DESIGN
2022

TOPICS

DESIGN2022

DESIGN SUPPORT TOOLS AND METHODS
- Configuration and modularisation
- Design for additive manufacturing
- PDM/PLM
- Requirements and change management
- Usage and integration of supportive technologies

INDUSTRIAL DESIGN
- User-centred design
- Aesthetics and visual impressions
- Product semantics
- User experience design
- Emotional design

DESIGN INFORMATION AND KNOWLEDGE
- Representations of information and knowledge
- Decision-making rationale and support
- Knowledge-intensive design
- Knowledge-based engineering
- Emerging IT technologies in knowledge management

HUMAN BEHAVIOUR IN DESIGN
- Human factors in design
- Designer's attitudes and skills
- Design thinking
- Design cognition and problem-solving
- Designer's activity

DESIGN THEORY AND RESEARCH METHODS
- Multidisciplinary research approaches
- Design theories and models
- Experimental design research
- Design typology
- New infrastructure for design research

ENGINEERING DESIGN PRACTICE
- Geometrical modelling and CAD
- Simulation-based design
- Advanced visualisation and virtualisation
- Case studies of design methods application
- Best design practices from industry

DESIGN FOR SUSTAINABILITY
- Sustainability awareness
- Design for social equity and cohesion
- Design for circular economy
- Technology and sustainable society
- Product-service systems

SYSTEMS ENGINEERING AND DESIGN
- Architecting complex engineering systems
- Simulation within complex systems
- Model-based systems engineering (MBSE)
- Cyber-physical systems design
- Approaches to socio-technical systems design

DESIGN ORGANISATION AND MANAGEMENT
- Organisational and design processes
- Product development models and strategies
- Market and business implications
- Global product development
- Agile management

ARTIFICIAL INTELLIGENCE AND DATA-DRIVEN DESIGN
- Artificial intelligence in product development
- Generative design and topological optimisation
- Data-driven design process
- Knowledge discovery and data mining in design
- Smart systems for Industry 4.0

DESIGN CREATIVITY
- Creative design processes
- Cognitive processes in design creativity
- Supporting design creativity and innovation
- Creativity assessment and measurement
- Bioinspired design

COLLABORATIVE DESIGN
- Design teams
- Design communication and collaborative processes
- Co-design
- Multidisciplinary/Interdisciplinary/Transdisciplinary collaboration
- Open/Social innovation

DESIGN FOR HEALTHCARE
- Healthcare ecosystems
- Healthcare design
- Healthcare services
- Use of advanced technologies in healthcare
- Life sciences and design

DESIGN EDUCATION
- Competency development
- Digital learning and ICT in education
- Project-based learning
- Adopting different teaching and learning environments
- Lifelong and organisational learning

INVITATION

By tradition, DESIGN Conference is a forum for discussion and further development of design knowledge from cognition and philosophy to methods and tools, from research theory to practice.

The transition from known and comfortable to unknown and challenging is ubiquitous. It is challenging every aspect of our being. How can design research and practice respond to changes, influence wellness, ensure sustainable development, reimagine the future, rethink the product design and development?

How to improve design methodologies, tools, projects, and processes? How to develop products and services to make the world a healthier place? Which competencies, information, and communication technologies are needed? What is the impact on everyday design work? Which social and legal issues should be considered? How will we teach future designers, communicate ideas and share knowledge? How to adapt to the new normal?

Applied, theoretical, and results-oriented papers from academia and industry, based on thorough analysis or argumentation, will be considered for the conference programme. The submitted papers should fit into one of the proposed conference topics. It is expected that these specific topics are extensive and nonexhaustive.

A list of examples is added to illustrate the core topics. It is required explicitly from all contributors to show how they contribute to the overall research within these areas. A detailed description of topics and instructions for online submission is available at www.designconference.org.

Programme chairs welcome the high-quality submissions covering substantial, original, and previously unpublished research.

Rigour academic research should provide designers with the next generation of methods and tools appropriate to the demands.

PROGRAMME

The DESIGN Conference provides an interactive environment where participants proactively create opportunities to share design knowledge and new cross-disciplinary research that leads to innovation.

PLENARY SESSIONS

The new ideas and visions will be presented by the keynote speakers.

TOPIC ORIENTED SESSIONS

Will host papers selected around common research questions in order to foster discussion.

WORKSHOPS

DESIGN 2022 workshops will promote integration of different views, approaches and methods. Workshop coordinators could invite selected presentations and demonstrations in order to stimulate the debate as well as to propose any format of delivery that inspires interaction. The workshops will be organised on the 23rd of May.

PHD STUDENTS' FORUM

The forum will be a unique opportunity for younger researchers and PhD students to discuss their research questions and ideas with experienced researchers, practitioners and R&D managers in order to facilitate their research efforts.

THE DESIGN DEBATE

The purpose of the design debate is to investigate in a forensic manner some key topics that affect the engineering design research community. Two opponents and the debate moderator will be distinguished key players in the community presenting evidence for or against a particular topic.

INDUSTRIAL FORUM

The industrial forum will be an opportunity to discuss industrial views, needs and expectations of design research, tracing emerging trends in industrial innovation and the right strategies for a sustainable future. The forum will offer a platform for debate among decision makers, practitioners and academics about the future of design research, needs and expectations.

REVIEWING POLICY

The papers will be accepted on the double-blind review basis made by the members of the Scientific Advisory Board.

The review criteria will be the novelty and level of contribution, validity of conclusions, industrial or application perspective and formal qualities of the contribution.

DESIGN Conference papers are published online at Cambridge Core Journals pages as: Proceedings of the Design Society: DESIGN Conference. All papers are indexed in SCOPUS and WOS - CPCI and referenced in CrossRef with DOI identifier.

Selected papers will be recommended for publication in international journals.

STEP 01 — Full paper submission deadline
November 15, 2021

STEP 02 — Final acceptance of papers
February 1, 2022

STEP 03 — Publish-ready papers
February 25, 2022

STEP 04 — Final conference programme
April 2022

STEP 05 — DESIGN 2022 CONFERENCE
May 23-26, 2022

PROGRAMME CHAIRS

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the Design Society
a worldwide community

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