26th Ada-Europe International Conference on Reliable Software Technologies (AEiC 2022)

14-17 June 2022, Ghent, Belgium

Conference Chair

Tullio Vardanega
University of Padua, Italy
tullio.vardanega@unipd.it

Journal-track Chair

Jérôme Hugues
Carnegie Mellon University, USA
jjhugues@sei.cmu.edu

Industrial-track Chair

Alejandro R. Mosteo
Centro Universitario de la Defensa,
Zaragoza, Spain
amosteo@unizar.es

Work-in-Progress-track Chair

Frank Singhoff
University of Brest, France
frank.singhoff@univ-brest.fr

Tutorial and Workshop Chair

Aurora Agar Armario
NATO, Netherlands
aurora.agar@ncia.nato.int

Exhibition & Sponsorship Chair

Ahlan Marriott
White Elephant GmbH, Switzerland
software@white-elephant.ch

Publicity Chair

Dirk Craeynest
Ada-Belgium & KU Leuven, Belgium
dirk.craeynest@cs.kuleuven.be

Local Chair

Vicky Wandels
University of Ghent, Belgium
Vicky.Wandels@UGent.be

General Information

The 26th **Ada-Europe International Conference on Reliable Software Technologies** (AEiC 2022) will take place in Ghent, Belgium in **dual mode**, with a solid core of in-presence activities accompanied by digital support for remote participation. The conference schedule comprises a journal track, an industrial track, a work-in-progress track, a vendor exhibition, parallel tutorials, and satellite workshops.

Schedule

~~16 January 2022~~   ~~Submission deadline for journal-track papers, tutorials and workshop proposals.~~

27 February 2022   Submission deadline for industrial-track and work-in-progress-track abstracts.

14 March 2022   Notification of invitations-to-present for journal-track papers. Notification of acceptance for all other types of submission.

3 April 2022   Publication of advance program.

Topics

The conference is an established international forum for providers, practitioners and researchers in reliable software technologies. The conference presentations will illustrate current work in the theory and practice of developing, running and maintaining challenging long-lived, high-quality software systems for a variety of application domains including manufacturing, robotics, avionics, space, health care, transportation, Cloud environments, smart energy, serious games. The program will allow ample time for keynotes, Q&A sessions and discussions, and social events. Participants include practitioners and researchers from industry, academia and government organizations active in the promotion and development of reliable software technologies.

The topics of interest for the conference include but are not limited to:

- Real-Time and Safety-Critical Systems
  - Design, implementation and verification challenges;
  - Novel approaches, e.g., Mixed-Criticality Systems, novel scheduling algorithms, novel design and analysis methods.
- High-Integrity Systems and Reliability
  - Theory and practice of High-Integrity Systems;
  - Languages vulnerabilities and countermeasures;
  - Architecture-centred development methods and tools
- Reliability-oriented Programming Languages (not limited to Ada)
  - Compilation and runtime challenges, language profiles;
  - Use cases and experience reports;
  - Language education and training initiatives.
- Experience Reports
  - Case studies, lessons learned, and comparative assessments;

Refer to the conference website for the full list of topics.

Call for Journal-track Submissions

Following the **journal-first model** inaugurated in 2019, the conference includes a *journal-track* that seeks original and high-quality submissions that describe mature research work in the scope of the conference. Accepted papers for this track will be published in the "Reliable Software Technologies (**AEiC2022**)" Special Issue of the Journal of Systems Architecture (JSA). General information for submitting to the JSA can be found at https://www.journals.elsevier.com/journal-of-systems-architecture. Submissions should be made online at https://www.editorialmanager.com/jsa/ by selecting the "**VSI:AEiC2022**" option for the paper type.

In order to speed up publication, the JSA has adopted the Virtual Special Issue model, whereby acceptance decisions are made on a rolling basis. On that account, authors are encouraged to submit as early as they can, no later than 16 January 2022. *Authors who have successfully passed the first round of review will be invited to present their work at the conference.* Ada-Europe, the main conference sponsor, will cover the Open Access fees for the *first four papers* to gain final acceptance, which do not already enjoy OA from personalized bilateral agreements with the Publisher.

