12th EDITION EUROPEAN CONGRESS

ERTS 2024

11-12 JUNE, TOULOUSE - FRANCE
DIAGORA CONGRESS CENTER

EMBEDDED
REAL TIME SYSTEMS

CALL FOR PAPERS AND EXHIBITIONS

ORGANISERS

- **3AF**, Society for Aeronautics and Space
- **SEE**, Society for Electricity, Electronics, and Information and Communication Technologies

GENERAL CHAIRS

- Program Committee Chair : **Mohamed Kaâniche**, LAAS-CNRS Director
- Industrial co-chairs : **Gilles Mabire**, CTO for Continental Automotive, Head of Software and Central Technologies and **Jean-Marie Garigue**, VP Engineering, Head of avionics and simulation products.

The ERTS congress is a unique biennial European cross-sector event on Embedded Real-Time Systems, a forum for top-level scientists with representatives from universities, research centres, industrial key players, and agencies addressing critical systems and applications. Traditionally, this event includes more than 80 talks, up to 500 participants and 60 exhibitors.

ERTS is:

- a congress with high-level scientific and technical presentations
- an exhibition forum covering a wide range of innovative products and services, for improving direct relationship between providers and users
- a unique forum involving industry and academia to share knowledge and extend your personal network.

The congress targets all the domains where embedded systems are crucial, such as transportation (aeronautics, automotive, railways, marine, unmanned vehicles,…), space exploration and satellite applications, e-healthcare, industry 4.0, robotics, defence, energy, telecoms. The congress welcomes submissions reporting academic and industrial research, practical experiments and use cases, feedback on new technologies, and position papers on open challenges or major trends.

This edition encourages contributions bringing new and inspiring ideas for the development, deployment and operation of safe, secure, autonomous and sustainable systems. This includes innovative methods to support the dependable integration of Artificial Intelligence algorithms, but also the use of those techniques to support the design and optimization of critical embedded systems. Contributions addressing software and hardware engineering practices to develop the high-performance computation and communication capabilities required by new embedded systems are welcome too.

IMPORTANT DATES

CALL FOR PAPERS

• Regular paper abstract, short paper (4 pages) submission **Submission deadline extented to :**	~~15th October 2023~~ **26th November 2023**
• Acceptance notification	**8th February 2024**
• Regular paper for review (10 pages)	**3rd April 2024**
• Final paper (Short and Regular)	**5th May 2024**
• Conference	**11th & 12th June 2024**

EXHIBITION SCHEDULE

• Information and registration	**20th september 2023 to 30th may 2024**
• Select your contact for meetings	**30th may 2024**
• Exhibition and B2B meeting	**11th & 12th June 2024**

— Join ERTS for high quality papers and meeting a high quality audience! —

CALL FOR PAPERS

Original and unpublished submissions are solicited, which may be under two forms: Regular and Short papers.

- **Regular papers** presenting achieved results. The selection will be based firstly on the review of extended abstract (4 pages) followed by the review of the full paper (10 pages) for final acceptance. Accepted regular papers will be published in the proceedings and presented in an oral session at the congress (registration and presentation by one author are mandatory).
- **Short papers** reporting on work in progress. The selection will be based on the review of the full short paper (4 pages). Each accepted short paper will be published in the proceedings and presented both as a poster and in a five-minute oral presentation at the congress (registration and presentation by one author are mandatory).

Submissions are expected in all aspects of critical embedded real-time systems, and notably on the following topics:

- **Embedded computing platforms and networked systems**: Multi-core/manycore platforms, Hardware accelerators, Networks-on-chip, Energy management, Trusted execution platforms, Middleware, Virtualisation, Service-oriented platforms, Blockchains, Embedded networks, Software-defined networks, Distributed architectures, Edge computing, New computer architecture
- **Processes, methods and tools**: Agile techniques, AI based development methods, Model-based system and safety engineering, Virtual engineering and simulation, Requirement engineering, Product line engineering, Programming languages, Verification methods, Software development frameworks, Life Cycle Assessment for sustainability
- **Resilience**: Dependability, Safety, Cyber security, Quality of service, Fault tolerance, Maintainability, Diagnosis, Health monitoring, Certification, Privacy and data protection
- **Human system interaction**: User interfaces for command and control systems, Human monitoring and error evaluation, User-centred design, Automation design and function allocation
- **Autonomous and AI-based systems**: Dependable and trustworthy artificial intelligence, Intelligent systems, Assured autonomy, Frugal AI, Social acceptability, Ethical and legal issues

Submission guidelines on the web site http://**www.erts2024.org**

EXHIBITION

The exhibition is the opportunity for companies to present their latest products; it will be combined with B2B meetings for improved direct relationship between exhibitors and contractors represented by R&D directors, technical directors and projects managers from all industry sectors.

The exhibition and congress areas are situated under the same roof allowing attendees to visit booths during the congress.

Exhibition contact: **Xavier Sicard** (xsicard@advbe.com)

COMMITTEES

Programme Committee

Chair: Mohamed Kaâniche, LAAS -CNRS

Scientific coordinators: Philippe Cuenot (Continental Automotive), **Kevin Delmas** (Onera), **Marie de Roquemaurel** (Airbus D&S), **Jean-Marc Gabriel** (Renault Software Labs), **Adrien Gauffriau** (Airbus), **Christophe Grand** (Onera), **Eric Jenn** (IRT Saint Exupéry), **Christine Rochange** (IRIT)

The Programme Committee includes industrial and academic experts from more than ten countries. The list is available on the website.

Organising Committee

Chairs: Carsten Doll (3AF), **Gilles Perusot** (SEE)

The list of the Organising Committee members will be available on the website

Exhibition Chair: Xavier Sicard (ABE France)