Call for Papers

20th International Conference on Formal Aspects of Component Software (FACS 2024)

9-10 September, 2024, Milan, Italy (Co-located with FM 2024)

https://facs-conference.github.io/2024/

Overview

FACS 2024 is concerned with how formal methods can be applied to component-based software and system development. Formal methods have provided foundations for component-based software through research on mathematical models for components, composition and adaptation, and rigorous approaches to verification, deployment, testing, and certification.

Topics

The conference seeks to address the applications of formal methods in all aspects of software components and services. FACS aims at developing a community-based understanding of relevant and emerging research problems through formal paper presentations and lively discussions. FACS 2024 welcomes contributions including but not limited to:

- Formal methods, models, and languages for software-intensive systems, components and services, including verification techniques (e.g., model checking, theorem proving, testing, constraint solving, runtime analysis), probabilistic techniques, (co-)simulation techniques, composition and deployment, component interaction, software variability, QoS and other non-functional properties (e.g., trust, compliance, security, privacy);
- Formal aspects of concrete software-intensive systems, including service-oriented architectures, business processes, cloud or edge computing, real-time/safety-critical systems, hybrid and cyber physical systems, quantum systems, components that use artificial intelligence;
- Tools supporting formal methods for components and services;
- Case studies and experience reports over the above topics;
- **Special track: Formal Methods of Component Software in the context of emerging computational paradigms** (e.g. cyber physical human systems, quantum computations, AI systems, blockchain systems, etc) .

Submission and Publication

We solicit high-quality submissions reporting on:
A - full papers: original research, applications and experiences, or surveys (16 pages);
B - short papers: tools and demonstrations (6 pages);
C - Special track papers (16 pages);

The page limit excludes references and appendices. Papers should be prepared in LaTeX, adhering to the Springer LNCS format and Guidelines. Papers should be submitted through the easychair link:

https://easychair.org/conferences/?conf=facs2024

All submitted papers should be in LNCS format and unpublished and not submitted for publication elsewhere. All accepted papers will have to be presented at the conference by one of their authors. Accepted papers in all categories will be published in the FACS proceedings and published as a volume in Springer LNCS series.
The authors of a selected subset of accepted papers will be invited to submit an extended version of their papers to a special issue of the Science of Computer Programming journal.
FACS 2024 will recognize the most outstanding submissions with a **best paper award**.

Important Dates

- Abstract submission: 8 May, 2024
- Full paper submission: 15 May, 2024
- Notification: 26 June, 2024
- Final version due: 17 July, 2024
- Conference: 9-10 September, 2024

Invited Speakers

- Ana Cavalcanti (University of York, UK)
- David Parker (University of Oxford, UK)
- Geguang Pu (ECNU, China)

Conference Organizers

Program Co-chairs:

- Diego Marmsoler (Exeter University, UK)
- Meng Sun (Peking University, China)

Program Committee

- Achim Brucker (University of Exeter, UK)
- Antónia Lopes (Universidade de Lisboa, PT)
- Anton Wijs (TU Eindhoven, NL)
- Arpit Sharma (IISERB, IN)
- Brijesh Dongol (University of Surrey, UK)
- Camilo Rocha (Pontificia Universidad Javeriana Cali, CO)
- Clemens Dubslaff (TU Eindhoven, NL)
- Fatemeh Ghassemi (University of Tehran, IR)
- Giorgio Audrito (University of Turin, IT)
- Gwen Salaün (University of Grenoble Alpes, FR)
- Ivan Lanese (University of Bologna/ INRIA, IT)
- Jacopo Mauro (University of Southern Denmark, DK)
- José Proença (University of Porto, PT)
- Keigo Imai (DeNA Co., JP)
- Kenneth Johnson (Auckland University of Technology, NZ)
- Kyungmin Bae (POSTECH, KR)
- Luís Soares Barbosa (University of Minho, PT)
- Marie Farrell (The University of Manchester, UK)
- Mario Gleirscher (Universität Bremen, DE)
- Mieke Massink (CNR-ISTI, IT)
- Min Zhang (ECNU, CN)
- Olga Kouchnarenko (University of Franche-Comté, FR)
- Peter Ölveczky (University of Oslo, NO)
- Samir Genaim (Universidad Complutense de Madrid, ES)
- Shoji Yuen (Nagoya University, JP)
- Simon Bliudze (INRIA Lille, FR)
- Simon Foster (University of York, UK)
- Violet Ka I Pun (Western Norway University of Applied Sciences, NO)
- Xiyue Zhang (Oxford University, UK)
- Zhenbang Chen (NUDT, CN)