Prospective authors may direct all enquiries regarding this track to the corresponding chair, Jérôme Hugues, at the listed address.

Call for Industrial-track Submissions

The conference seeks industrial practitioner presentations that deliver insight on the challenges of developing reliable software. Given their applied nature, such contributions will be subject to a dedicated practitioner-peer review process. Interested authors shall submit a *short (one-to-two pages) abstract*, by 27 February 2022, via https://easychair.org/conferences/?conf=aeic2022, strictly in PDF, following the Ada User Journal style (cf. http://www.ada-europe.org/auj/).

The abstract of the accepted contributions will be included in the conference booklet. The corresponding authors will get a presentation slot in the prime-time technical program of the conference, and will also be invited to expand their contributions into full-fledged articles for publication in the Ada User Journal, which will form the proceedings of the Industrial track of the Conference.

Prospective authors may direct all enquiries regarding this track to the corresponding chair, Alejandro R. Mosteo, at the listed address.

Call for Work-in-Progress-track Submissions

The Work-in-Progress track seeks two kinds of submissions: (a) ongoing research, and (b) early-stage ideas. *Ongoing research* submissions are 4-page papers that describe research results that are not mature enough to be submitted to the journal track as yet. *Early-stage ideas*, are 1-page papers that pitch new research directions that fall in the scope of the conference. Both kinds of submission must be original and shall undergo anonymous peer review. Submissions by recent MSc graduates and PhD students are especially sought. Authors shall submit their work by 27 February 2022, via https://easychair.org/conferences/?conf=aeic2022, strictly in PDF, following the Ada User Journal style (cf. http://www.ada-europe.org/auj/).

The abstract of the accepted contributions will be included in the conference booklet. The corresponding authors will get a presentation slot in the prime-time technical program of the conference, and will also be offered the opportunity to expand their contributions into 4-page articles for publication in the Ada User Journal, which will form the proceedings of the WiP track of the Conference.

Prospective authors may direct all enquiries regarding this track to the corresponding chair, Frank Singhoff, at the listed address.

Academic Listing

The Journal of Systems Architecture, publication venue of the journal-track proceedings of the conference, was ranked Q1 (SJR) in the year 2020, also featuring 72th percentile in CiteScope (Scopus). The Ada User Journal, venue of all other technical proceedings of the conference, is indexed by Scopus and by EBSCOhost in the Academic Search Ultimate database.

Awards

Ada-Europe will offer an honorary award for the best technical presentation, to be announced in the closing session of the conference.

Call for Tutorials

The conference seeks **tutorials** in the form of educational seminars on themes falling within the conference scope, with an academic or practitioner slant, including hands-on or practical elements. Tutorial proposals shall include a title, an abstract, a description of the topic, an outline of the presentation, the proposed duration (half day or full day), the intended level of the contents (introductory, intermediate, or advanced), and a statement motivating attendance. Tutorial proposals shall be submitted by e-mail to the Workshop and Tutorial Chair, Aurora Agar Armario, at the listed address, with subject line: "[AEiC 2022: tutorial proposal]".

The authors of accepted full-day tutorials will receive a complimentary conference registration, halved for half-day tutorials. The Ada User Journal will offer space for the publication of summaries of the accepted tutorials.

Call for Workshops

The conference welcomes satellite workshops centred on themes that fall within the conference scope. Proposals may be submitted for half- or full-day events, to be scheduled at either end of the conference proper. Workshop proposals shall be submitted by e-mail to the Workshop and Tutorial Chair , Aurora Agar Armario, at the listed address, with subject line: "[AEiC 2022: workshop proposal]". Workshop organizers shall also commit to producing the proceedings of the event, for publication in the Ada User Journal.

Call for Exhibitors

The conference will include a vendor and technology exhibition. Interested providers should direct inquiries to the Exhibition Chair.

Venue

The conference will take place in the heart of the city of Ghent, Belgium, capital city of the East Flanders, north-west of Brussels, a half-hour train ride from it. Ghent is rich in history, culture and higher-education, with a top-100 university founded in 1817.