The Conference registration fees include:

- Participation in **all oral sessions**
- Entrance to the exhibition/poster session area
- Access to full **conference abstracts**
- Refreshment breaks
- One ticket for the **reception dinner** held in the city center, at the rooftop of the Media library José Canabis, in the Vanel spaces, located right in front of the new “Las Ramblas”.



Scientific Committee

- Mickaël Causse, ISAE-SUPAERO
- Caroline Chanel, ISAE-SUPAERO
- Jean-Charles Chaudemar, ISAE-SUPAERO
- Stéphane Durand, Dassault Aviation
- Bruno Patin, Dassault Aviation
- Nicolas Devaux, Dassault Aviation
- Jean-Louis Gueneau, Dassault Aviation

Organizing committee

- Agnès Trincal, Fondation ISAE-SUPAERO
- Anne Mansuet, ISAE-SUPAERO
- Evelyne Rebut, ISAE-SUPAERO
- Vsevolod Peysakhovich, ISAE-SUPAERO
- Eric Bernard, Dassault Aviation
- Gilles Tuduri, Dassault Aviation
- Anke Brock, ENAC

- **Partners**



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