

HCSE 2022

9th International Working Conference
on Human-Centered
Software Engineering

August 24th – 26th, 2022



Call for Papers

August 24th – 26th, 2022 – Eindhoven University of Technology, Eindhoven, The Netherlands

<http://www.hcse-conference.org>

E-Mail: organizers@hcse-conference.org

HCSE is a bi-annual, single-track, working conference organized by the [IFIP Working Group 13.2 on Methodology for User-Centred System Design](#). We aim at **bringing together researchers and practitioners** interested in strengthening the scientific foundations of user interface design, examining the relationship between software engineering and human-computer interaction and on how to strengthen human-centered design as an essential part of software engineering processes. Other topics of interest include:

- contributions to the theory and best practices of user-centered design
- involvement of end-users, clients and stakeholders in the design and development process of interactive systems
- innovative methods for identifying end-user requirements for interactive systems
- integration of user experience (and any other user interface property) in development processes
- methods for designing, building and assessing interactive systems beyond the desktop (e.g. the living room, ubiquitous and multi-display, cockpits, etc.)
- models and model-based approaches for building interactive systems
- methods and tools for low-code and no-code development paradigms
- integration of multiple properties (e.g. usability, (cyber)security, reliability, user experience, privacy, accessibility, etc.) in software development and making them more accessible to developers and users
- context-aware and adaptive interactive systems (e.g. in areas such as digital collaboration, digital and worker assistance)
- design and integration of novel interaction techniques such as augmented, virtual, and mixed reality
- support for new kinds of human-machine interaction (HMI) for increasingly autonomous systems and systems that use or provide artificial intelligence (e.g. autonomous driving or human-robot collaboration)
- socio-technical aspects of interactive software development
- artificial intelligence and machine learning to support the development of interactive systems
- software architectures and architectural patterns for interactive systems
- rational design, design patterns and traceability of design choices.

HCSE 2022 welcomes contributions as **technical full papers, late breaking results, demonstrations and posters**. All papers are peer-reviewed and selected contributions will appear in the proceedings published by Springer in the LNCS series.

In the present edition of **HCSE 2022** we are particularly interested in studies focused on **multi-stakeholder** concepts and how to cope with multi-stakeholders taking into account not only micro perspective, but on the systemic change level. This research area is central to the host of the current edition of the conference, the Eindhoven University of Technology, Industrial Design, Systemic Change group.

In addition, building on the activities carried out by the WG13.2 during the workshop held at the INTERACT 2021 IFIP TC-13 conference, special consideration will be given to issues related to “**changing the context of use**”, which has significant impact on how to design and develop with a user-centered perspective and how usage of these systems changed for example in the current pandemic situation.

As in past editions, the focus of the working group is on **user interface properties** (such as usability, ux, privacy, trust, security, reliability, adaptability, among others) and how to design, develop and evaluate based on a **user-centered development process**. We are interested in understanding how different stakeholders and developers value diverse user interface properties and how they manage conflicts between them (when one property might degrade the value of another) on a systemic change level. Our aim is to cover a large set of user interface properties and try to reveal their inner dependencies. We are particularly interested in the development of theories, methods, tools and approaches for dealing with multiple properties that should be taken into account when developing interactive systems.

HCSE welcomes the following types of contributions:

- **Technical full papers (up to 20 pages)** should describe substantial research contributions of novel work that has produced advanced results including validation of results.
- **Late-breaking results (up to 12 pages)** are short papers that present work in progress, new practice and experience reports containing good (and bad) practices and/or recent practical evaluations of methods, techniques and tools.
- **Demonstrations and posters (5–8 pages, plus poster design draft)** should present ongoing work and/or late-breaking results related to the use of innovative tools and cutting-edge systems not described in other paper submissions. Demonstration papers should provide description of tools including user tasks and evidence of use to end-users. Demo submissions should summarize the system’s significance and its performance and should either include screenshots or link to an online-accessible resource. The poster design draft should show the planned design and content of the poster that will be presented at the conference. Industry contributions to demos and posters are particularly welcome and highly encouraged.

SUBMISSIONS AND REVIEWING PROCESS

All contributions should be submitted via the **EasyChair** system (<https://easychair.org/conferences/?conf=hcse2022conference>). All submissions will be peer-reviewed for their topical relevance, originality, technical contribution, and presentation quality by the members of the international program committee. Technical full papers and late-breaking results short papers will be reviewed **double-blind**, demonstrations and posters **single-blind**. Authors must prepare their submission files accordingly! For poster submissions, both paper and poster design draft will be assessed for review. It will be possible for the program committee to suggest accepting submissions in other than their original submission categories.

PRESENTATIONS

If we hold a physical conference, under the current circumstances, all accepted submissions will be presented at the conference in technical sessions. It will be possible for authors of accepted technical full papers and late-breaking results short papers to give tool demos as well without submitting additional demo papers. The conference will NOT enable hybrid participation.

PROCEEDINGS

Accepted contributions must be formatted according to the [guidelines of the Lecture Notes in Computer Science \(LNCS\)](#) series of Springer. Authors are requested to prepare submissions as close as possible to final camera-ready versions.

IMPORTANT DATES

Technical full papers, late breaking results

Submission: **May 23th (extended)**, 2022
Notification to authors: **June 13th (new)**, 2022
Camera-ready due: **June 27th (new)**, 2022

Demos, posters

Submission: **May 30th**, 2022
Notification to authors: **June 13th**, 2022
Camera-ready due: **June 27th**, 2022

ORGANIZERS / GENERAL CONFERENCE CHAIRS

Regina Bernhaupt, TU/e Eindhoven | Carmelo Ardito, Politecnico di Bari | Stefan Sauer, Paderborn University